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FINDNPARK ANDROID APP

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Editor In Chief

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Labour At Click Application

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Project Guide, Department of Computer Engineering, Marathwada Mitra Mandal's Polytechnic, Thergaon, Pune, Maharashtra, India..

ABSTRACT

As we all know that there are many advanced technologies used in today's lives due to which the labours work is reduced. And due to which the labours face problems of finding work. But there is a solution for this problem, in today's world the common used technology is mobiles, and everyone has one. So are here with an mobile application "Labour at Click". This application will help to find the work for them. It has simple UI with simple labour options (Painter, plumber, carpenter, etc). after selecting a particular labour user can directly contact them via call. And for confirmation of hiring users have to click on hire button so that labour will receive a message with users address on it. The main motive of this project is to help the unemployed labours to find work with the help of the smartphones.

Keywords: Labour At Click app, android application, service based app.

1. INTRODUCTION

As the increase in technology the human effort have reduced a lot. For small home work we use advanced technologies and the work is done in no time. Due to this advanced technologies the labour work is also decreasing and the labours have to face severe loss as they can't find the jobs to do. But there are also some things where we only require labours and at that instance we cannot find the labours. So, this problem is with both the labours and the consumer where one is not finding the job and another not getting the labours to do it.

As a solution to this problem we are here with an mobile application which will help the labours to find the jobs to do also will help the consumers to get the labours. These application contains some labours options such as painter, carpenter, plumber, etc. the consumer has to select an option and add the location from which area he wants to hire the labour, after that he will get the details and can contact then and can hire the labours also he can select the payment mode for money transfer. This is how the consumer can find labours and can be beneficial for both of them.

2. LITERATURE REVIEW

Due to Covid 19 pandemic many people especially labours lost their jobs. 5.2 million workers – one in six of the workforce were still away from work or working fewer hours at the end of September, after lockdown many labours find it difficult to find work. Contractors were facing shortage of labours. This app help households to find labours to do small scale works such as painting, electricity work etc. Labours can easily find work.

3. TECHNOLOGIES USED

- A. Hardware used – Laptop with
Installed memory - 4 gb and more ram
System type – 64 bit OS

B. Platform

1. Android Phone

C. Software Tools Used

1. Microsoft Windows 7 or above
2. Android studio
3. Firebase Database
4. Java Development kit

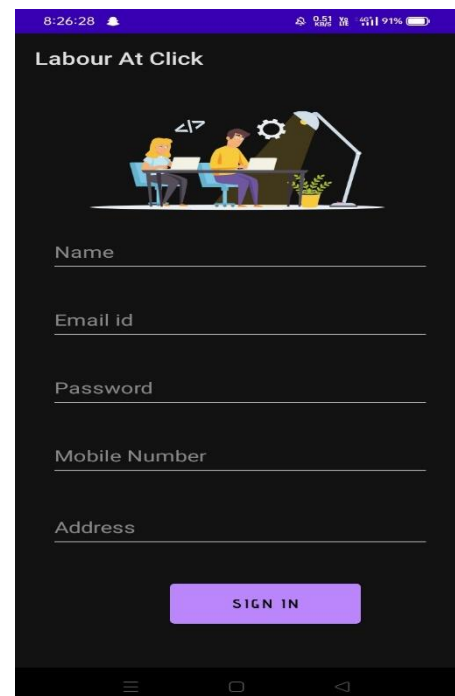
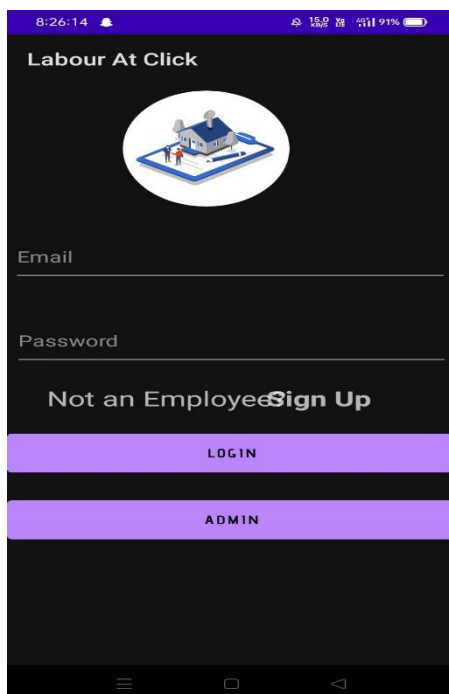
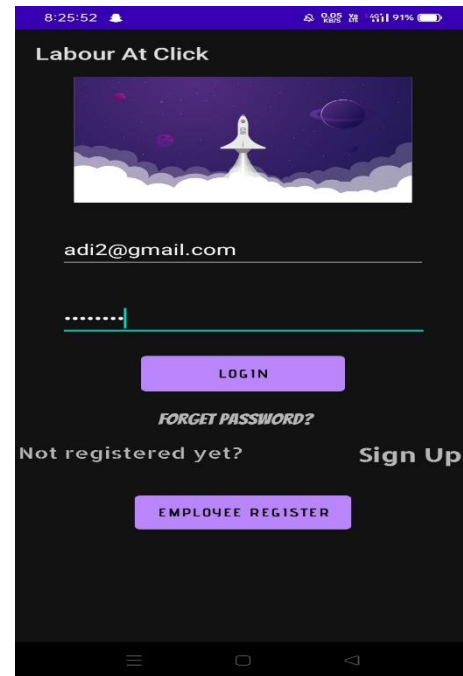
- **ANDROID STUDIO** : Android Studio is the official Integrated Development Environment (IDE) for android application development. Android Studio provides more features that enhance our productivity while building Android apps. Android Studio was announced on 16th May 2013 at the Google I/O conference as an official IDE for Android app development. It started its early access preview from version 0.1 in May 2013. The first stable built version was released in December 2014, starts from version 1.0. Since 7th May 2019, Kotlin is Google's preferred language for Android application development. Besides this, other programming languages are supported by Android Studio.
- **FIREBASE DATABASE** : The Firebase Realtime Database is a cloud-hosted database in which data is stored as JSON. The data is synchronized in real-time to every connected client. All of our clients share one Realtime Database instances and automatically receive updates with the newest data, when we build cross-platform applications with our iOS, and JavaScript SDKs. The Firebase Realtime Database is a NoSQL database from which we can store and sync the data between our users in real-time. It is a big JSON object which the developers can manage in real-time. By using a single API, the Firebase database provides the application with the current value of the data and updates to that data. Real-time syncing makes it easy for our users to access their data from any device, be it web or mobile.

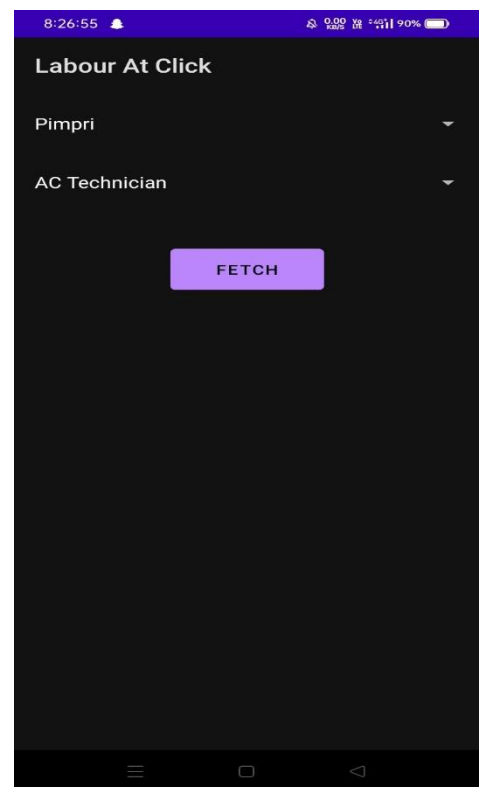
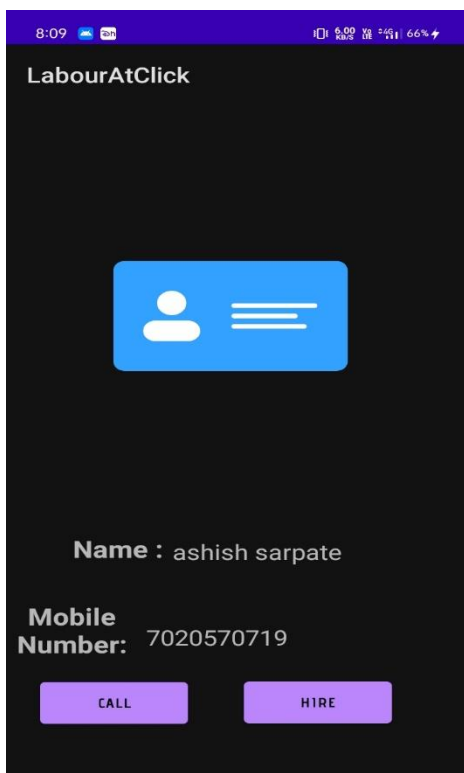
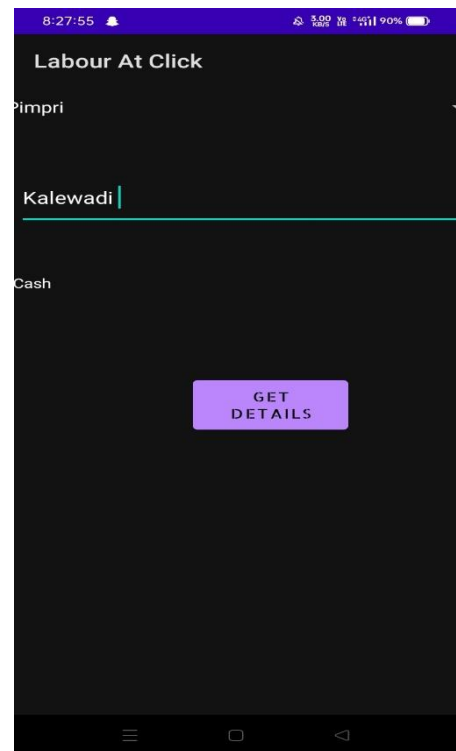
4. METHODOLOGY

This application was made using java, firstly the login page was created where the user has to login by using this email id and password and if the user is new than he has to register by adding the details such as his email id, password, mobile no and address. After adding the details an OTP page will pop out where the person has to verify the OTP generated on the provided mobile no.

After registration the next pages opens is of the options of people required for the work. In this page you can choose that what kind of worker is required, for example if a user want to do painting work in her house so he/she select painter option . After choosing painter option the next page opens in which you have to select your town and then enter the your address after that you have to click on get details , list of available workers will be shown, click on any worker as per your choice. After that you will be directed to next page showing the details of the workers or labours with their name, mobile no, occupation and address. From these page a person can get details and contact info about the worker. There a two options first is call this helps you to call particular labour and make confirmation about the work. Second option is of hire this option will send a message to the labour stating the id of user and location.

5. SCREENSHOTS OF APPLICATION





6. Conclusion

The labour at click app is designed in such a way that the Households/Users will find it easy to search labours of various category in their area. The users will no longer have to enquire to various people or visit enterprise shops for small scale works, they will find experienced workers at a click at their their doorstep. The labours will also get jobs on daily basis, the UI for user kept so simple for labours.

The main objective of this is to provide good service to users and provide employment opportunities to labouers.

7. REFERENCES AND BIBLIOGRAPHY

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- Android development books



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Construction Planning App

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ABSTRACT

Construction Planning App is a application that helpsto organize and track activity, punch lists, document management. These systems provide firms with the appropriate management and documentation management required to process information requests (RFIs), change orders and purchase orders so that they can add here to the project budget and timeframes.

Building a business run and our construction planning application makes sure people know exactly what to do. All activities in the project are planned and commercialized. The functions of construction planning app typically include the following: Specifying project objectives and plans including, budgeting, scheduling, setting performance requirements, managing documents.

Keywords: Construction Planning, Construction management, Androidstudio, Java, Budgeting

1. INTRODUCTION

The functions of construction planning app typically include the following:

- Clarify Project objectives and plans including, budgeting, scheduling, setting performance materials required and selecting project participants.
- Our mobile construction planning application keeps your team in the field Connected on all core use cases: plan viewing, punching lists, scheduling, and reporting.
- Construction Planning is best done by people who have a thorough knowledge of architecture, such as building engineers or architects. However, some aspects of this work, such as budgeting or purchasing, can be done by people who do not have a building background. With enough training and experience, the average person can get enough experience to work as a construction project manager.
- Construction management can be done by the various agencies in the project. It can be done by project contractors, project owners, independent consultants employed by the owners, project designers, or investors in the project. It is important to note that each agency may have different goals and motivations for the project. For example, a builder might want to increase the cost of the building, and the owner may want to reduce it. Independent consultants may wish to delay the project, as they are paid a monthly maintenance fee.

The key elements of Construction planning are: Construction Planning, Quality Control, Contract management, Procurement management.

2. METHODOLOGY

This application was developed using Java, firstly the login page was created where the construction site workers and manager has to login by using the email id and password and if the user is new than he has to register by adding details such as his email id, mobile number, username and password. After login site manager and worker get separate panel and features to use. A construction manager get options to assign a task by adding task's name, assigned worker, starting date, ending date, priority of task, status of task and can create a new floor plan ,add and delete tracks of inventory, etc. A construction site worker get options to view assigned task, upload progress of task, upload and make changes in inventory list, upload task's progress photos, view floor plan uploaded by site manager.

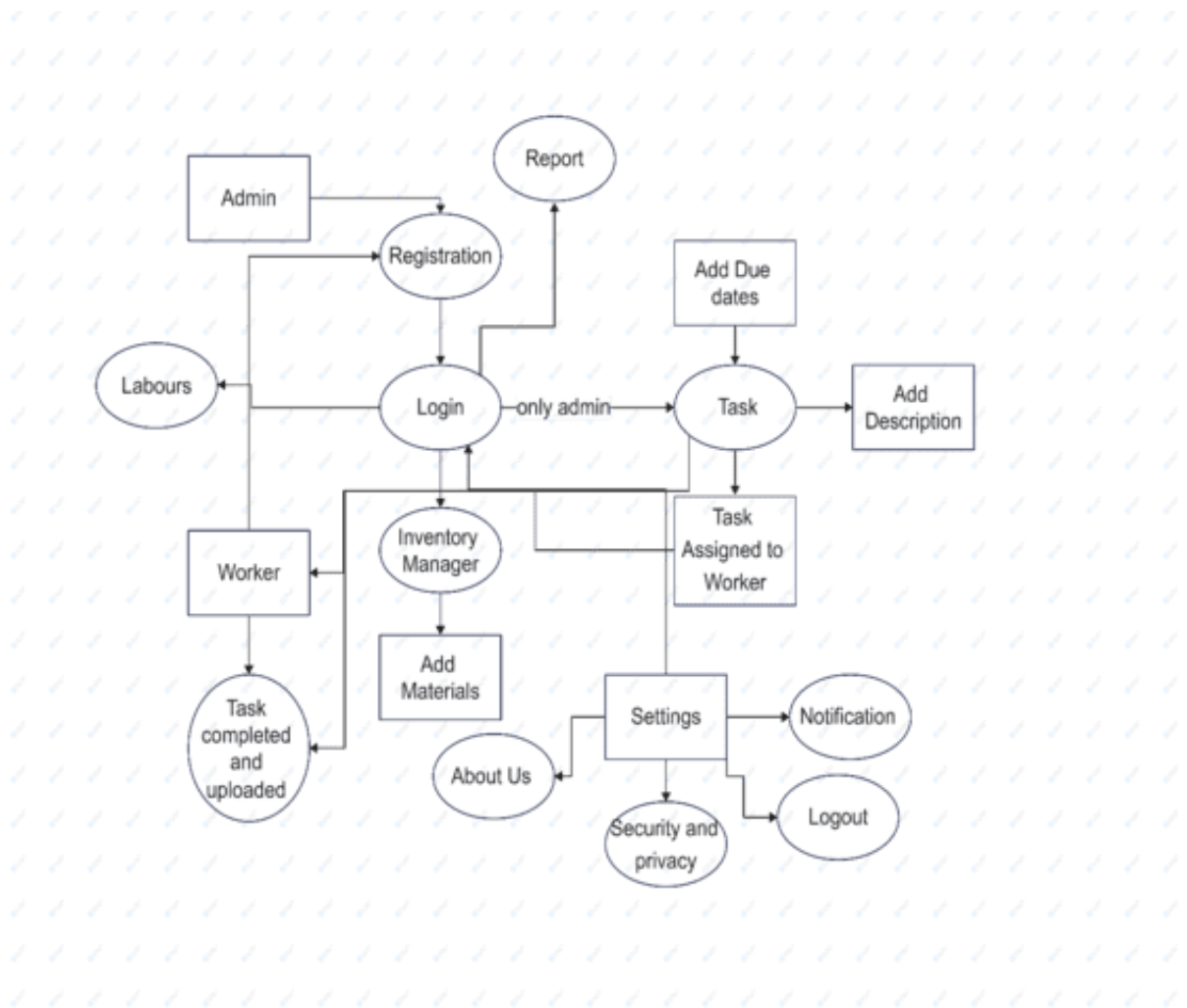


Fig. 1–Data Flow Diagram of App

3. PROJECT TRACKING

This application is useful in Construction project management for managers and workers in all phases of software development. This application will help for creating project schedules as well as budgets that optimize limited resource usage. It will also improve communication between project stakeholders. As the application is embedded in mobile, it can be accessed anywhere at any time. Agile software development methodology is used in this application. It provides iterative software development methodology.

A. Control Desk

There is a user friendly interface which gives list of projects, tasks, that are assigned to the worker. It also gives the role of the worker in the task. There is a facility of uploading photos giving the status of the project to enable managers to intervene where required. Site managers add workers to project team. It is very simple to use this application. If anyone wants to use this application, he/she has to register using email-id and mobile number.

B. Project Planning

Project manager assigns various tasks to the team members and these tasks need to be scheduled considering schedule of them.

- Task assigning: Interface that allows user to add or edit tasks, change schedules or assignments
- Resource allocator: Customize work hours for the users. New tasks are scheduled automatically according to the availability by the system.

C. Project Tracking

It is necessary to track the progress of project for its successful completion.

- Project progress: Manager or teammembers indicate progress of construction. The system shows the projected end dates of the tasks and project.
- Progress Photos: Identify the completed and pending task across project

4. TOOLS AND TECHNOLOGIES

- A. Hardware used laptop with
 1. System type – 64-bit OS
 2. Installed memory - 4 GB and more ram
- B. Platform
 1. Android Phone
- C. Software Tool Used
 1. Microsoft windows 7 or above.
 2. Android Studio
 3. Firebase Database
 4. Java Development Kit



Fig 2 Splash Screen

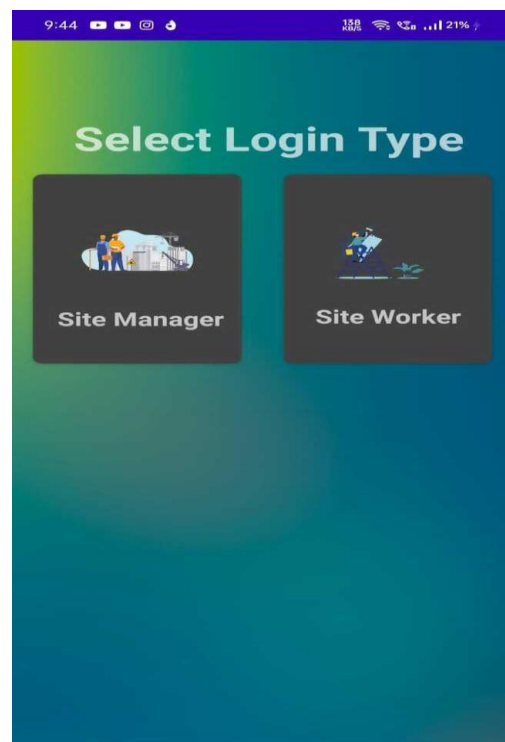
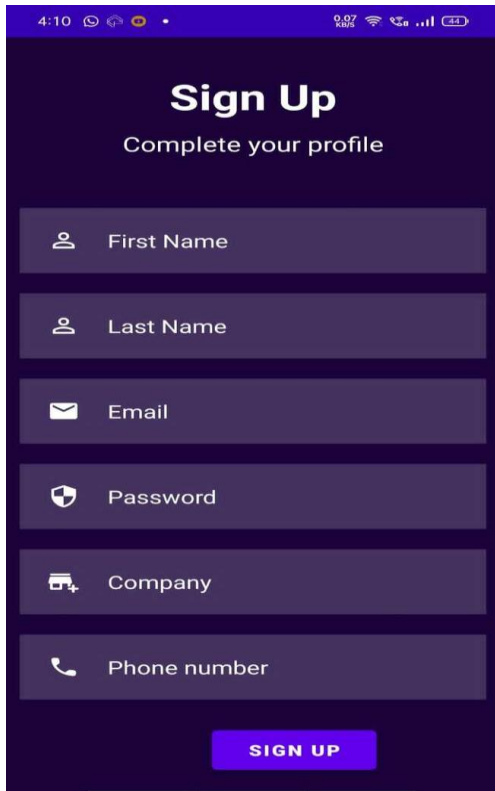


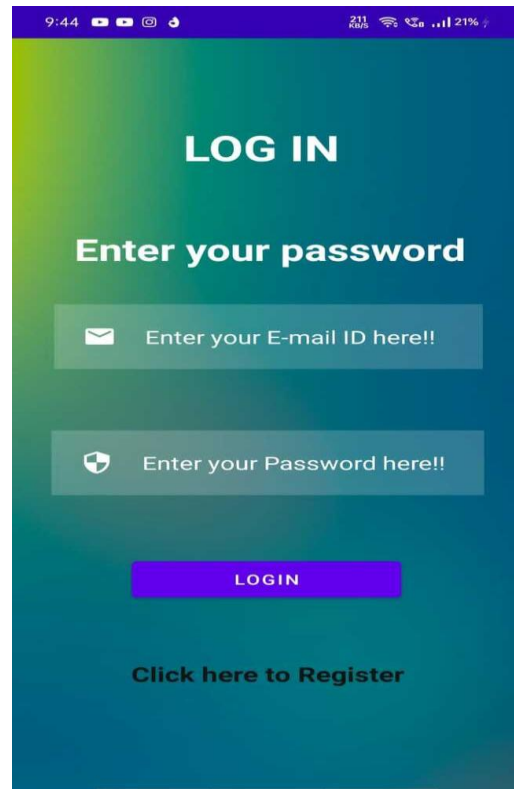
Fig 3 Select Login Type page

5. SCREENSHOTS OF APPLICATION



A mobile application screen for signing up. The background is dark purple. At the top, the text "Sign Up" is in large white font, followed by "Complete your profile" in a smaller white font. Below this are six input fields, each with a white icon on the left and a white label on the right: "First Name" (person icon), "Last Name" (person icon), "Email" (envelope icon), "Password" (shield icon), "Company" (building icon), and "Phone number" (phone icon). At the bottom right is a red button with the text "SIGN UP" in white capital letters.

Fig 4 Login Page



A mobile application screen for logging in. The background is a gradient of green and blue. At the top, the text "LOG IN" is in large white font. Below it, the text "Enter your password" is in white. There are two input fields, each with a white icon on the left and a white label on the right: "Enter your E-mail ID here!!" (envelope icon) and "Enter your Password here!!" (shield icon). Below these is a red button with the text "LOGIN" in white capital letters. At the bottom, the text "Click here to Register" is in white.

Fig 5Sign Up Page

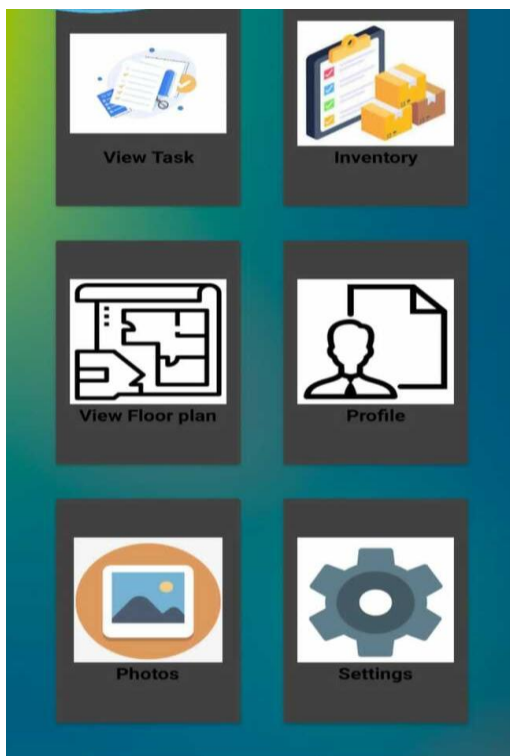


Fig 6 Applications Content

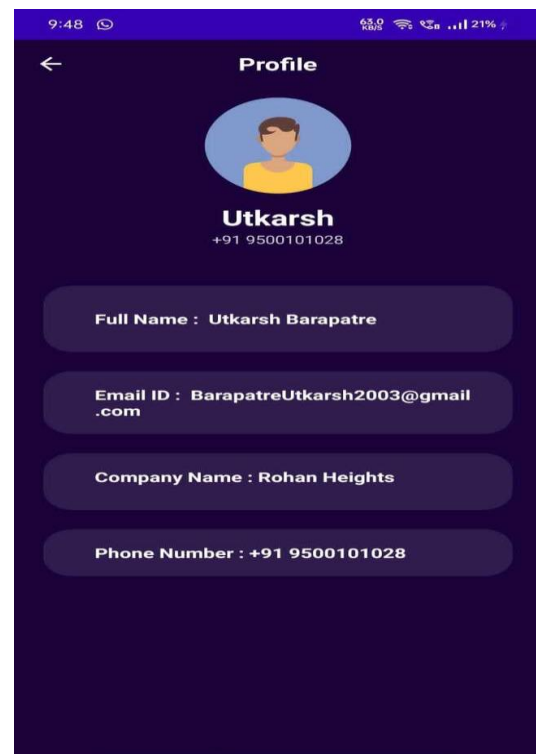


Fig 7 Profile Page

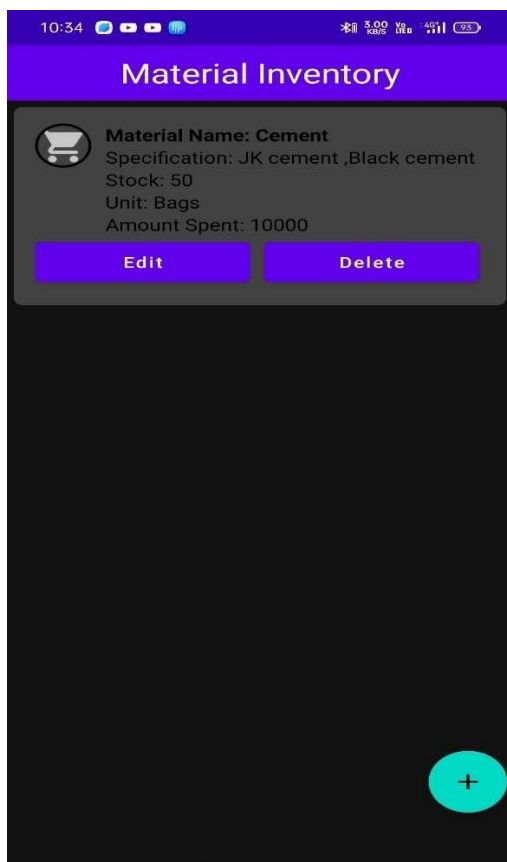


Fig 8 Material Inventory Page

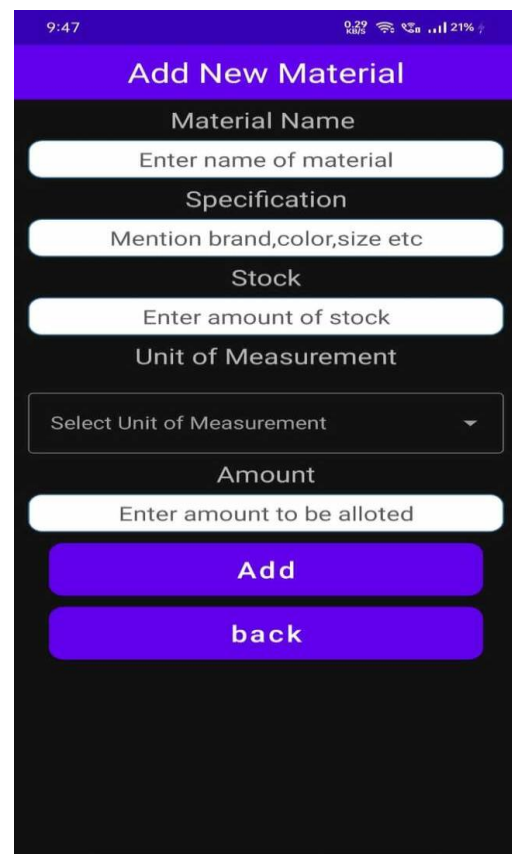


Fig 9 Page to add new material in inventory

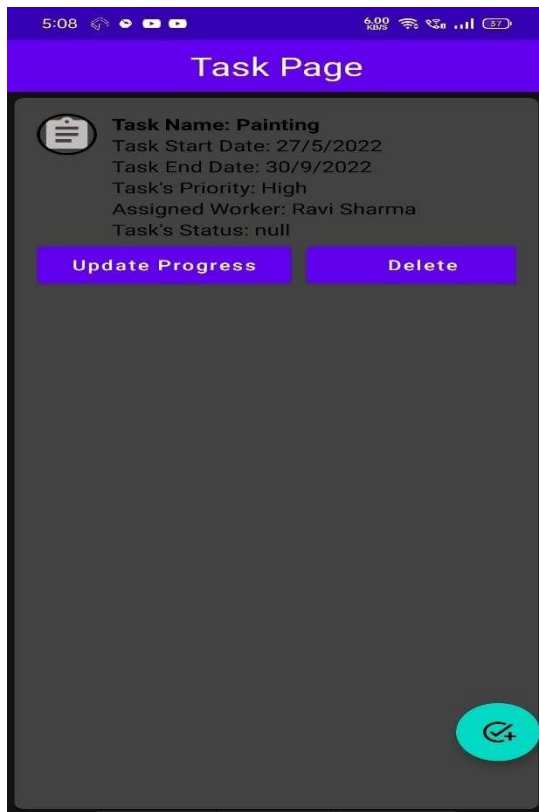


Fig 10 Task Page

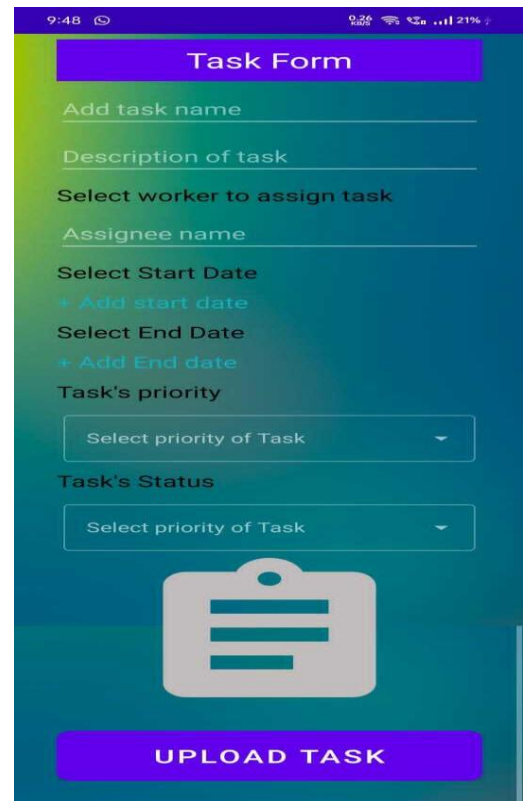


Fig 11 Page to add task

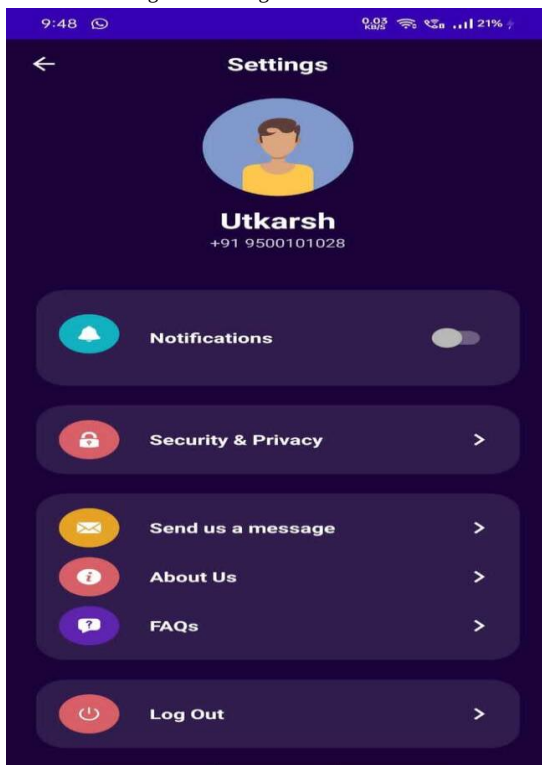


Fig 12 Settings Page

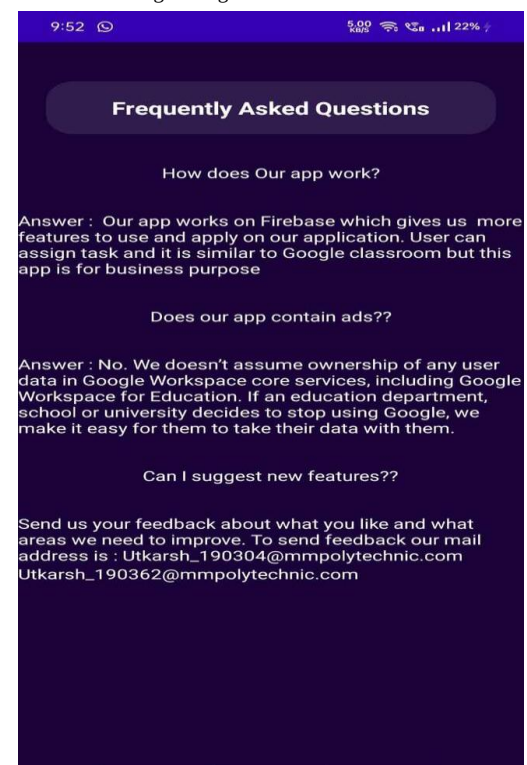


Fig 13 FAQs Page



Fig 14 About Us Page

6. CONCLUSION

The Construction Planning is designed in such a way that the problems facing the consulting company to meet the requirements will end. The burden of the actual work was made easier with the development of the system. The user can view data and performance analysis can be done. The main objective of this project was to provide the required number of back-end reporting tools that can handle a sufficient amount of data.

Construction planning app will be very useful in construction planning, budgeting. This will help many constructors and will help in reducing the delays in Construction projects

6. ACKNOWLEDGEMENTS

Perseverance, Inspiration & Motivation have always played a key role in the success of any venture. At this level of understanding it is difficult to understand the wide spectrum of knowledge without proper guidance and advice, hence we take this opportunity to express our sincere gratitude to our respected Project Guide an example appendix

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An Android App for Gate Pass Management System

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ABSTRACT

Education is an essential element in our life in order to build a better future for young generations. A school must have a better communication platform between teachers and parents to ensure collaboration in monitoring the children's education. Due to time confinement and restrictive schedule, parents nowadays are not able to monitor their children's progress accordingly in terms of school activities and student performance. Not even able to make time for children's school visits. Furthermore, instructions from the teachers to the parents were not delivered properly. These are caused by multiple factors such as the inability to deliver messages correctly due to young age. Therefore, this app proposes an online guest system. The guest app will be built into the mobile application system. There are a few features in the guest app involved such as taking teacher appointments via app. This system is specifically designed for primary school students. The rapid Application Development (RAD) cycle is chosen as a methodology to develop this guest app. By having this guest app, parents and teachers can meet and collaborate to monitor the students' performance.

Keywords: Android, Firebase, Gate Pass, Teacher-Parent Appointment

1. INTRODUCTION

In the current school/college system parents and teacher meetings are done manually. Just like if a parents want to meet a teacher then on parents' meeting day parent can meet. Even on another day then parents need to enquire a lot. So overall this process is traditional and time-consuming. So to overcome this we need to make this process faster and that can be done digitally.

Here we are developing an android app that will arrange a meeting between parents and teachers. Here 2 apps are developed one for teacher and another for a peon. When a parent arrives at school/college to meet a specific teacher then peon takes a photo of the parents and adds details like the parent's name, the reason for the meeting, date, time, and more. All this information is sent to the particular teacher with whom the parent wants to meet.

The teacher receives the request of the parent sent by the peon. The teacher has two options to accept the request or reject the request. If the teacher accepts the request then that gets notified to peon and then parents meet with the teacher. So overall this process is digital and the same it keeps records in a real-time database too. As each can check anytime on which date individual parent come to visit and for what purpose and all. So overall this makes the meeting process simple and traceable.

2. METHODOLOGY

This application aims to connect the teacher and parent. The objective of the project is to build an application that will allow fixing an online appointment with the teacher. The online system for booking an appointment responds to the current needs of the institute. The purpose of the application is to create a software product that will help as many users as possible.

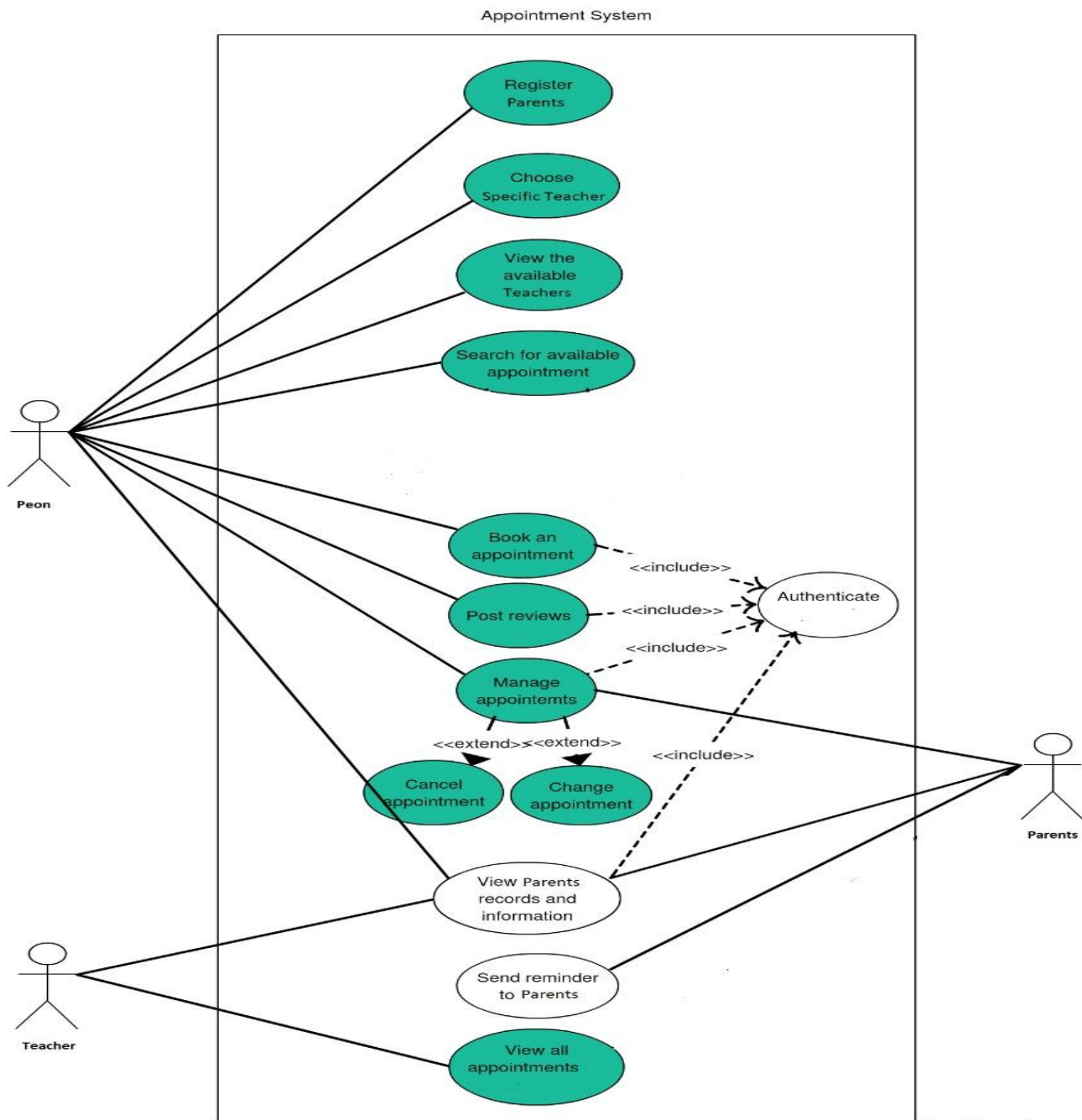


Fig. 1– Use case Diagram

3. PROJECT TRACKING

This application aims to connect the teacher and parent. The objective of the project is to build an application that will allow fixing an online appointment with the teacher. The online system for booking an appointment responds to the current needs of the institute. The purpose of the application is to create a software product that will help as many users as possible.

Proposed System

The current system of school system works manually and is quite time-consuming. The main objective of this project is to develop an android application so that parents can book the appointment online directly from their smartphones and receive a message on their own phones. Thus the process of meeting teachers will become easier and less time-consuming. Just to make the current system easier and more effective we are developing an android application. In this application, the parent will send an appointment request to the teacher. If a teacher is free he will approve the parent's request else he will reject the request

System Analysis

Android Studio and Firebase are used for developing our project which is available everywhere. It provides the technical guarantee of accuracy, reliability, and security. The current system development is technically feasible with all the resources needed for the development of the apps as well as the maintenance of the same is easy,

Requirement Analysis

- ✓ **Hardware requirements –**
 - Processor: 2.2 GHz CPU
 - RAM: 8 GB
 - Device: Android Phone
- ✓ **Software Requirements –**
 - Development Tool: Android Studio
 - Android O.S: Kit Kat & Above

4. TOOLS AND TECHNOLOGIES

- A. Hardware used in PC
 - 1. System type – 64-bit OS
 - 2. Installed memory - 4 GB and more ram
- B. Software Tool Used
 - 1. Microsoft windows 7 or above.
 - 2. Android Studio
 - 3. Firebase Database
 - 4. Java Development Kit
- C. Platform
 - 1. Android Phone

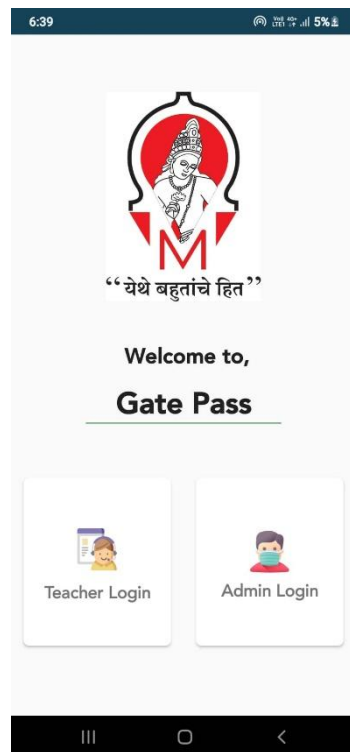


Fig 1 Select Login page

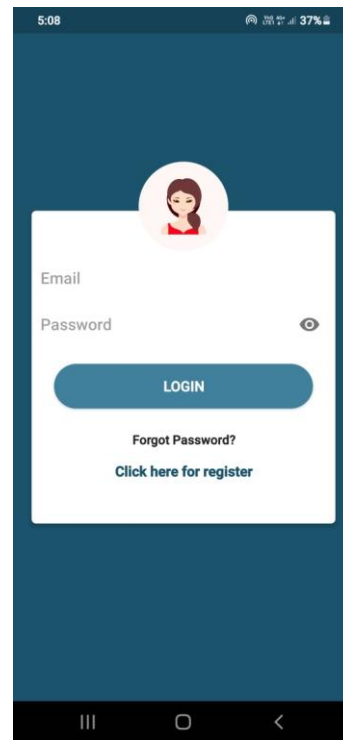


Fig 2 Teacher Login page

5. SCREENSHOTS OF APPLICATION

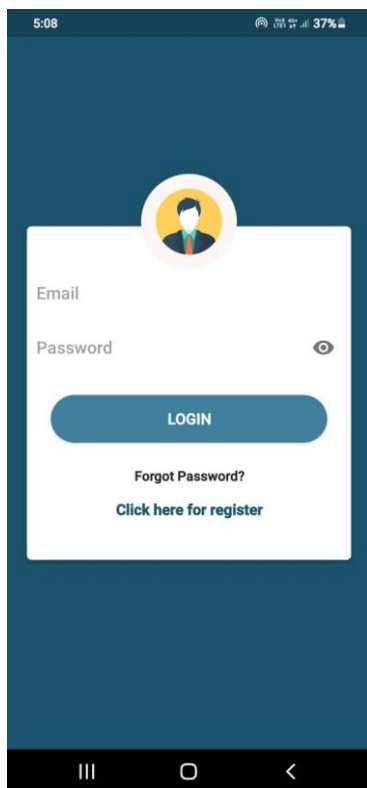


Fig 3 Admin Login Page

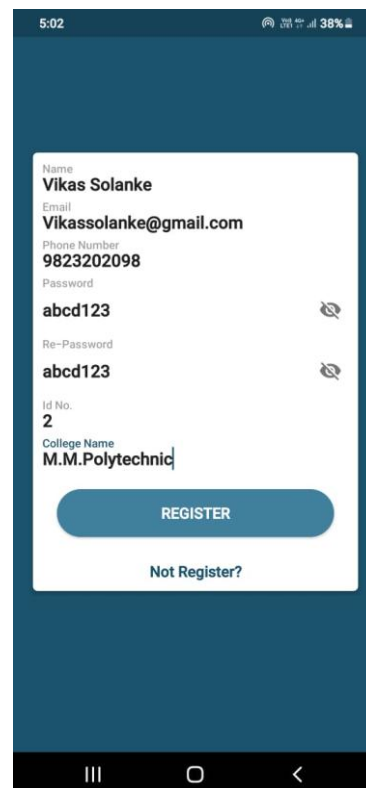


Fig 4 Registration Page

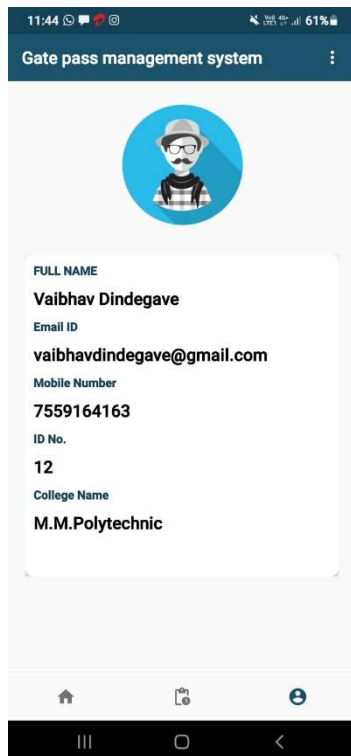


Fig 5Teacher profile

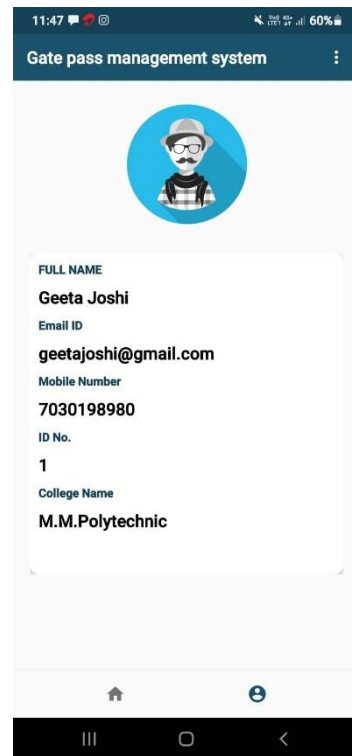


Fig 6Admin Profile Page

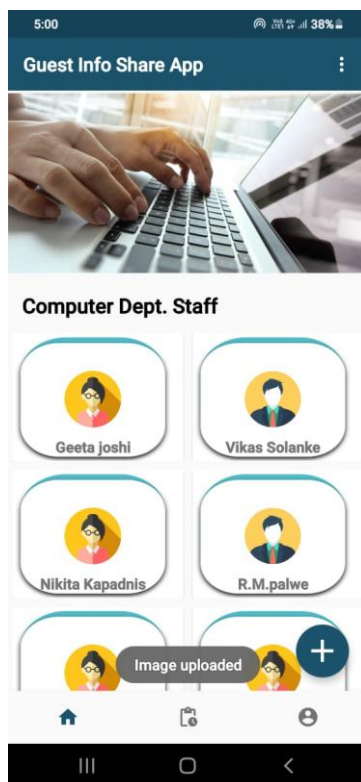


Fig 7Teacher Staff

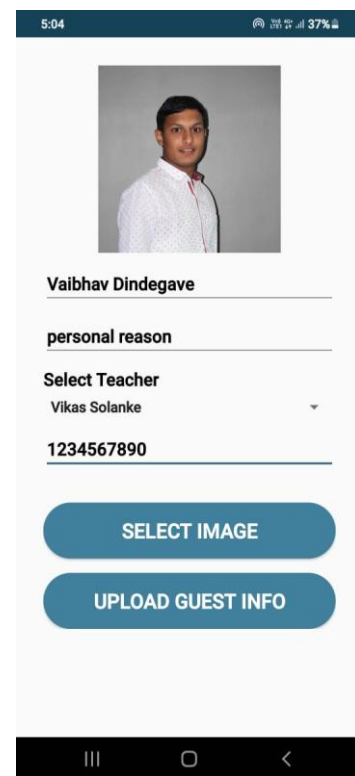


Fig 8Sending request to teacher

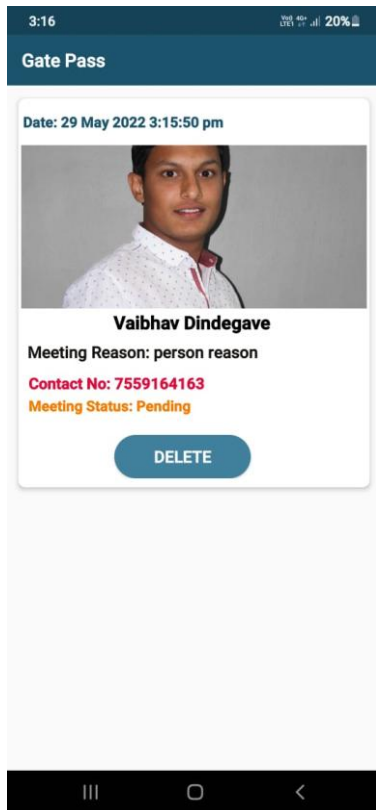


Fig 9 Teacher side request

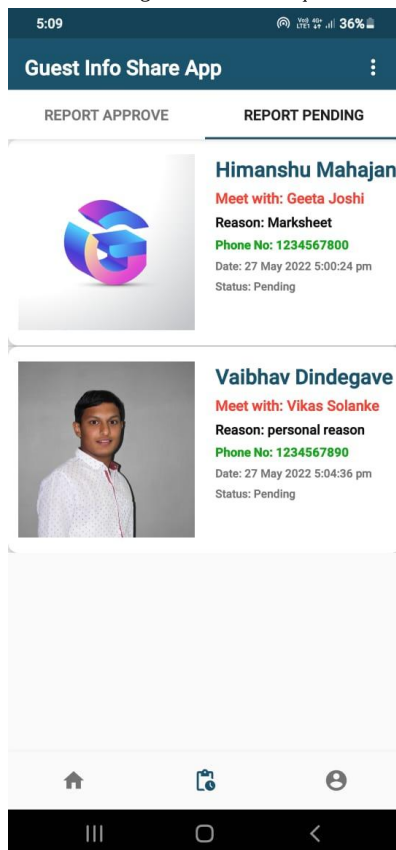


Fig 11 Admin side Approve pending report

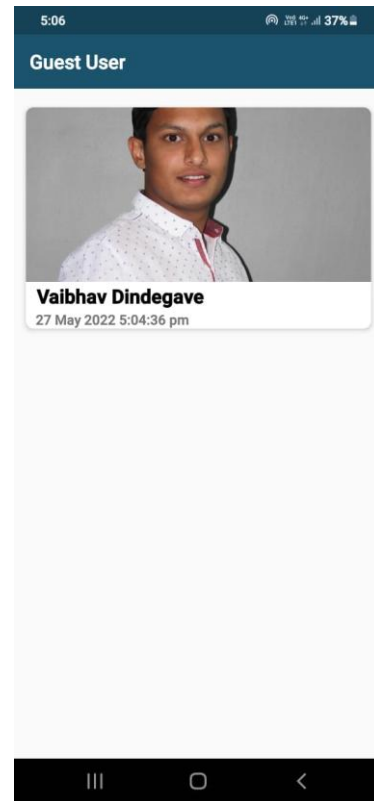


Fig 10 Admin side Staff data

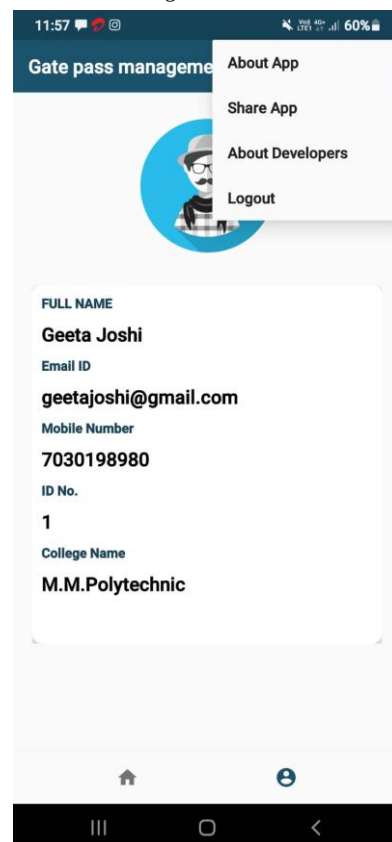


Fig 12 Menu Bar

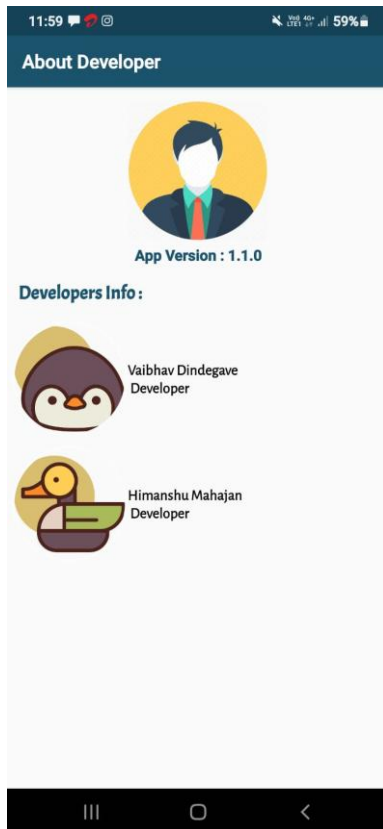


Fig 14 About developer page

6. CONCLUSION

This application will simplify the process of parents-teacher meetings, The app will allow peon to send parent requests to teachers and teachers will be having the full privilege to accept requests or decline requests. The app also contains full records of which parents met which specific teacher and why parents visited and at which date, and time parents visited. Overall this app will connect parents' and teachers' meetings in an effective way.

The app has a backup that keeps a record, as in the backend of the app firebase real-time database is used to store data and provide security to data. So overall app is fully secured and data is processed in real-time. This app is completely useful to teachers and parents for arranging a meeting.

7. ACKNOWLEDGEMENTS

Perserverance, Inspiration & Motivation have always played a key role in the Success of any venture. At this level of understand it is difficult to understand the wide spectrum of Knowledge without proper Guidance and Advice, hence we take this to express our Sincere Gratitude to our respected project guide Mr.R.M..palwe who as a guide Evolved an interest in us to work and select an entirely new idea for project work.

Vaibhav Rajkumar Dindegave
Himashu Neharu Mahajan

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AMBULANCE MANAGEMENT SYSTEM

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ABSTRACT

As in India each minute's one individual dies because he isn't always capable of attain the health center in time so we are developing an utility with the intention to lessen the time. the primary characteristic of those task will lessen the time among ambulance driving force and the sufferers and it will store someone's life. records era has become a critical part of our dynamic existence for every human being in the global and usage of smartphones is growing exponentially. aged peoples who're unable to offer correct facts and utilize the emergency phone calls, users whom discover themselves in an unknown area that may not be described or offer an accurate cope with while emergency takes place, casualties which because of the overdue arrival of ambulance and looking for an available close by ambulance have been a number of the hustling factor that confronted by way of cutting-edge speedy tempo community. With extra congested roads and inadequate information, the hunt and rescue operation grow to be nearly not possible. This Android based cellular software project will completely trade the native manner of calling an ambulance and it'll be extra efficient and dependable for the emergency scientific offerings (EMS). This app will help the consumer to get any to be had ambulance without calling the hospitals to check for the ambulance availability. The app reacts with just one tab at the button and it's going to send the notification of user's information and location through GPRS to nearby ambulance manipulate centre. Then it's the authority's hand to approve the asked notification. Once the request is widely wide-spread, the GPS area will be despatched to the ambulance motive force with the intention to cause the user region. It also enables to save you fraud calls and tracks down the perpetrator who misuse the EMS with the aid of diverting the service from higher needy.

Keyword:- Ambulance Management System, GPS, Android.

1. Introduction

As in India maximum of the cities are going to be clever city but as in underneath the clever metropolis we a lot again to obtain the word of clever. If we improve efficiency in healthcare sector it is not clean undertaking because of these we are able to require some time however we are able to do it. As our project i.e. ambulance services which we've got got concept with the aid of seeing our daily life. Where in we can see that every minute and every hour some die due to not reaching. Health center inside time. The need of quick and green services are almost important in each factors specifically in terms of medical offerings. Sufferers are basically having problems on looking for an ambulance, handling the places and availability of the restrained provider inside the time of emergency. As a consequence the ambulance drivers ought to have right facts supplied to them in order that they gained wander away or locate themselves attempting to find the exact region of the patient. This made the ambulance driving force to loss and not able attain to the affected person who want on the spot clinical interest. The primary intention is to lessen the time of calling the operator and to request an ambulance, reduce fraud calls and to permit ambulance driver to find the victim without problems by means of using GPS signal.

2. SYSTEM AND COMPONENTS

Components use

- Hardware Requirements

Smart mobile phone

CPU-Quad-core Max 1.40GHz

Internal memory – 8 GB RAM

- Software Requirements

Android Studio

Programming: java

Operating System: Windows 7

3. OBJECTIVE

The purpose of the application is to give better idea for rescue system with user friendly interface in case of emergency and rescue situation. At the present, there is no such application which can facilitate the people in case of emergency through a smart phone app. [1]

4. WORKING OF OUR PROJECT

In our application we are giving facility of reserving ambulance in addition like how we ebook cabs. it will likely be very critical application for us from which we will reduce time and deliver patient on time. In our software there can be two modules wherein one can be for consumer/affected person and other may be for ambulance driving force. In our venture facts can be kept competently and in systematic manner so that it will clean to maintain data of customers and drivers. In our assignment we will effortlessly discover ambulance in addition to consumer as it should be thru which it'll reduce the time of calling to everyother.

Chart -1 GPS



5. STEPS TO USE APPLICATION

- Driver Registration
- User login
- View Vehicle location availability
- Send user location to driver
- Server take decision about path and serving vehicle
- User call the driver and check Available Ambulance

6. ADVANTAGES

- Stay monitoring and status statistics of all to be had ambulances in a map which enables for quick redirection of the ambulance to a vital spot.
- Enables health center authorities to be expecting the advent time of emergency instances and to do previous preparations.
- Higher management and responsibility of ambulance operations.
- Advanced response times, potentially saving lives.
- Greater accuracy for allocating sources and strategic making plans.

7. DISADVANTAGES

- User wishes to name and supply them specific place to capable them to track and attain the consumer on time.
- Person need to test availability of the ambulance to make certain they get the ambulance.

8.SCOPE OF PROJECT

we are able to be desiring greater unique database and minor roads for proper and earliest identity. In destiny, AMS can be utilized by the emergency provider providers. This prototype can be used for functioning and to find the closest path from police car to the crime vacation spot. And also to locate the hearth spot on virtual map. The AMS machine may also be offering a detailed geodatabase of every town particular. afterward, similar era can be applied in the railways for secure transportation.

G3 technology are: Geographical statistics device
worldwide Positioning machine
GSM

these G3 technologies will be further used for following needs like displaying, locating and transmitting statistics.

9. CONCLUSIONS

In this paper, a concept is proposed for saving a patient's life in a faster way feasible. With this software, the ambulance can reach the sufferers as place is given via the app. hence it reduces the time complexity and allows to provide faster scientific offerings.

10. ACKNOWLEDGEMENT

We take this opportunity to thank all the individuals connected with this project for their useful direction, help, and timely support which helped us to complete the project in a specific amount of time. We would like to express great gratitude to our head of department Mr. V. S. Solanke and Mrs. Nikita Kapadnis there for their all-important support, motivation, guidance, and helpful suggestions all over the project work. Last but not least our sincere credit goes to our family for their support since we begin our education and also to all our group persons.

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IoT Cleaning Robot

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ABSTRACT

Cleaning is an essential part of our day-to-day lives. Cleaning effectively should be an important part of a larger plan to create healthier indoor environments by removing contaminants that can cause illness. Lack of hygiene and cleanness is an open invitation to infection. A clean environment allows for a safe work environment. People like to work in clean surroundings. Employees will not make additional effort to dress up to impress knowing that the workplace is dirty and smelly. This may indicate that owners and managers do not care about the environment in which they work. Robotic cleaners have received significant attention in robotics research in recent years due to their effectiveness in assisting humans in floor cleaning applications in homes, hotels, restaurants, offices, hospitals, workshops, warehousing, and universities, among other places [1]. This document describes the design, development and production of the Clean Sweeper prototype. The subject robot works autonomously as well as in manual mode. The Clean Sweeper prototype lets the user operate the system from being within the prototype's Bluetooth range.

Keyword: - IoT, HC-06 Bluetooth Module.

1. INTRODUCTION

Clean Sweeper is autonomous and smartphone-controlled robot that cleans the floor of your home! The rotating mops on the front of the robot can do the job perfectly. There is also a water pump and reservoir that can be activated to throw water on the floor and moisten the mops for a thorough clean.

The project sends commands to the most commonly used microcontroller, the Arduino UNO, using Bluetooth communication via an HC-06 Bluetooth module. The robot is powered by a 12V lead acid battery, which is the optimal voltage for all of the motors used here. The driver motor pair is 100rpm, while the mops are 75rpm plastic ones. The best part is that the mops were made from old CDs and rags, and they work perfectly.

In this project, the Arduino Uno is the microcontroller. All the commands are stored in the Arduino Uno in the form of Program. The programming language used for this project is C++. Arduino Uno is the most popular microcontroller used for IoT Projects. The Arduino Uno is a microcontroller board that was designed by Arduino.cc and is based on the Microchip ATmega328P microprocessor.

The board has a number of digital and analogue input/output (I/O) pins that can be used to connect to various expansion boards (shields) and other circuits. The board features 14 digital I/O pins (six of which are capable of PWM output), 6 analogue I/O pins, and is programmable via a type B USB cable using the Arduino IDE (Integrated Development Environment).

2. OBJECTIVE

The objective of this project is to design the manual and automatic floor cleaning robot to reduce the human workload. Because of this project, the cleaning time will be reduced and the cleaning robot is at an affordable price. This project can be developed according as per the user's requirement. If the user needs automatic robot, then the user can get fully automatic robot and if the user needs manual robot so that the user doesn't need to clean the floor physically but user can only command with a smart phone and the floor.

This project includes numerous features such as it has 2 rotating mops on the front side of the cleaning robot so it can clean the floor properly. It has an Ultrasonic Sensor attached to the front side of the cleaning robot to detect obstacles and to avoid accidents while cleaning. The cleaning robot has a pump and water container installed. Using the pump, the water will be sprayed in the front of the mops to make the mops wet.

3. SCOPE OF PROJECT

The project's goal is to create a manual and automatic device that can be controlled by a person or the internet of things to clean the floor, and we only need to click a start button of the robot in a smartphone application. This project's scope includes a large floor area.

4. PRINCIPAL COMPONENTS OF PROJECT

1. Arduino UNO
2. HC-05/06 Bluetooth module
3. Ultrasonic Sensor
4. L293D motor driver board
5. Servo motor
6. 12V Sealed lead acid rechargeable battery
7. 12V Water pump
8. TIP31C NPN power transistors
9. 75rpm Plastic geared motors
10. 100rpm DC Geared motors

5. ASSEMBLY OF PROJECT

The project is being built on a ply board. Two wheels are attached to the plywood's back side. In addition, there are two plastic geared motors on the front side. A small roller in the front middle part of the plywood is used to support the plastic geared motors. The weight of the plywood and the components in the front is transferred to the roller. A motor driver controls the movement of motors. This motor driver is programmed with Arduino software and powered by a 12-volt battery.

12V Sealed lead acid rechargeable battery is for the power supply. The 12V Sealed lead acid rechargeable battery is connected to the Arduino UNO. And then Arduino UNO supplies the power supply to other components used.

First, we checked that all the components which are going to be used for the project are in working condition and we make sure that there is no fault in the components. After that we took two old CD's and a cleaning cloth. We cut the cloth in a circular shape a little bit bigger than CD size. We stitched elastic to the corner of the cloth so that it can fit onto CDs properly. Then those CDs are attached to the plastic wheels with the glue gun. And here our mop is ready. We attached those mops to the plastic gear motors which will be attached to the front of the plywood.

Two wheels are powered by dc motors, which are controlled by the motor driver L293D via Arduino programming and pin connections.

The digital write pin is used in Arduino software to provide input. We provide motor driver input from the Arduino digital write pin for operation. For Arduino to function, various pins are assigned.

Table -1: Arduino Uno pins assigned to L293D

SN.	Digital write pins of Arduino Uno	Pins of L293D
1	D10	In 4 (Right motor '+')
2	D11	In 3 (Right motor '-')
3	D6	In 1 (Left motor '+')
4	D9	In 2 (Left motor '-')

The Arduino is used to program motor drivers. The motor driver is programmed to control the motion of dc motors. When the ultrasonic sensor sends a signal to the Arduino, the motor driver operates the motors for a right or left turn, and then the motor moves forward.

The pins of HC-06 Bluetooth Module are connected to Arduino UNO. Following table displays which pin of HC-06 Bluetooth Module is connected to which pin of Arduino UNO.

Table -2: Arduino Uno pins assigned to HC-06 Bluetooth Module.

SN.	Digital write pins of Arduino Uno	Pins of HC-06 Bluetooth Module
1	RXD	TXD
2	TXD	RXD

We soldered the circuit of "TIP31C NPN power transistors" onto the PCB board. We soldered the 5-volt pins together on one part of the PCB board so that the 5-volt power supply should go from one source. We soldered the ground pins together on the second part of the PCB board.

The pins of Ultrasonic Sensor are connected to the Arduino UNO so that Arduino can transmit and receive the data from the Ultrasonic Sensor. Following table shows that which pin of Ultrasonic Sensor are connected to which pin of Arduino UNO.

Table -3: Arduino Uno pins assigned to Ultrasonic Sensor.

SN.	Digital write pins of Arduino Uno	Pins of Ultrasonic Sensor
1	A0	Echo
2	A2	Trig

Table -4: Arduino Uno pins assigned to Other Components.

SN.	Component Name	Digital write pins of Arduino UNO
1	Pump	D4
2	Plastic Gear Motors (Mops)	D5
3	Servo Motor	D3

6. WORKING

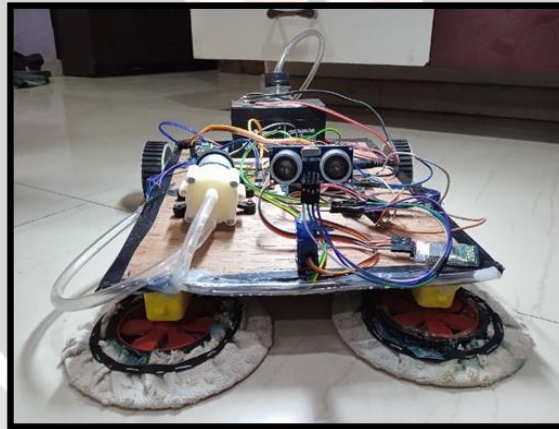
Clean Sweeper robot has a 12V Sealed lead-acid rechargeable battery. First step is to connect the 12V Sealed lead-acid rechargeable battery with Arduino Uno and connect Bluetooth with the HC-06 Bluetooth Module and make hole circuit controllable remotely with Bluetooth Serial Controller Application. When we send a motion signal from the Bluetooth Serial Controller Application, the program set by the Arduino Uno will launch a given command motion.

We can give 9 commands from Bluetooth Serial Controller Application.

Table -5: Commands given by application.

SN.	Commands	Description
1	'F'	Gives command to go Forward
2	'B'	Gives command to go Backward
3	'R'	Gives command to go Right
4	'L'	Gives command to go Left
5	'S'	Gives command to Stop
6	'M'	Gives command to turn on Mop
7	'm'	Gives command to turn off Mop
8	'P'	Gives command to turn on Pump
9	'A'	Automatic Mode

7. MODEL

**Fig -1:** Front view of Model.**Fig -2:** Side view of Model.

8. CONCLUSION

We have completed the manually controlled and autonomous IOT floor cleaning robot model prototype, and this project presents implementing an Internet of Things-controlled, manual and automatic cleaning system. In today's world, time is an important aspect for people. People aren't getting much time from work to do household work. So for those people, this product can be helpful. And If people have time but they are not physically able to clean the floor, then this product's manual mode will help them to clean. In the Manual mode of IoT Cleaning robot, if there is obstacle in between the way of robot and still if user gives command to go forward, then robot will not respond to that command because of obstacle.

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Kaun Banega Crorepati Simulation

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Abstract

Success of a television game show requires brand-building effort and brand value management like any other product. However, aspects of information, entertainment, novelty, instant gratification, and experience dimensions are more salient in game shows. This has been amply proven by the television game show Who Wants To Be A Millionaire. The purpose of this research is to explore why some entertainment products succeed, while others fail. Design/methodology/approach – In this paper, we present the system dynamic model of brand management of the game show Kaun Banega Crorepati (KBC), the Indian version of Who Wants To Be A Millionaire. Initially, we present the reference mode behaviour, drawn from published data. In the dynamic model, we include factors such as channel popularity, host popularity, prize money, and competition that work towards building the viewership and influencing operational revenues. Computer-based simulation and experimentalism are then applied as a research method to the model to explore its dynamic behaviour. Findings – Our analysis shows that the right mix of host popularity, channel popularity and prize money has enabled KBC to achieve unprecedented success. Research limitations/implications – Validation of the model is based on the strength that the simulation results can replicate the reference mode behaviour and produce behaviour expected under extreme conditions. The validated model is used to draw what-if scenarios, some of which resemble the experiences of competing game shows. Originality/value – Understanding the dynamics of brand management of this game show can serve as an important tool for brand management of entertainment products. Further, the use of system dynamics for dynamic modelling of brand value has application in broader areas of marketing, and would be of interest to a wide managerial audience.

Introduction

KAUN BANEGA CROREPATI PROGRAMME is well famous and popular game among many players all over the world. This report details the development of a Kaun Banega Crorepati Simulation Game application that is written in CPP Programming. In addition, the report details the implementation to solve any kind of Quiz Game. Also, how to generate a Game with different level of difficulties and make sure there will be only one solution. The aim of the report is also to discuss and other logics in order to create and solve Quiz Game. Furthermore, the user-friendly environment is considered in the report as the rules of Kaun Banega Crorepati are connected to the interface. This programme improves methods of solving Quiz .The report concludes by evaluating the end application to analyze how good it met its objectives and the performance of Kaun Banega Crorepati Simulation Game. Finally, the report summaries the overall achievements of the application development and indicates other possible extensions.Kaun Banega Crorepati (KBC) simulation system is based on the television show by the same name, hosted by Mr. Amitabh Bachchan. The main objective of this application is to provide its users with an opportunity to play the famous quizzing game at the comfort of their homes on a computer system. The main purpose of this game is to make people learn new things and improve their general knowledge, just by playing a game. You keep yourself updated by recent current affairs. There is a good scope for improving one's general knowledge. You can be one step ahead of others. You can be more confident on any topic and gain more knowledge and also able to convey the information to others as you already know about it. By this projects students will Acquire knowledge for developing many more projects like KBC.

Research Methodology

In order to run the program users have to first give the proper path of the graphics driver which is available under bgi. To check the whether graphics driver is available or not, you have to quit the turbo C++ shell and you will be taken to the C:\TURBOC3\BIN. You will have to change the directory to check whether bgi driver is

available or not. So you can change directory by CD... and press enter. The directory of bgi can be different as per the compiler you are using. This is the path of the graphics driver which we have to give in this program to enjoy the game.

To start this game, you have to press any key, you will be given a question with 4 options which has been displayed at the bottom of the page. A table with the amount is displayed at the right side of the page, 3 Life lines are displayed at the top right corner. For every right option you will be promoted to the next level and you will awarded with some money. In case the player is stuck with a question he can use any of his life lines. If the player chooses the wrong option the game ends.

PROJECT AIMS AND OBJECTIVES

KBC GAME involves enhancing skills such as developing research skills, improving language skills and reasoning ability, developing the power of concentration and increasing creative abilities. KBC GAMES Improve IQ Research states that solving Questions helps raise the IQ (intelligence quotient) level of the player. KBC GAMES force the solver to think and reason.

KBC GAMES Improve Cognitive Ability in Students, KBC GAMES enhance their ability to visualize and understand the whole - part relationship. KBC GAMES Enhance Motor Skills. KBC GAMES can be used to speed up the learning process. When players are expected to grasp the objects and fit them into proper.

This improves programme building abilities using Graphic as KBC is graphically oriented programme.

KBC is Design to promote a fun way to study and in the process help improve once General Knowledge .KBC improve or expanding once knowledge of things.KBC is to encourage players to look beyond their textual knowledge and establish a relationship between theory and application of the learnt concepts.

GAME RULES

Contestant who is in hot seat will be given a Question with have 4 options.

He has to choose the right option from the 4 options.

The contestant has 3 –Life lines I.e. They are:

- ❖ 50:50 – The 2 wrong options will be eliminated. The contestant is left with 2 options of which one is the correct option.
- ❖ Phone a Friend: The contestant can make a phone call to any of his/her friends or relatives and can ask the answer for the question. The contestant has only 30 seconds to do this
- ❖ Audience pole: The contestant can ask the audience and choose the right answer.

Hardware and Software Requirements

1. Minimum Hardware Requirements
 - i. Monitor
 - ii. Keyboard
 - iii. Mouse
2. Minimum Software Requirements
 - i. Operating System: Windows XP
 - ii. Turbo C++
 - iii. At least 44.0 KB of free space

Header File Used

Filename	Description
FSTREAM.H	Provides functions for file and We/o handling
CONIO.H	Used to create text based UIs
STDIO.H	Provides functions with standard We/o capabilities.
MATH.H	Design for Basic mathematical operations
GRAPHIC.H	Facilitate graphical operations such as to draw different shapes, change colors and many more
STRING.H	Contains functions with string handling capabilities
STDLIB.H	This header defines several general purpose functions
DOS.H	Contains functions for handling interrupts, producing sound date and time function etc.

Functions used in the Program

Functions	Description
Void page2():	Used to play the game rules, levels of the game, and ask the details of the player.
Void page3():	Used to display 4 options for the respective Questions.
Void Questions();	It is used to display the Question's ,Which are from the Question Bank and that is embedded in TC\BIN FOLDER

Void incorrect1();	This is used when player has chosen the wrong option and ends the Game which is used to check the first option.
Void incorrect2();	This is used when player has chosen the wrong option and ends the Game which is used to check the second option.
Void incorrect3();	This is used when player has chosen the wrong option and ends the Game which is used to check the third option.
Void incorrect4();	This is used when player has chosen the wrong option and ends the Game which is used to check the fourth option.
Void Phone a friend();	This function enables the player to seek help from his friend within 30 seconds
Void fifty();	This function is used for removing two options from the given 4 options.
Void audience();	This function is used for representing a graph in which the ratio of audience selecting the options as shown.
Void sorry(); Void select();	This function is used, when the player has chosen a wrong option it displays the statement: sorry It enables the user to select his described option.
Void total prize money();	This function is used for showing the amount won by the player.
Void ask name();	This function is used for asking the Name and place of the player and it also displays the instructions of the game.

Result and Discussion





Conclusion

This section concludes the report with what have been achieved. In addition, it discusses future activities that could be added to the application. In future we can implement it by timer at each every level of the game.

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BLIND HELPER APPLICATION BASED ON TEXT-TO-SPEECH

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ABSTRACT

Blind individuals don't have the posh to browse and write. Hence, I'm creating an associate in a nursing application that will modify the written text with a camera by simply sound on the screen employing a speech engine. I actually have conjointly designed a talking calculator so blind individuals will use the calculator via voice commands. On the side of that, I actually have supplementary applications so they assist blind individuals to use them throughout their standard of living. It conjointly shows your current location. With the assistance of this application, the user also will notice the weather of any town or location. It conjointly needs negligible effort from the user to use the appliance throughout the standard of living. With the ascent of wireless communications, the requirement for voice recognition techniques has enlarged greatly. Voice applications supported by voice interfaces, voice recognition, and voice dialogue management will facilitate users to be targeted on their current work while not a further effort for hands or eyes. the appliance listens to your commands and then responds with voice commands by talking.

Keywords: - OCR recognition, Calculator, Location detector, Weather detector, Text-To-Speech, Android

1. INTRODUCTION

Visually impaired are the ones who are completely or partially blind. According to an estimate made by the World Health Organization (WHO) 285 million of the population suffer from visual impairment and 39 people were blind and approximately 3% of all the ages in a nation are visually impaired. [2] This project was conceived keeping in mind the day-to-day struggles such as reading, current location, weather detection, phone battery status and time and date, etc. faced by the blind and visually impaired people. So, for that, I have used Google speech input where the blind user has to say certain words to open those particular tasks. One of the major factors in developing these technical aids is the compatibility with the user. He should not have trouble getting acquainted with the product. The features of the product should not be too difficult to use.[1] This application has simple working like the user has either swipe right or left on the screen to open the voice assistant and talk. I have also added a text-to-speech method for listening to the working and use of the application. It is developed to help deaf-blind people interact with others with ease. Provides the blind user the ability to perform some basic daily activities by the combination of some mere touches and taps, such as reading, calculator, weather, location, and getting the time and date phone battery status with someone. The project is designed to address the daily struggles of blind and visually impaired people such as reading, current location, weather detection, phone battery status, and time and date. So, for that, I have used Google Speech Input where the blind user has to say a few words to open those specific functions. This application has a simple function as the user swipes right or left on the screen to open and speak to the voice assistant. I've also added a text-to-speech method to listen to the application's functionality and usage. This application allows the blind user to perform some basic daily activities such as reading, calculator, weather, location, time, and date to know the battery status of the phone with the help of touch and tap on the mobile screen. Also, the main thing I have implemented is the user will open this functionality using voice commands like when I say read it automatically open that particular activity.

1.1 Tools and Technology Used

Software: - Android Studio

Language: - Java

Android SDKs are modules of Java code that are required for accessing mobile device functions.

The main component of the Android SDK is a library called Gradle to build our application.

Google Speech API is required.

Android Studio: Android Studio is the official Integrated Development Environment (IDE) for android development. Android Studio uses the Instant Push feature to push code and resource changes to a running application.

Java: Java is the first choice of android app developers because of its ease of use, robustness, security features, and cross-platform development capabilities.

SDK: SDK stands for software development kit or devkit for short. It's a set of software tools and programs used by developers to create applications for specific platforms.

Gradle: Gradle is a build system (open source) that is used to automate building, testing, deployment, etc. "build-gradle" are scripts where one can automate the tasks.

Google Speech API: Speech-to-Text enables easy integration of Google speech recognition technologies into developer applications. Send audio and receive a text transcription from the Speech-to-Text API service.

2. METHODOLOGY

1. **Importing:** - First I have added the required dependencies that allow us to include external library or local jar files or other library modules in our Android project.
2. **Design and Coding:** - Then in the .xml I have designed the user interface of the application. In MainActivity.java I have created all the methods that will help the user to open certain tasks with simple voice commands. By right-swiping on the screen user will read the feature or operations of the app. By left swiping on the screen voice input will start. After the user gives the voice command it will automatically be redirected to that particular activity. Let's say If the user says "read" then it will automatically open the read activity. So that user will just tap on the screen and take the picture and read-aloud text in it.
3. **Methods Used:** -
 - a. Text to Speech (TTS): - TTS is a method that converts speech from text. TTS is important for voice output for voice feedback for the user. TTS is implemented in software where audio capability is required. When the user enters a voice command, TTS will convert that voice into text format and performs a specific action.
 - b. Speech to Text (STT): - Android has an inbuilt feature that is speech-to-text through which the user can provide speech input to the software. In the background, speech input will be converted to text and perform an action in the form of TTS.

3. System Architecture

The system proposes the following applications:

1. OCR reader: - After swiping right on the screen user has to say "read" then it will ask if you want to read say yes for continue and no to return to the main menu.
2. Calculator: - The user has to say "calculator" after that user has to tap on the screen and say what to calculate then the application will say the answer.

3. Location: - In this user has to say location after that user will tap on the screen then it will say current location.
4. Weather: - In this user will say "weather" and then say the name of the city. After that application will say the weather of that particular city.
5. Battery: - To check the current phone battery status user has to say "battery".
6. Time and date: - To check the current time and date user has to say "time and date".

3.1 User Interface



Fig -1 Home Page of Application



Fig -2 Features of Application**Fig -3 Google Assistant**

4. CONCLUSIONS

At present, mobile apps on smartphones are used to perform most of our daily activities. But the people with vision impairment require assistance to access these mobile apps through handheld devices like mobile and tablets. Google, Android applications have been developing various mobile apps for visually impaired people. Still it needs to provide more effective facilities in the app by adopting and synergizing suitable techniques from Artificial Intelligence. This report introduced two environmentally-friendly designs for blind people. We presented information about the Blind people application. This application will be more effective for blind people. It is important to develop this application for the future. The system is used by Blind people, but normal people also can use it. In the future, the proposed system will be able to interpret the textual description in a much better way. The Image recognition can be enhanced with much more details about the image captured through the camera. Enhancement to this system can be done by adding the features of currency recognition [3].

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IoT based Weather Reporting system

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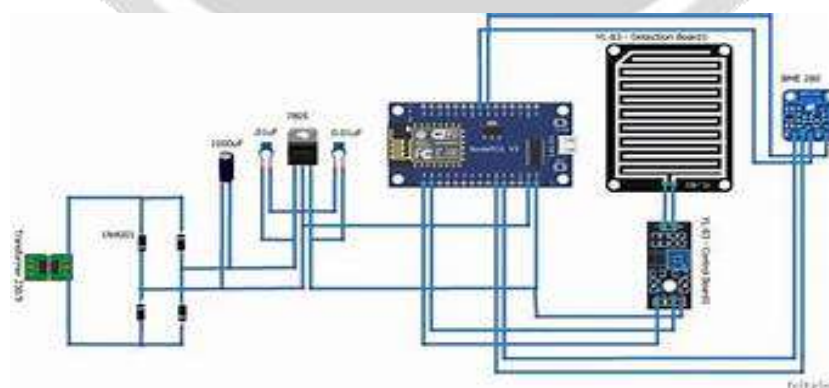
ABSTRACT

The weather monitoring and reporting system project is used to get stay reporting on weather circumstances. It will display temperature, humidity, and moisture. The proposed system is a modern answer for monitoring a particular vicinity and making the data available over the internet. These statistics can then be considered in an application so that essential and well-timed movements may be taken. The system uses sensors, sirens, and other digital components to track climate parameters. The machine deals with controlling and monitoring the environmental adjust like temperature, relative humidity, raindrop, and flame with sensors and sends the records to the cloud which can also be reachable on the Android app after which plot the sensor data as scripted form.

keywords - Arduino Uno, temperature sensor, humidity and moisture sensor, WIFI module, siren, smart surroundings

INTRODUCTION

It has empowered us to display and manage extraordinary electronic apparatuses distantly with the usage of sensor networks having the potential of detecting, coping with, and communicating the records to a cloud internet is the heart of this modification assuming an essential part in profitable, strong, and quick correspondence of statistics from gadgets to the cloud and the opportunity manner spherical. This makes a demand for developing clever frameworks which can locate the progressions inside the weather and consequently control the associated gadgets. Sensor devices are planted at various regions to accumulate the statistics as and whilst it detects an adjustment of the gap of hobby and alarm can likewise applied with sensor region and handle the circumstance of sensor and thoroughly paintings upon the circumstance of sensor and alarm



1. Internet of Things (IoT)

It's far the future era of connecting the whole international at one location. all of the objects, things, and sensors may be linked to the percentage of the records acquired in numerous locations and manner/analyses that record for coordinating the packages like traffic signaling, mobile fitness tracking in clinical packages, industrial protection making sure techniques, and many others. As per the estimation of technological professionals, 50 billion gadgets could be related to IoT by way of 2020. IoT offers a wide variety of connectivity of gadgets with diverse protocols numerous homes of applications for acquiring the complete gadget to system interplay.

2. LITERATURE SURVEYS

Many pollutants tracking systems in nowadays world are designed in keeping with different environmental parameters. IoT-based total weather monitoring and reporting device afford the existing device version which could gather, method, analyze and gift your measured records on the internet server. wi-fi sensor network management model consists of an end device, router, gateway node, and control monitoring center the end device is accountable for collecting wireless sensor network facts, and sending them to the parent node, then facts are despatched to the gateway node from figure node without delay or with the aid of router. After receiving the information from the wireless sensor community, the gateway node extracts information after analyzing and packaging them into Ethernet layout facts and sends them to the server. much less formally, any computer running a server software program might also be referred to as a server. Servers are used to manage resources within the network. The net-primarily based services or information are linked via LAN and made accessible to customers via smartphones, net browsers, or different internet browser gadgets to make the system smarter, greater adaptable, and extra efficient.

3. ARDUINO

It's miles an open-source physical platform primarily based on a simple microcontroller board, and a development environment for writing software programs for the board. Arduino can be used to broaden interactive items, taking inputs from the diffusion of switches and sensors, and controlling an expansion of lights, vehicles, and other bodily outputs.

4. Applications Details

- a) facts are to be had on the android app.
- b) previous weather alerts or weather data may be viable.
- c) beneficial for the agriculture area as a gadget could be very less expensive, it could be lower priced to Farmer.
- four)by making an extensive network of this tool, we can fetch real-time records of climate from a specific region that may be available without spending a dime to assist the cause.

5. Conclusion

The studies and implementation of a machine for tracking the environmental parameters using IoT scenarios are done. The system presents a low electricity solution for setting up a weather station. The device is tested in an indoor environment and it's far correctly updated the weather situations from sensor records. it is also a much less high priced answer because of the usage of low electricity stressed out sensors and SoC contained GPRS module

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Home Automation Using Remote Control

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ABSTRACT

The world is moving fastly towards automation. People have less time to handle any work so automation is simple way to handle any device or machine will work to our desire. This paper aim is to develop and design a Home automation using Arduino with IR Receiver,4 Channel5v Relay Module. Home automation system gives a simple and reliable technology with Android application. Home appliances like Bulb, Switch, automatic door lock are controlled by Home automation system using Arduino Nano with IR Receiver,4 Channel 5v Relay Module . The paper mainly focuses on the monitor and control of smart home by Remote and provide a security based smart home, when the people does not present at home. This paper motive is controlled home appliances in smart home with user friendly, design at low cost, simple installation.

Keywords :Arduino Nano,4-Channel Relay5v Module,IR receiver

INTRODUCTION

There is an increasing demand for smart homes, where appliances react automatically to changing environmental conditions and can be easily controlled through one common device. This project helps the user to control all the electronic devices using his/her Remote. Time is a very valuable thing. Everybody wants to save time as much as they can. To save people's time we are introducing Home Automation system.

Advantages

The tasks to be carried out in our homes are much easier, and you can do many actions comfortably from a remote.

Disadvantages

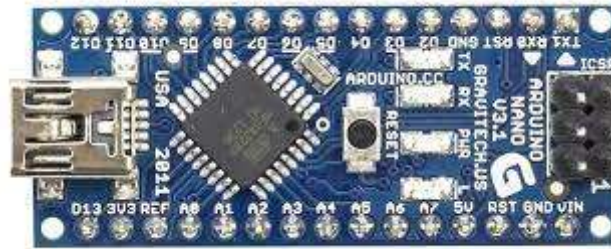
Installation cost can be high.The investment that must be made is very important since the entire home must be wired.

LITERATURE SURVEY

In this Home Automation System we are using Arduino Nano and controlling this with a remote controller (remote). We have given C language program to Arduino Nano and this will give signals to the remote to on and off to the particular switch or a bulb. We Have Use remote based because it is more sustainable to use and there are no difficult features for it.

SYSTEM AND COMPONENTS

Arduino Nano



The ARDUINO Nano is small component and when using on breadboard it is user friendly .

It is Used to add coding of an remote that when to on/off which switch. In this code there are all Remote coding for when to start a particular a certain part of switch and bulb.

IR Receiver



A heated bed is another most important part of a 3d printer. The objects are printed on this heated bed. on this heated bed there is a glass bed or a metal bed also so that we can remove the printed object easily. Heat beds prevent issues like poor adhesion to print bed, poor adhesion between layers, thermal runaway, and warping. the result of using a heated bed can be greater precision and less waste, due to the prevention of early or uneven cooling.

Channel 5v Relay Module



A power relay module is an electrical switch that is operated by an electromagnet. The electromagnet is activated by a separate low-power signal from a micro controller. It can be used to control high voltage high current as motor, lamps, AC load.

MP3 Player IR Remote



(InfraRed Remote control) IR Remote Control is a wireless device used to control/operate used to operate audio, video and other electronic device in a room with InfraRed signals.

Infrared light requires line of sight to its destination. Low-end remotes use only one transmitter at the end of the unit and have to be aimed directly at the equipment. High-quality remotes have three or four powerful IR transmitters set at different angles to shower the room with signals.

Printed Circuit Board(PCB)



PCB printed circuit board is electronic board used in device and projects to provide an electronic path to the components used in it.

It is made by combining different type of sheets such as fiberglass or plastic which easily holds copper circuitry.

Male to Female jumper wires



Jumper wires have three versions which are male-to-male, male-to-female and female-to-female. The only difference between is that each is in the end point of the wire. Male ends have a pin protruding and can plug into things, while female ends do not and are used to plug things into.

Bulb Holder

A lightbulb socket, lightbulb holder, light socket, lamp socket or lamp holder is a device which mechanically supports and provides electrical connections for a compatible electric lamp

USB for Power Bank

We are using USB to provide portable battery to components. They can get current through portable battery.

Software used for Arduinio

We use a software named Arduinio. Arduinio is a software provided through Arduinio company, in which we can handle the working .In this software we can control or give control to remote were and how to on and off a certain component.

CONCLUSION

This project task is that by controlling home appliance it will save our time.The C program given to remote control it will control most appliance in the home.The Energy is saved in home and electricity will be also reduced.We can aply it in home,schools,hospitals etc. we trust that this research paper will inspire others to do work on related subjects.so,for decorative purposes,and working purposes we should think about the Home Automation.

ACKNOWLEDGEMENTS

We take this opportunity to thank all the individuals connected with this project for their useful direction, help, and timely support which helped us to complete the project in a specific amount of time. we would like to express great gratitude to our head of department Mr. V. S. Solanke and Mr.R.M.Palwe. there for their all-important support, motivation, guidance, and helpful suggestions all over the project work. Last but not least our sincere credit goes to our family for their support since we begin our education and also to all our group persons.

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"Training And Placement App"

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ABSTRACT

Training and Placement application that helps student for training and job recruitment .The Training And Placement Cell is an important part of any educational institute, in which most of the work till now is being done manually. The training and placement officer has to inform around thousands of students about every single training and placement related activity. So to make the placement process easy and effective for the training and placement department as well as the students, an Android application can be developed. This application can help the placement officers to provide the details of upcoming companies.

The students will be alerted via a notification. Once the recruitment process is completed, a list of placed students will be uploaded in the application by the administrator. It would be easy for the students to view the details of those who have been recruited. The number of students placed in a particular company can be viewed by students when required. If any changes is need to be made in the student details the student can make a request to the placement officer. This project will be helpful in faster management of the placement related activities in the college campus.

Keywords: Training And Placement ,Database , Firebase , Training And Placement Officer, Android Studio,Smartphone.

1. INTRODUCTION

The use of smartphones, internet and the World Wide Web helps the user to gain information on a particular action. The internet helps the user to manage the placement process. Actually the earlier system is not computerized. All the transactions in the earlier system is done manually by maintaining a record. It will take much time for the placement officer to collect and approve all the student details. There is no proper communication between the students and the placement officer. So with the help of this application the students can easily communicate with the placement officer.

The training and placement cell plays an important role in improving the overall performance of the student. The main objective of the training and placement department is to manage the details of the placement, student details, overall academic details of the students, and their technical skills. Once the details is stored in the database, it would be easy for the training and placement officer to filter the students based on the criteria of the campus drive. The overall system of the training and placement officer is managed by the administrator.

2. METHODOLOGY

This Project is aimed at developing an online application for the Training and Placement department of the college. The system is an online application that can be accessed throughout the organization and outside as well with proper login provided. This system can be used as an application for the TPO of the college to manage the student information with regards to placement. Student logging should be able to upload their information in the CV. Visitors/Company representative logging in may also access/search any information put up by the Student.

This system modules are Login and registration, Database Creation, Placement officer, Information view by students, and List of placed students.

1. LOGIN AND REGISTRATION
2. DATABASE CREATION
3. PLACEMENT OFFICER
4. INFORMATION VIEW BY THE STUDENTS

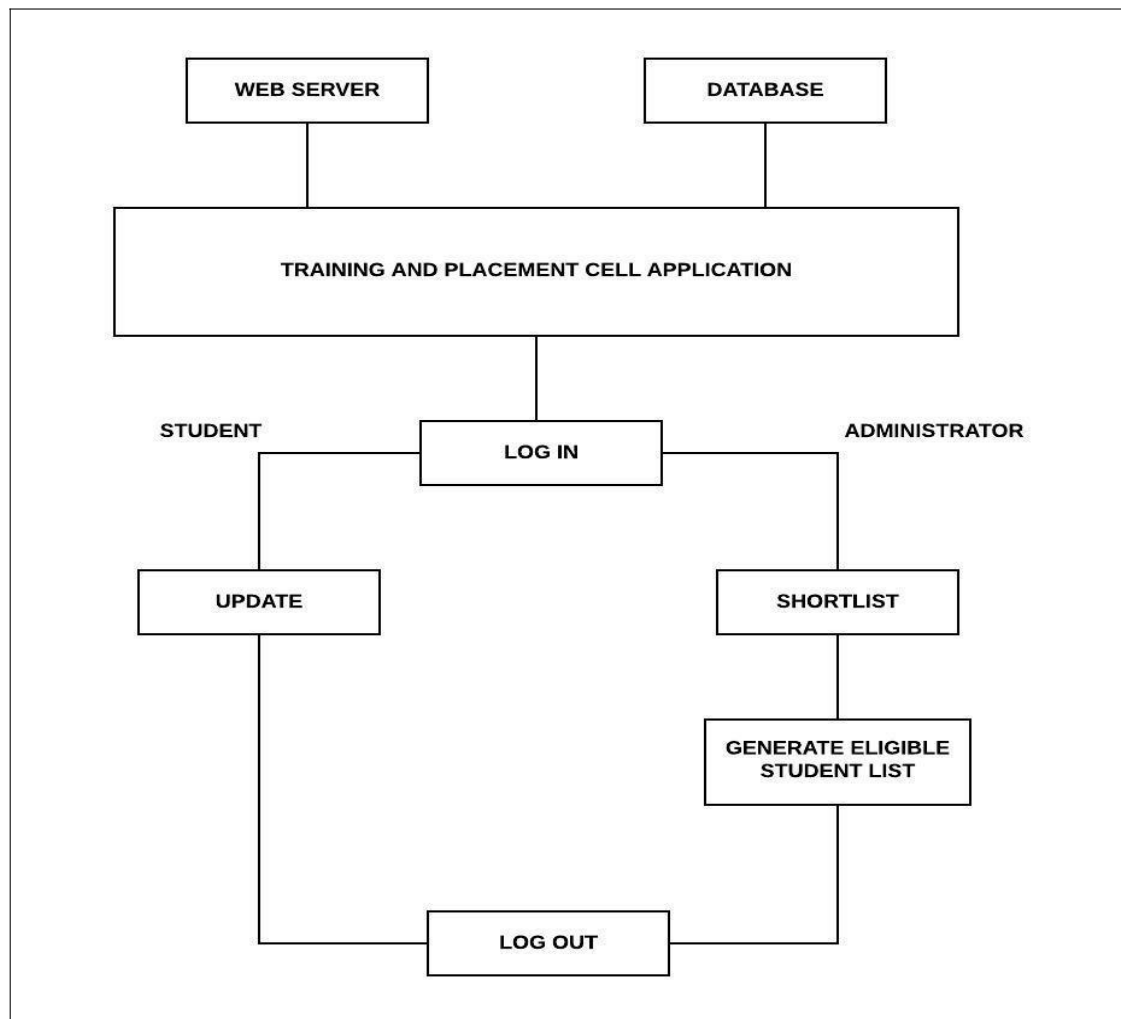


Fig 1-Data Flow Diagram.

3. VISIBILITY OF THE SYSTEM

The students need to register themselves for the placement through this application. Once the registration gets successful, a unique user ID and password will be created for an individual student. If the students need to make changes in their personal and academic profile they can send a request to the placement officer. The students may also receive the notifications regarding the upcoming campus drive. It also provides information about the campus details, criteria for the campus, recruitment process. A link will be provided by this application includes the following: Work can be done in a computerized way, No need of paper work, To increase the administrator of the upcoming campus where the students can obtain extra information about the company.

Placement officer will also be provided a unique id and password by the administrator. This application helps the placement officer to update the correct details of the requested students. The administrator only have the rights to access the database. Once the campus recruitment gets completed the final list of the placed students in a particular company will be uploaded by the administrator. Students will also be updated about the campus drive.

Students can maintain their own information and update. Notifications will be sent to the students about the upcoming campus drive and also they can access the information about the previous placement. Some of the features the accuracy and efficiency of the placement process management of student data, Analysis of the overall placement process and the work burden will be less for the training and placement department.

4. TOOLS AND TECHNOLOGIES

A. Hardware used Laptop with

1. Minimum 1GB RAM
2. 50MB Space
3. Minimum 1.5 GHZ processor is required

B. Platform

1. Android Phone

C. Software Tool Used

1. Android Studio
2. Microsoft windows 7 or above
3. Firebase Database
4. Java Development Kit

5.SCREENSHOTOFAPPLICATION



FIG 2. SPLASH SCREEN

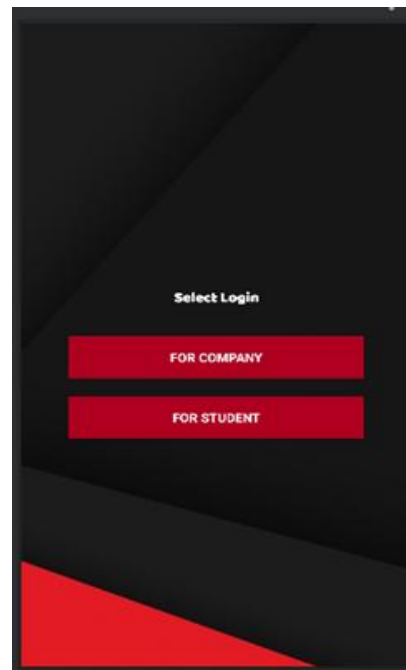


FIG 3.SELECT LOGIN TYPE

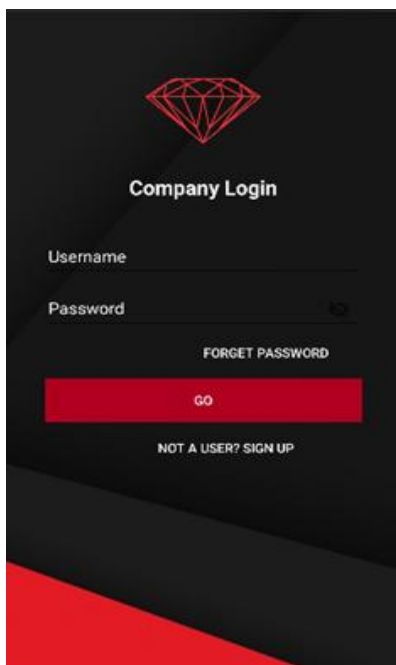


FIG 4.COMPANY LOGIN

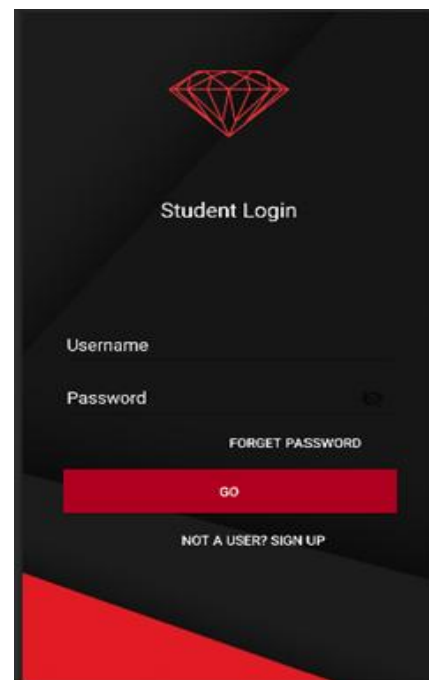
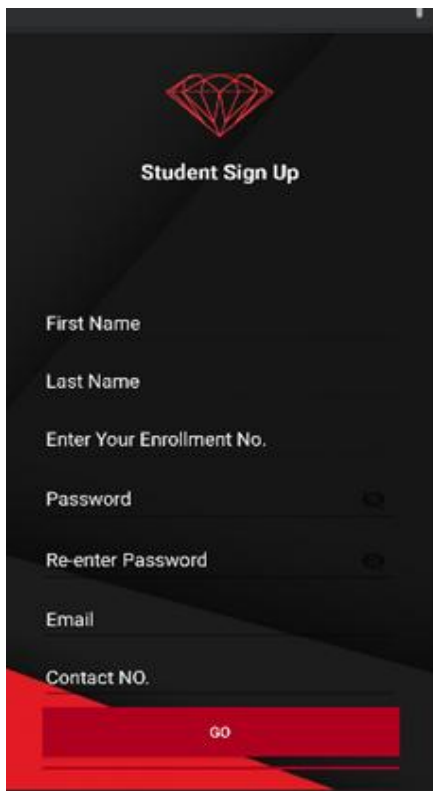


FIG 5.STUDENT LOGIN



Student Sign Up

First Name

Last Name

Enter Your Enrollment No.

Password

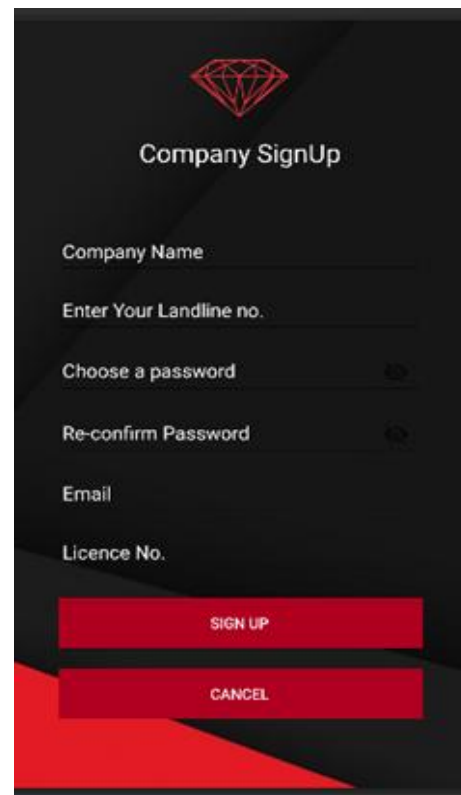
Re-enter Password

Email

Contact NO.

GO

Fig 6. Student Signup



Company Signup

Company Name

Enter Your Landline no.

Choose a password

Re-confirm Password

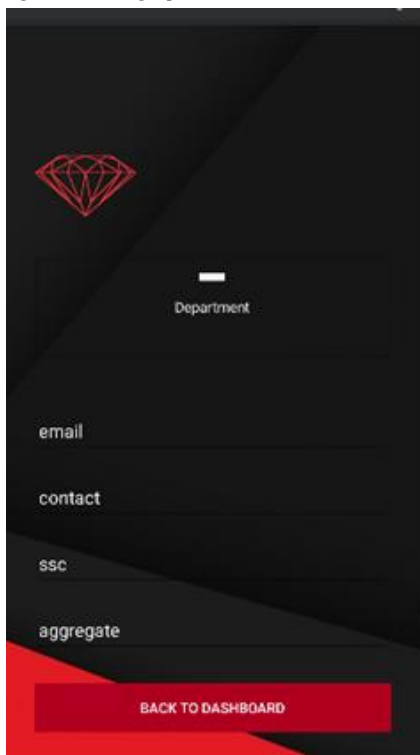
Email

Licence No.

SIGN UP

CANCEL

Fig 7. Company Signup



User profile

Department

email

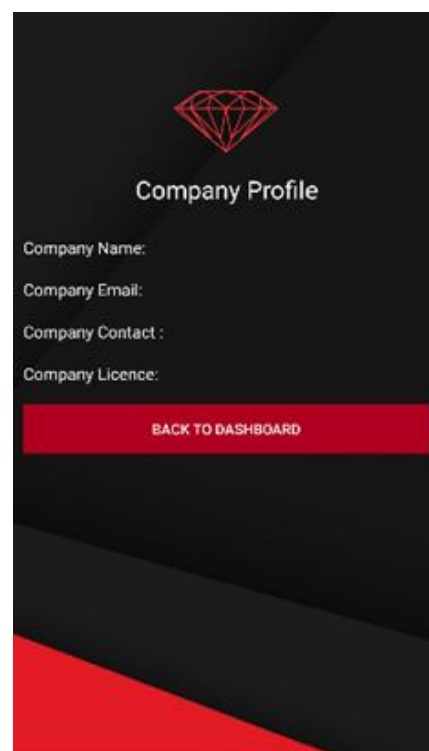
contact

ssc

aggregate

BACK TO DASHBOARD

Fig.8 User profile



Company Profile

Company Name:

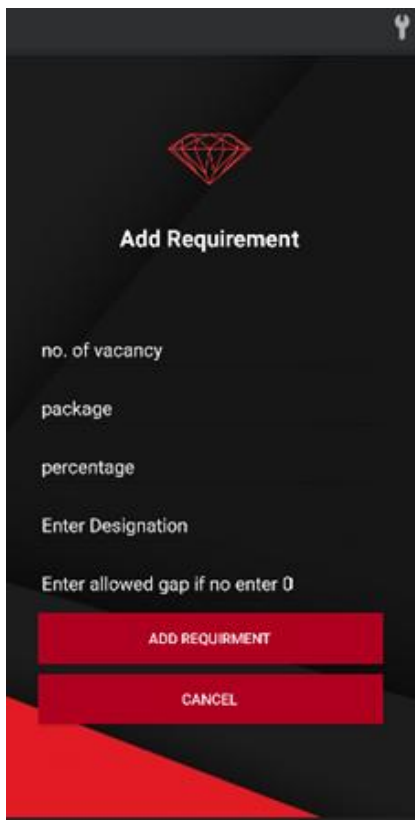
Company Email:

Company Contact :

Company Licence:

BACK TO DASHBOARD

Fig.9 Company profile



Add Requirement

no. of vacancy

package

percentage

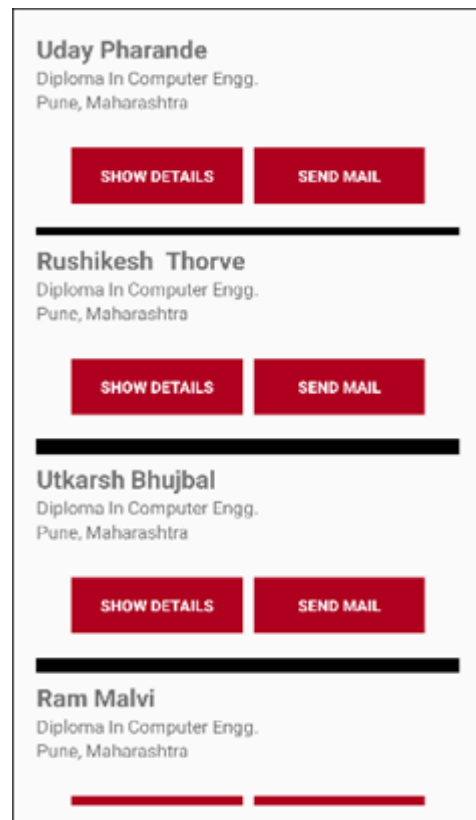
Enter Designation

Enter allowed gap if no enter 0

ADD REQUIRMENT

CANCEL

FIG .10ADD REQUIREMENT



Uday Pharande
Diploma In Computer Engg.
Pune, Maharashtra

SHOW DETAILS **SEND MAIL**

Rushikesh Thorve
Diploma In Computer Engg.
Pune, Maharashtra

SHOW DETAILS **SEND MAIL**

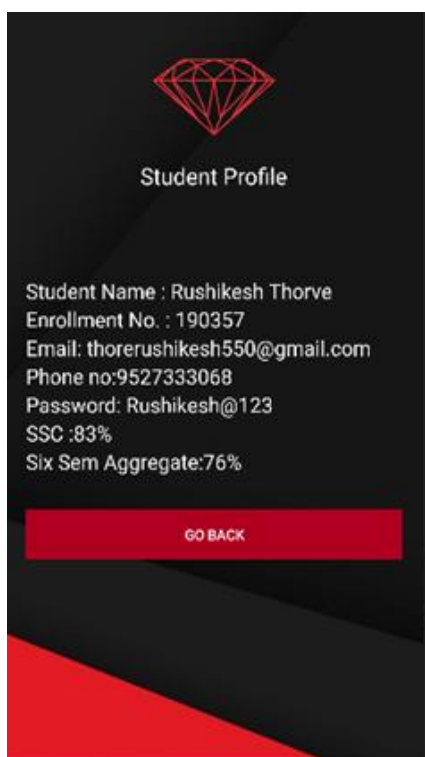
Utkarsh Bhujbal
Diploma In Computer Engg.
Pune, Maharashtra

SHOW DETAILS **SEND MAIL**

Ram Malvi
Diploma In Computer Engg.
Pune, Maharashtra

SHOW DETAILS **SEND MAIL**

FIG.11 ACTIVITY STATUS LIST

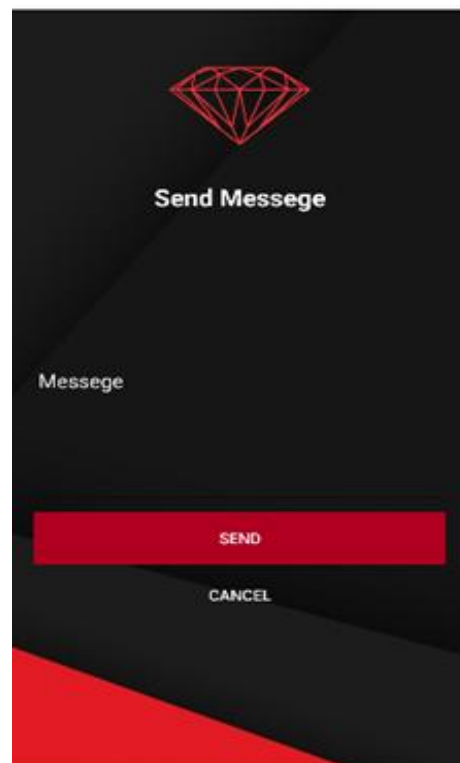


Student Profile

Student Name : Rushikesh Thorve
Enrollment No. : 190357
Email: thorerushikesh550@gmail.com
Phone no:9527333068
Password: Rushikesh@123
SSC :83%
Six Sem Aggregate:76%

GO BACK

FIG.12 STUDENT PROFILE



Send Messege

Messege

SEND

CANCEL

FIG.13 ACTIVITY MESSAGE



FIG.14 ACTIVITY NOTIFICATION



FIG.15 COMPANY LIST

6.CONCLUSION

After the system has been studied, designed, developed and tested, the following conclusions were created. The Developed system can guarantee to keep the records safe which is stored in the database. It generates reports that provide description details including various number of student placed in the company. The analysis of placed students recruited by the company will be made available in this application. Though this project provides a better way for the training and placement department, some more additional features can be added for the betterment of the application in future. The list of students should be automatically filtered based on the criteria of campus drive. The student as well as Training and placement officer should be able to communicate by sending message via this application. Test link should be uploaded so that the students may be able to test their technical skills.

SOCIAL DISTANCING DEVICE

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ABSTRACT

The fast transmission of COVID-19 has caused a worldwide health crisis. one of the first ways that to cut back the unfolding of the virus is to follow social distancing. Specifically, it's necessary to remain a minimum of six feet removed from others. However, it's troublesome to implement this, and folks will usually forget to take care of this distance after they area unit in a very public place. My answer could be a Social Distancing device. this method consists of multiple devices that communicate with one another through supersonic signals and frequency signals. The devices area unit programmed with the employment of micro-controllers in order that once any 2 units return within six feet of every alternative, each unit begins beeping, thus notifying each user with these devices to step removed from one another. Despite sturdy recommendations to keep up a minimum of the one-and-a-half-meter distance between the persons, the rule isn't religiously followed. PIR device is employed for the detection of a target within the section (1.5 m). Upon violation of social distancing norms, the system can trigger an Associate in Nursing audio alarm once the detection of the target object. The analysis paper model is ready by considering the requirements of the individuals. several researchers are specializing in chasing affected persons; however, few are specializing in the social distancing preventive. The prompt transportable device can forever apprise the one that is violating the norm of 1.5 m. The projected device can minimize the likelihood of transmission and cut back the infection rate of COVID-19. The device uses a PIR device relying upon the pertinency space of the person

Keywords: COVID-19, distance, micro-controller, preventive, frequency, PIR

I. INTRODUCTION

COVID-19 (Coronavirus illness 2019) is an Associate in Nursing communicable disease caused by SARS-CoV-2 (severe acute metastasis syndrome coronavirus 2). it absolutely was known in December 2019 in China. it absolutely was declared a virus by the United Nations agency. COVID-19's doubling rate is on the average seven.4 days [1]. The unfold of COVID-19 is because of the transmission of coronavirus [2]. Coronavirus enters the physical body through openings just like the mouth, nose, and eyes. The droplets exerted through physiological reaction, coughing, and generally talking will unfold the coronaviruses from person to person [2, 3]. To reduce the speed of COVID-19 transmissions, several government medical bodies and UN agencies have instructed some preventive measures through the rules. one of all the vital pointers instructed by the UN agency to cut back on transmission is social distancing. Social distancing indicates maintaining the space between 2 persons. It's powerfully suggested by the UN agency that a minimum distance of one.5 m should be maintained to cut back COVID-19 transmission [4,5,6,7]. The coronavirus pandemic could be an incapacitating international health crisis. Countries try to slow the transmission of the virus by reducing travel, forbidding giant crowds, and quarantining voters, so individuals will minimize face-to-face contact with one another. one in every one of the first ways in which to scale back the unfold of the virus is to apply social distancing. Social distancing refers to keeping physical distance between yourself et al. Specifically, it's necessary to remain a minimum of half-dozen feet far away from others. However, it usually will be, is, maybe, tough to recollect to keep up this distance in a very public place and other people often violate this distance threshold. this method might be used on a private or individual level, it best caters to businesses or teams that try to remain open throughout this health crisis or try to open when an amount of inactivity.

II. METHODOLOGY

The methodology planned during this paper to prompt half dozen feet distancing from another person is by the employment of HC SR04 sensors. The IoT (Internet of things) is an associate degree rising platform that allows the communication between electronic devices and sensors victimization of the net to boost the living vogue. Motion sensing technologies square measure accustomed observe movement within the neighborhood. this can be normally used for security, industrial, and transportation systems [11].

HC SR04- sensing element works by victimization measuring device to see the space to associate degree object. Ultrasonic sensing element HC-SR04 may be a sensing element that will live distance. It emits associate degree ultrasound at forty thousand Hz (40kHz) that travels through the air associate degrees if there's an object or obstacle on its path it'll reclaim the module [8].

Considering the time period and also the speed of the sound you'll calculate the space. The configuration pin of HC-SR04 is VCC (1), TRIG (2), ECHO (3), and GND (4). the availability voltage of VCC is +5V and you'll attach TRIG and ECHO pin to any Digital I/O in your Arduino Board.

III. MODELING

Ultrasonic sensors send waves. These waves are absolutely invisible and come back after hitting an optical. The Trig pin activates (D11) or (D12). In which we have connected LED and Buzzer.

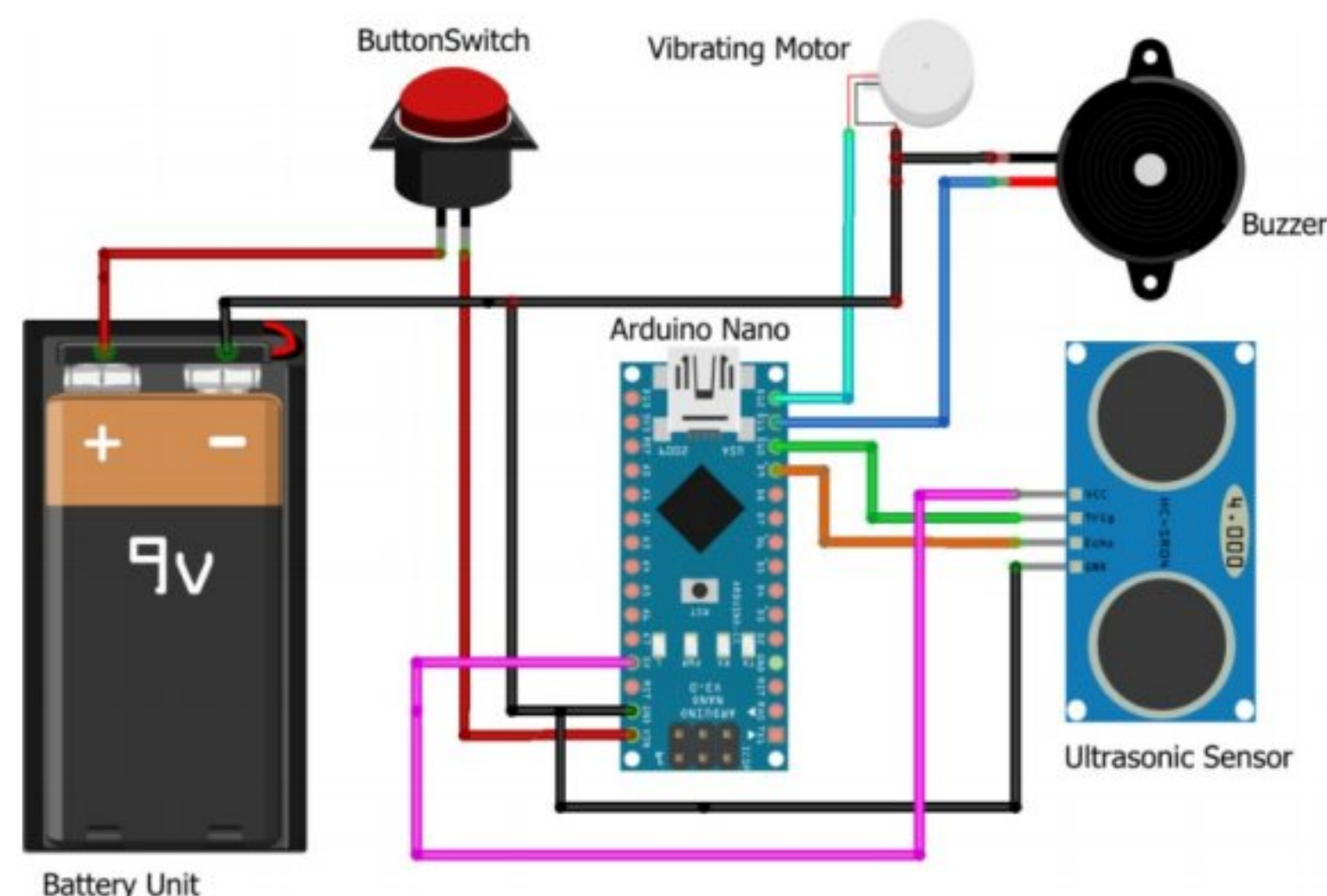


Figure: Circuit Diagram

IV. CONCLUSION

The objective of the project was to style associate degrees and implement an inaudible distance meter. The device delineated here will observe the target and calculate the space of the target. The inaudible distance meter could be a low price, low an easy device for distance measuring. The device calculates the space with appropriate accuracy and determination. it's a handy system for non-contact measuring of distance. The device has its application in several fields. It may be utilized in the automotive backing system, automation and artificial intelligence, police work the depth of the snow, water level of the tank, line. This device also will have its application in the civil and mechanical field for precise and tiny measurements. To shrewd, the space victimization of this device, the target whose distance is to be measured must always be perpendicular to the plane of propagation of the inaudible waves. Thus, the orientation of the target could be a limitation of this method. The inaudible detection varies and additionally depends on the dimensions and position of the target. the larger is that the target, the stronger the mirrored signal, and a lot of correct is the space calculated. Thus, the inaudible distance meter is a very helpful device.

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HEALTH CARE CENTER**Nupur Diwate^{*1}, Suraj Shelke^{*2}**

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ABSTRACT

Health care center is android based application which aims the purpose of collecting the donated medicines and organizing them through our portal. This API includes three interfaces namely: Blood Donation System, Medicine Donation System and Money Donation System. The software requirement for this android application is Android Studio. In this interface, the donor needs to fill the form of the particular interfaces; the data filled by the donors can be seen in the NGO section only to the Authorized NGO workers. The main objective for development of this project is to reduce the medical wastage. People can also send the request in the individual interfaces who are in need for medicines. The NGO section can see those requests and distribute them to the donor. The bridge of communication between these two interfaces i.e., Donor and NGO can be done with the help of phone number which is taken from the donor while the time of registration; and also, with the help of email which is provided by user. The Money Donation interface is the main source of attraction. Those people who don't have sources to donate but are willing to grant donation can directly donate money using our application.

Keywords: Medicine Donation, Blood Donation, Money Donation, Android, NGO, Medical-Field.

I. INTRODUCTION

In today's generation, it is normal to see that people are concern about their health [1]. These people approach doctors without any delay for medications. But, many times, we see that people complete their medication course but are left with the extra medicine. These medicines either get expired or left unused; On the other hand, unprivileged/poor people don't get proper medication as they are aware of expensive pharmaceuticals. Due to the dissipation of these medicines, we can see the high level of increment in biomedical wastage which can't be ignored or left aside. As per the saying of Centre for Science and Environment, India had produced approximately 141 tons per day of covid -19 related biomedical waste in the past April 2021, as the country hold up against the second wave. Henceforth, we have given a small try for finding solutions to these problems. The Health Care Center system aims at providing an online platform for donating the leftover or unused medicines to the poor, illiterate or needy people [2]. Also, it has an interface for the user who are in need of the medicines, thus they can make a request on our portal. Furthermore, we have added Money Donation and Blood Donation. Blood donation interface will help in collecting the data of the donor and will provide this data to the respected NGOs of that particular locality which will later communicate with them for donating the blood. An NGO is a non-income-driven organization autonomous of States and all-inclusive administrative organizations [3]. Money Donation interface may help the people who are inclined for making a donation but are not available with the required sources. They can simply just fill the donation form of Donation and make an online payment for donating money. The data of all these donors will only be accessible to the corresponding NGOs and Admin. In addition to this, our project will also be making a try reduce the medical waste at a certain level and lend a helping hand for the future generations. After all, together we can make a difference.

II. OVERVIEW AND SNAPSHOTS

Below specified is a glimpse of the entire project. Some of the main interfaces are defined below.

Fig. 01: **Login Screen:** Here the donor can simply enter his/her credentials and enter to the on-boarding screen

Fig. 02: **Home Screen:** This is the main interface or the home screen of our API. Four sections named Blood Donation, Medicine Donation, Money Donation and about app is specified.

Fig. 03: **Medicine Donation Form:** This screen displays a fragment of medicine donation form. Similar forms are designed for money donation, blood donation and medicine request.

Fig. 04: **Profile Screen:** This screen shows the profile of current donor or user who has logged in the application with his/her details like name, profile picture, email ID and phone number.

Login

Forgot Password

LOGIN

-----OR-----

Create New Account As An NGO

Create New Account As A Donar

Heath Care Center



Blood Donation



Medicine Donation



About App



Money Donation

Home Request profile

MEDICINE DONATION

Donar's Name

Nupur Rajendra Diwate

Email ID

nupurdiwate279@gmail.com

City

Pune

☒ CROCIN 20

EXPIRY DATE 31/10/2022

☐ PARACETAMOL

☒ VICKS ACTION 10

EXPIRY DATE 30/9/2022

☐ B-COMPLEX

Heath Care Center



Suraj Shelke

surajshelke332@gmail.com

Charity is Everywhere

Sharing saves souls

Suraj Shelke

surajshelke332@gmail.com

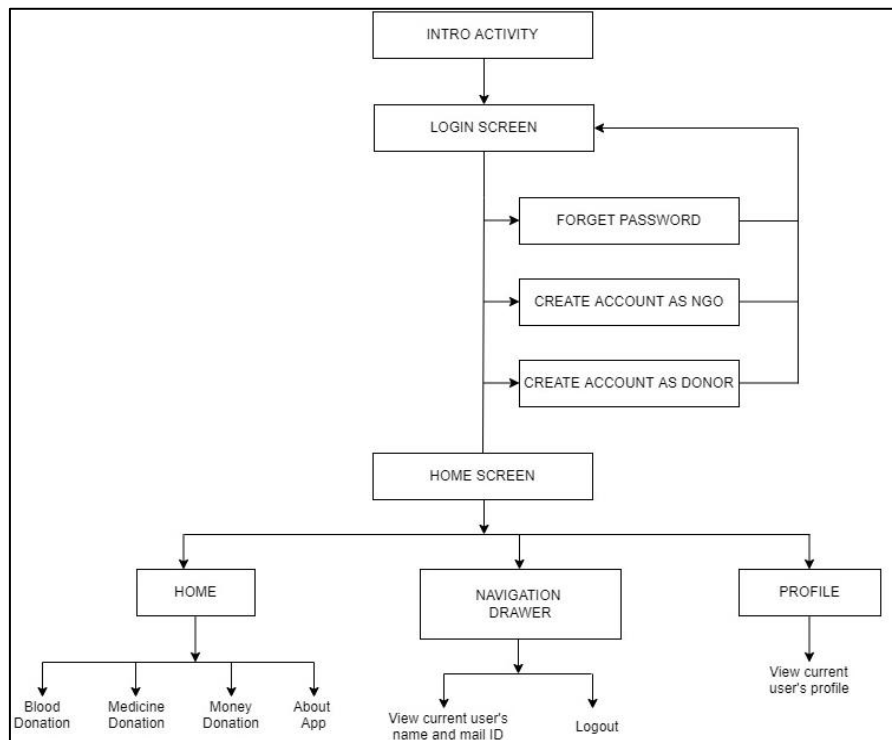
9588459826

Home Request profile

III. FUTURE SCOPE

Looking ahead to the current situation this android application can be improved feasibly by adding the extra facility of 'Organ Donation'. Donors who wish to donate their body organs can also approach in our portal. Also, it can be expanded further to provide an 'Online Blogging in Health Care Center' can also be added as this can provide new content on a daily basis related to medical sector. Thus, moving forward it can also be declared as a commercial applications/portal for donation sector which will be the unique availability till now discovered.

IV. PROCESS FLOW



V. CONCLUSION

The modern world has started. People from all walks of life, whether rich or impoverished, literate or illiterate, are now concerned about their health. It is a pity that despite their awareness, poor individuals cannot devote enough time to their health care routine due to their low money. NGO's and our website take tremendous initiative in giving free medical care to those in need. However, in the vast majority of situations, people receive treatment rather than pricey medications. As a result, they have lost interest in this fantastic project. This project provides a quick outline of the project's concept and development, which will be very effective a make a significant contribution to providing health services to those who are in need. This android application provides a quick survey of the project's concept and development, which will be very effective and make a significant contribution towards providing health services to those who are in need [4].

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SIMPLE SMART BLIND STICK USING ARDIUNO NANO

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Maharashtra, India.

Student, Computer engineering, Marthawada mitra mandal polytechnic, pimpri chinchwad
Maharashtra, India.

ABSTRACT

The main aim of this paper is to help blind persons while not human want. Notably, the visually impaired people convey a hand that stays with them at no matter purpose they have facilitate. Once in a very whereas in any event, once they utilize this stick, there's no assurance that the visually impaired folks are protected and find in inbound at their destinations. There could be a deterrent in their approach nevertheless isn't practiced by the individual with the help of the stick. Notably, the visually impaired people convey a hand that stays with them at no matter purpose they have facilitate. Once in a very whereas in any event, once they utilize this stick, there's no assurance that the visually impaired folks are protected. There could be associate obstruction in their approach but is not practiced by the individual with the help of the stick. Thus, the folks could also be dislocated if the obstacle is sufficiently big or dangerous. Thus, during this paper, a blind stick is intended and developed to help the blind man and supply them a transparent path. The system consists of associate inaudible sensing element fastened to the user's stick. whereas the user moves the stick within the forward direction, the inaudible sensing element with Arduino nano fixed to the stick tries to discover the obstacle if any gift within the path. If the sensing element acknowledges the obstacle, the output of the recipient are going to be given through the buzzer and also the person are going to be alert.

Key words: *obstical, arduino nano, buzzer, sensing*

1. Introduction

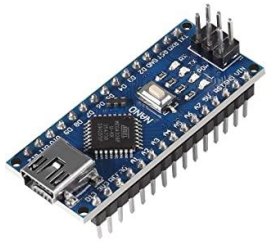
visually impaired persons have problem to move and feel their surroundings. they need very little contact with surroundings. physical movement could be a challenge for visually impaired persons, as a result of it will become difficult to differentiate obstacles showing before of them, and that they aren't ready to move from one place to a different. they depend upon their families for quality and funding. their quality opposes them from interacting with individuals and social activities. within the past, totally different systems square measure designed with limitations while not a solid understanding of the useable perception. researchers have spent the decades to develop associate intelligent and good stick with assist and alert visually impaired persons from obstacles and provides info concerning their location. over the last decades, analysis has been conducted for brand new devices to style a decent and reliable system for visually impaired persons to observe obstacles and warn them at danger places. good walking stick is specially designed to observe obstacles which can facilitate the blind to navigate care-free. the audio messages can keep the user alert and significantly cut back accidents. a voice enabled automatic switch is additionally incorporated to assist them privately area additionally. this method presents a plan to produce a wise electronic aid for blind individuals, each publically and personal area the projected system detects the obstacle pictures that square measure gift in outside and indoor with the assistance of a camera. the stick measures the space between the objects associated

good walking stick exploitation an unhearable sensing element. once associatey objects or obstacles are available vary of an unhearable sensing element and it build buzzer sound.

1.1 Short working

This Smart stick will have an Ultrasonic sensor to sense distance from any obstacle, LDR to sense lighting conditions All the feedbacks will be given to the blind man through a Buzzer. Also we attached it a rechargeable battery of 4.1V. we is charged using our USB port charger.

1.2 Required components



1. Arduino nano

The Arduino Nano is a small Arduino board based on ATmega328P or ATmega628 Microcontroller.



2. Ultrasonic sensor

and ultrasonic sensor is used to sense the object at the distance



3. Buzzer

a buzzer is used to send a sound signal to alert a person from a threat.

4. Male to male and female to male jumper wire.



male to male wire are used to connect the connection in breadboard to arduino and buzzer. and male to female wire is used to connect the ultrasonic sensor, arduino, breadboard etc.



5. rechargeable battery

Our product range includes a wide range of 4v 2.0ah sealed lead acid rechargeable battery, 4v 1.0ah lead acid rechargeable battery, 4v 2.5ah sealed lead acid rechargeable battery, 4v 0.4ah sealed lead acid rechargeable battery, 4v 4.5ah amptek sealed rechargeable battery and 4 volt 4.5 ah smf vrla rechargeable batteries.



6. Push button

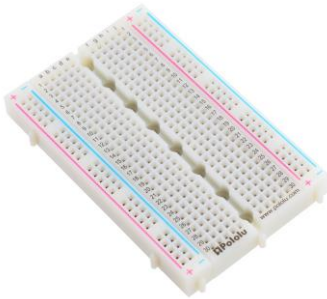
The power button could be a spherical or sq. button that powers associate device on and off. Nearly all electronic devices have power buttons or power switches.



7. LED bulb

An diode circuit or diode driver is AN electrical device accustomed power a semiconductor diode (LED). The circuit should offer adequate current to lightweight the diode at the desired brightness, however should limit this to forestall damaging the diode

8. bread board



The board is that the bread-and-butter of DIY physics. Breadboards enable beginners to urge aware of circuits while not the requirement for attachment, and even seasoned tinkerers use breadboards as beginning points for large-scale comes.

9. pipe polycab



Used to attach all the componets to it.

1.3 Conclusion

1. The process of detecting objects using ultrasonic sensors works well and stable by having twodistance conditions, 0 to 60cm.
2. The maximum distance of object detection on a smart stick reaches 60cm
- 3.The buzzer send an accurate sound alert when it receive the signal.
- 4.The battery works very well and long lasting as it is rechargeable.
- 5.All the components are in good condition and are giving proper signals while using stick.

1.4 Future scope

In future, we'll be modifying the projected model in higher means . Initiating with the addition of Bluetooth module for correct on and off functioning. Integration of GPS module for police investigation location of user , just in case of Associate in Nursing emergency. GPS module are integrated together of Bluetooth Module of Arduino Nano connecting it to the itinerant for higher and sleek location detection. And additionally will we will we are able to can use transmitter and receiver to find the stick if not close finally , so as to enhance the sound notification we tend to area unit reaching to implement sound module which can offer instruction in voice kind. The stick system conferred within the paper uses computing along side numerous sensors in real time to assist the visually disabled folks to navigate their surroundings severally. Image recognition, collision detection and obstacle detection area unit the 3 tasks performed by the system.

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IOT BASED WOMEN SAFETY WATCH USING GSM MODULE

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ABSTRACT

The paper presents a Wearable safety device for women using the Arduino Uno R3 microcontroller. The main purpose of this device is to safeguard women in the event they might face any danger. The device uses IoT to communicate with the secure channels and to send alerts message to the given number. The device is programmed in such a way that as soon as the sensor LM35-To-92-3 sense and sends the signals. The GPS and GSM are used to ping the user's location directly to the relevant authorities and saved contacts. The two additional switches in the device work for sending manual alerts in case of emergency and disengaging the system in case of generation of the false alerts respectively.

Keywords: IOT, Women Safety, Arduino UNO

INTRODUCTION

Even ordinary people's street conversations frequently turn to the escalating and horrifying attacks on women. An overpowering concern for the women in our families has lent urgency to our discussion of the critical and pressing issue of women's safety. Many special devices are primarily Western in nature, and the majority of them have yet to reach India. Another problem is the high cost of producing these devices. This is precisely where the government should intervene to try to mitigate cost and infrastructure issues for corporations working in this direction. The issue with apps is that they are often clumsy. The women must unlock her phone, open the app, and then press a button. Furthermore, most of the time, the perpetrators reach for the phone first. The need is for independent devices, such as safety bands, rings, key rings, and so on, that can be carried around in disguise and used quickly, and that will allow women to send emergency messages with their location in times of distress. The "Smart Watch" device is specifically designed for troubled women. It is a device for women who are in a chaotic situation. The basic approach is to use the Arduino Uno microcontroller, which is based on the ATmega328P and has the ability to send and receive data via the GSM network, which is provided by the Arduino GSM shield. The victim's current location is determined by the GSM network using Arduino Uno and the user's smart phone. Once the Arduino Uno has obtained the coordinates of the current location, the Arduino sends the coordinate information to the user's smart phone via the Arduino GSM shield. If the woman is in danger, the buzzer will sound. In a critical situation, the women will press the button, and a message will be sent to the number we have programmed into the card.

The main purpose of this device is to serve as an emergency device for women who may be attacked. If they are in danger, the women who own this device will press the panic button. An SMS will be sent to mobile phone numbers informing them of the danger and location. With regard to the heart rate. The coordinates received can be viewed on Google maps to determine the location of the women and appropriate assistance can be provided. GSM technology can be used to send the message to the appropriate controlling authority. This concept was developed to raise awareness of serious crime against women in India and to aid in the prevention of such crimes. Women's safety in India has become a major concern, with crimes against women increasing at an alarming rate. Crimes such as kidnapping and sexual harassment of women and young girls are on the rise. The National Crime Records Bureau (NCRB) registered cases of crime against women out of a total of 4.05 lakhs during 2019. In India, violence against women is a major issue. One-third of women aged 15 to 49 have experienced physical violence, and approximately one in ten has experienced sexual violence.

OBJECTIVE

Built a security system for women that is completely automated and requires no human interference whatsoever. To build a one stop solution system based on IOT, for women which is completely portable, also provides self-defences to help women escape in critical circumstances.

SCOPE OF PROJECT

- Our primary goal is to make every woman in our society feel safe and protected.
- In India, the emergency helpline number for women is 1091.
- According to a recent survey of women in our country, approximately 50% of
- Women who work are not safe.
- We can also connect this system to a smart phone, mobile device, or laptop.
- This safety device can be used in handbags, luggage, vehicles, and so on.

PRINCIPLE COMPONENTS OF PROJECT

- Aurdino Uno R3
- GY-GPS6MU
- SIM800L
- Push button
- Buzzer
- LED
- Resistor
- 9 volte 2 ampere adapter
- LM35 TO-92-3 Board Mount Temperature Sensor.
- Resistor

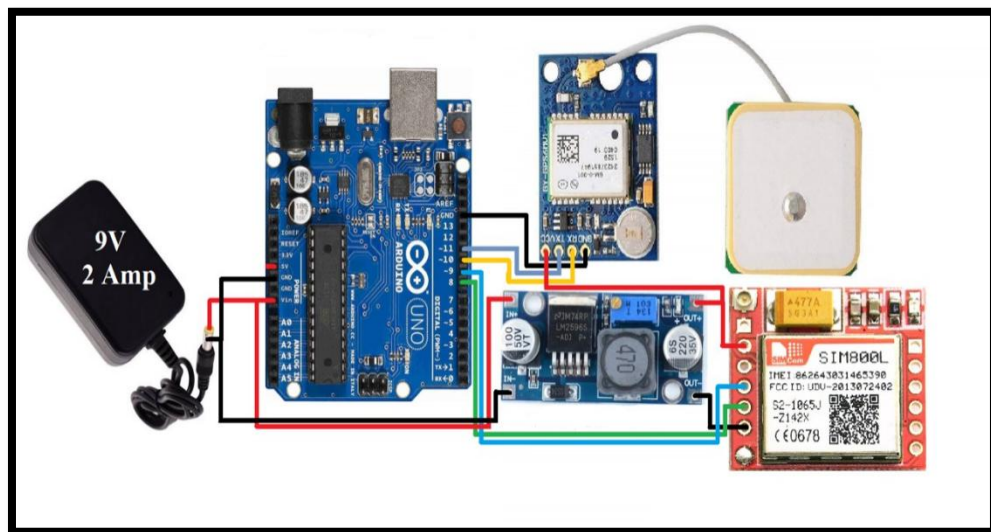


Fig 1: Circuit Diagram

WORKING

In this project, we have introduced a women safety device using GSM module. The hardware components in this project include Aurdino Uno R3, GY-GPS6MU, SIM800L, LM35 TO-92-3 Board Mount Temperature Sensor, Power Supply Module, Buzzer, LED. The connection of this module starts when the push button(emergency button) is pressed, the 9V 2Ampere power supply is passed from Vin of the Arduino UNO which is further connected to the IN+ of the power supply module. Moving to the next part the GND of Arduino UNO is connected to the IN- of the power supply module. Now the pin8 of Arduino UNO is connected to the second end of SIM800L, pin~9 is connected to the third end of the SIM800L, pin~10 is connected to the RX of GPS6MU, pin~11 is connected to the TX of the GPS6MU. The GND of Arduino UNO is connected to the GND of GPS6MU and the VCC of GPS6MU is connected to the first end of SIM800L. The first end of SIM800L is also further connected to the OUT+ of the power supply module. And the OUT- of power supply module is connected to the last end of SIM800L. This is how components are placed and connected to form the circuit diagram and make this project work. Above is the detailed working of the project/device designed just with the purpose of welfare and by a thought of helpfulness keeping in mind and making women of country to just fell safe all the time.

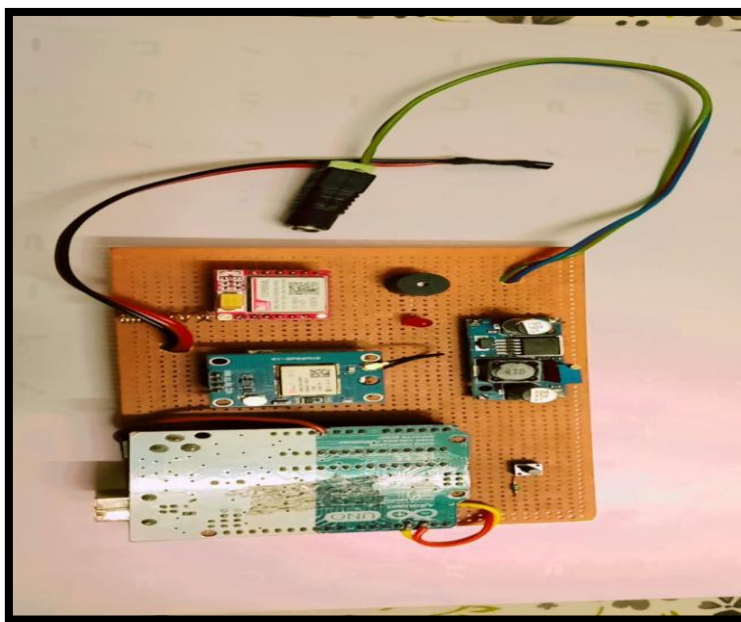


Fig 2: Circuit from Top view

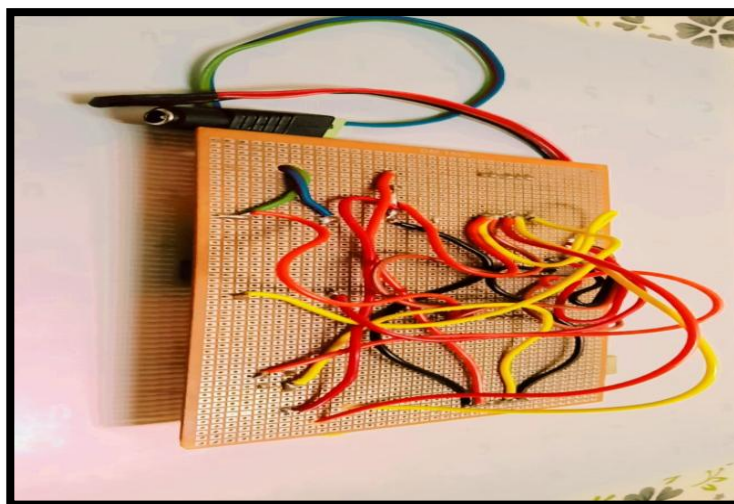


Fig 3: Circuit from Bottom view

CONCLUSION

The self-help device was implemented in response to the growing violence against women. This system is intended to protect women and assist them in dangerous situations by providing functionality to alert the appropriate people. The main advantage of this device is that it not only provides security but also safety by allowing women to defend themselves and gives them a lot of confidence in themselves. It was created with the intention of making the security device more portable and comfortable. This system was designed with reference to an existing system. The device protects the woman in need even when the victim is unable to press the security button, and thus does not compromise its functionality. Hence this device shall prove to be useful in preventing unfortunate incidents and violence against women. Therefore the crimes against women can be reduced using the prototype model. As a result, this device will be useful in preventing unfortunate incidents and violence against women. As a result, the prototype model can be used to reduce crimes against women.

ACKNOWLEDGEMENTS

Perseverance, Inspiration, and Motivation have always been important factors in the success of any venture.

It is difficult to understand the wide spectrum of knowledge at this level of understanding without proper guidance and advice, so we take this opportunity to express our heartfelt gratitude to our respected Project Guide Mrs. Shelke R.B, who as a guide developed an interest in us to work and select an entirely new idea for project work. He has been extremely cooperative and helpful in resolving all of our issues.

We'd also like to thank our Principal, Mrs. G.S. Joshi, for her ongoing advice and support.

I'd also like to thank my institution and my faculty members, without whom this project would have been a pipe dream.

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LAER LIGHT SECURITY SYSTEM USING ARDUINO WITH ALARAM

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ABSTRACT

This research paper is to analyze, that now a day's security is an important aspect. Technology develops day by day in the world. Now days the crime gang also improves their technology to carry out their operation. So, technology of security should be modern with time to protect the world from crime. We decide to make a security issue as our project. In this project we have used laser beam to cover a large area. We know laser light goes to long distance without scattering effect. It's additionally obvious just at source and occurrence point, in any case invisible. These two properties help us to develop a modern security for today's days system, which may name as "Laser Security System." When any person or object crossover the laser light, automatically the buzzer starts ringing. Laser beam goes through long distance without scattering effect and the ray is almost invisible. The project involves the use of Arduino UNO, Laser light, Buzzer, LDR and a simple program. With this equipment's we can easily set up a security alarm anywhere for unwanted intruders. A Laser Security System goes about as a standalone system, which makes sound or commotion when it distinguishes any sporadic action or can be part of a much bigger security or any other automation system which can alert owner.

Keyword: - Arduino UNO, Laser Light, Jumping Cables, Buzzer and LDR.

1.INTRODUCTION

Security is a most important factor in day to day life. Need of security is the basic necessity of every individual. The feeling that we are safe and everything around us is all right is imperative for a peaceful living. Be that as it may, in this unsafe world, when crime, terror and dangers are on their pinnacle, how might one achieve that suspicion of safety? For that Here, laser security system provides us with a solution and for this reason more and more people are installing them in order to stay safe and secure. Different electronic security systems can be utilized at home and other significant working spots for security and safety purposes. Laser Security alarm is a device used for security purposes. It has a wide application in fields of security and defense starting from the security of a simple house hold material to a very high valued material of an organization. They once used to be very expensive solutions for security needs. Owing to cost cutting and fast technological advancements, this form of security system is becoming more affordable. We probably seen an old western movie where the good guys settle down and run a string at ankle height around their camp, tying it to the filled with rocks. When the bad guys try to sneak up in the mid night, they kick the wire and pull over, making a rattle that awakens the sleeping good guys, who win the day. A laser security system works with the same principle. Instead of a string, there's a ray of light surrounding the area, and instead of the rocks, there's an alarm of one sort or another

1.1 OBJECTIVES

The main objective for developing this system is:

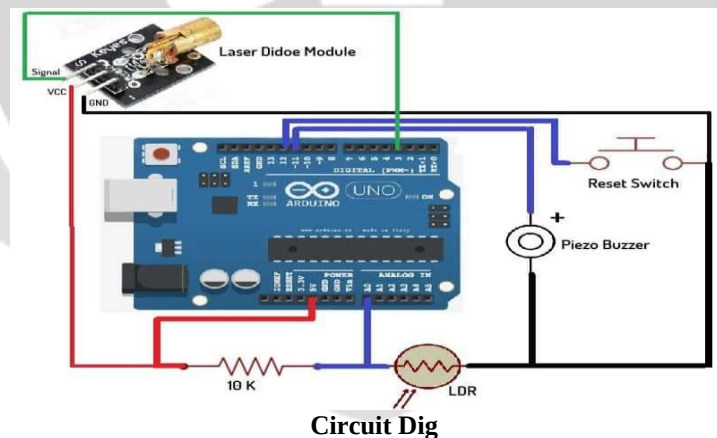
1. To provide security for home this is useful.
2. To provide a user-friendly system
3. To provide security for bank lockers
4. To provide a cost-efficient system.
5. To protect a valuable item.
6. To protect the individual from terror and threat in the unsafe world.
7. To make and study the functions of laser security system

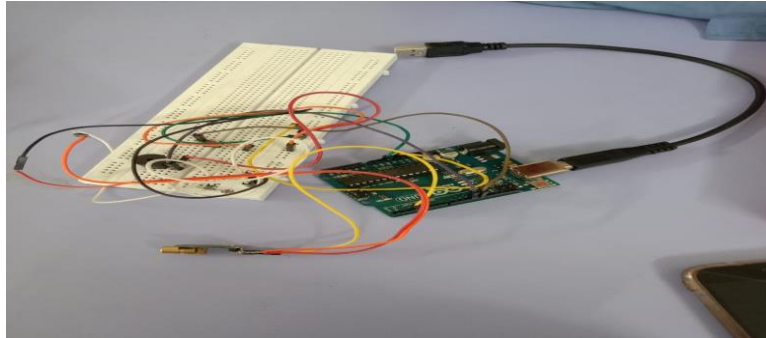
1.2 COMPONENT OF PROJECT

1. Arduino UNO Board
2. LASER Diode Module KY-008
3. Buzzer
4. LDR
5. Resistors (10k)
6. Push Button Switch
6. Bread Board
7. Connecting Wires

2. WORKING

The project basically works on the principle of interruption. If by any means the LASER light is interrupted the alarm will start unless it is reset with push-button. The laser is a concentrated light source that puts out a straight beam of light of a single color. The LDR is sensitive to light and puts out a voltage when the laser light hits it. When the laser beam is interrupted and can't reach LDR, its voltage output changes, and eventually the alarm will ring.



**Fig -1: Snapshot**

4. CONCLUSIONS

Laser Security System gives us the protection from any crime, theft in our everyday life thus individuals are installing them so as to remain sheltered, secure and sound. Various electronic security systems can be used at home and other important working places for security and safety purposes. It is one of the best opportunities and source of saving man power contributing no wastage of electricity. The “Laser Security System” is an important and helping system. Using this system robbery, thefts and crime can be avoided to large extent. Avoiding thieves results in the safety of our financial assets and there by their system provides us protection against all. The laser beams and LDR module system is highly sensitive with a great range of working. The system senses the light emitted by the laser falling over the LDR connected with the circuit. Whenever the beam of light is interrupted by any means, it triggers the alarm or siren. This highly reactive approach has low computational requirement therefore it is well suited to surveillance, industrial application and smart environments.

5. ACKNOWLEDGEMENT

I would like to thanks of gratitude to my teacher Mr. Palwe Sir as well as our principal Mrs. Geeta Joshi Mam who gave me the wonderful opportunity to do this wonderful project on the topic Laser Light Security System Using Arduino With Alarm, which also helped me doing a lot of research and we came to know about so many things I am really thankful to them.

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Drowsiness Detection System Using Goggles

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ABSTRACT

India is a developing nation. The number of vehicles in the country has increased over the last decade as the population has grown. Though road networks have improved, the increased vehicle population has exacerbated safety concerns. It is a well-known fact that "national health is more important than national wealth." As a result, road safety is a major public health concern, and attention must be paid to road safety measures. Drowsiness while driving causes major traffic accidents. Drowsiness caused by fatigue driving is becoming more common these days. This project is primarily concerned with road accidents that occur when people are sleepy and lethargic / half asleep or otherwise drowsy while driving. The project employs an infrared sensor to determine whether a person is drowsy or not based on whether their eyes are closed or open.[1] When the eyes are closed for more than 5 seconds, it detects sleep and alerts the user via a buzzer alarm. As in "The driver is sleepy." Accidents can occur as a result of inactivity, which is controlled and prevented by the alarm.

The goal of this purpose design is to detect drowsy drivers in order to prevent accidents and improve highway safety. On the Arduino nano, a method for detecting driver drowsiness/sleepiness is developed. All of this is done on Google. The goal was to make drivers safer and reduce the number of fatalities caused by drowsy driving.[3]

Keywords: Goggles, Drowsiness, innovative, Fatal.

1. INTRODUCTION

Every year, approximately 1.3 million people are killed in car accidents, which are the leading cause of death. The majority of these accidents are caused by distractions or driver drowsiness. The construction of high-speed highway roads had reduced the driver's margin of error. Every day and night, a large number of people travel long distances on the highway. A lack of sleep or distractions such as a phone call, talking with a passenger, and so on may result in an accident. In recent years, one of the leading causes of vehicle accidents worldwide has been driver fatigue. According to the National Highway Traffic Safety Administration (NHTSA), approximately 100,000 people are killed in car accidents caused by drowsy drivers. Drivers' attention levels deteriorate as a result of insufficient sleep, long periods of continuous driving, or any other medical condition such as brain disorders, among others.[2] When a driver drives for longer than is normal for a human, excessive fatigue occurs, as does tiredness, which causes the driver to fall asleep or lose consciousness. Drowsiness is a complex phenomenon in which the driver's alertness and consciousness levels decrease. Although there is no direct measure to detect drowsiness, several indirect methods can be used. To avoid such collisions, we propose a system that alerts the driver. So, we created an innovative Goggles that detects a person's sleep and alerts him with a buzzer alarm. The goal of this project is to create a prototype of a drowsiness detection system. As a result, detecting the driver's drowsiness is critical in order to save lives and avoid accidents on today's roads.[1]

- Need for the system

Driver drowsiness detection is a safety Goggles technology that aids in the prevention of accidents caused by drowsy driving. [2] According to various studies, fatigue is responsible for approximately 20% of all road accidents, and up to 50% on certain roads. As a result, a new system is required.

- Detailed Problem Definition

Drowsy driving is a major issue. Nobody knows when sleep takes over their body. This impairs the driver's ability to concentrate on the road. It has an impact on the driver's ability to make sound decisions. According to the National Highway Traffic Safety Administration, drowsy driving is responsible for nearly 1,00,000 traffic accidents, including more than 1,500 deaths and more than 70, 000 injuries. Fatigue is another major contributor to car accidents.[3]

- Future Prospects

We extend this project by using the Goggles to detect the driver's drowsiness. The driver drowsiness detection system detects the driver's drowsiness. If the driver becomes drowsy, the sensor detects our eyes and the buzzer sounds until our eyes open. [1] This proposed system uses Arduino to detect drowsiness. This helps to prevent many accidents.

1.1 Objective

The project's goal is to detect drowsiness while driving and alert the driver at the appropriate time to avoid any mishaps. The project employs an infrared sensor to determine whether a person is drowsy or not based on whether the eyes are closed or open. The project's main goal was to make drivers safer and reduce the number of fatalities caused by drowsy driving.[3]

1.2 Scope Of Project

- Capture individual drivers' drowsy steering activity.
- Additional simulator experiments should be carried out to validate the algorithm, test additional road conditions, and test a more diverse group of drivers.
- Based on-road test data, test and refine the algorithm, and conduct research on warning systems integrated with the detection system.
- It is used to prevent road accidents.

1.3 Principle components of project

1. Arduino nano
2. IR Sensor
3. 3V battery
4. Switch
5. Transparent glass
6. Buzzer

2. ASSEMBLY OF PROJECT

This paper aims to detect drowsiness while driving and alert the driver at the appropriate time to avoid any mishaps. In this case, we've used an alarm to keep things from going wrong.[4] We used an infrared sensor and separate LEDs that were extended with insulated copper wire because the sensor should be in front of the eyes and the module on the handle of the glasses. We drilled holes in the glasses for the photodiode and IR sensor fittings using soldering wire. And we've added the code to Arduino. On the other side, a 3.8 V battery is installed, and an IR sensor module, an Arduino nano, a switch, and a buzzer are connected and adhered to it. A glue gun is also used for sticking. And the innovative road safety project is now operational. When the eyes are closed for more than 5 seconds, it detects sleep and alerts the person via alarm using a buzzer until the person is woken up. [1] Accidents can occur as a result of drowsiness, which is controlled and prevented by the buzzer.

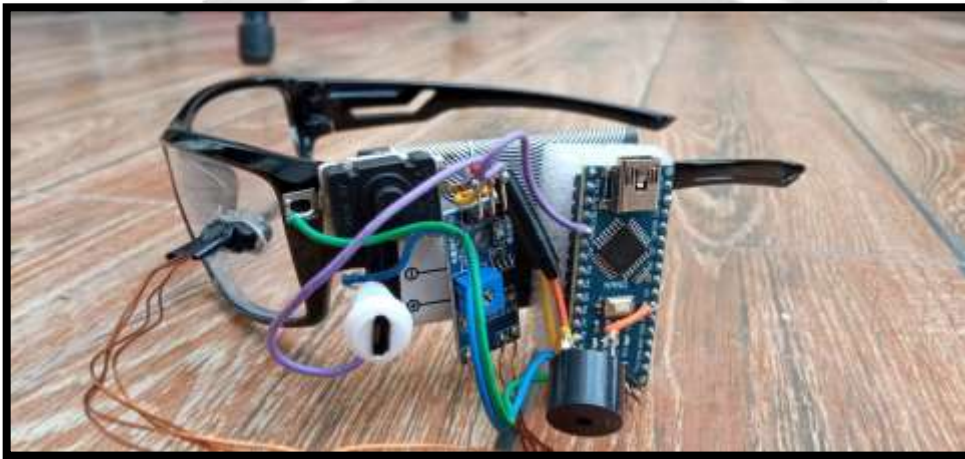


Fig 1: Assembly Project

3. WORKING

In this project, we have used I-R sensor with LED's, Arduino Nano , Buzzer, Battery of 3.8 V all this components which is connected with each other and the LEDs are extended in front of glasses.

I-R Sensor's first pin (out) which is connected to Arduino nano's A0; Second pin(GND) ground which is connected to the GND of Arduino and the third pin which is Vcc of IR sensor is connected to 5V of Arduino Nano.[2]

Arduino Nano's first pin (Vin) Voltage input which is connected to the positive(+ve) of the Battery and GND is connected to the negative(-ve) of the battery.

Buzzer's positive pin is connected to Arduino's D13 pin and the negative pin is connected to the GND of Arduino nano and the battery

The innovative Goggles which detects the sleep of a person and alerts him by the alarm by using a buzzer. If the person is feeling drowsy while driving a car or bike and the person can't control himself and he/ she slept more than 5 sec then the IR detects the eyes and pass the connection to the buzzer alerting the person at buzz till the person wakes up and after he wakes up he/she have to stop the buzzer by clicking on the button on Arduino Nano.

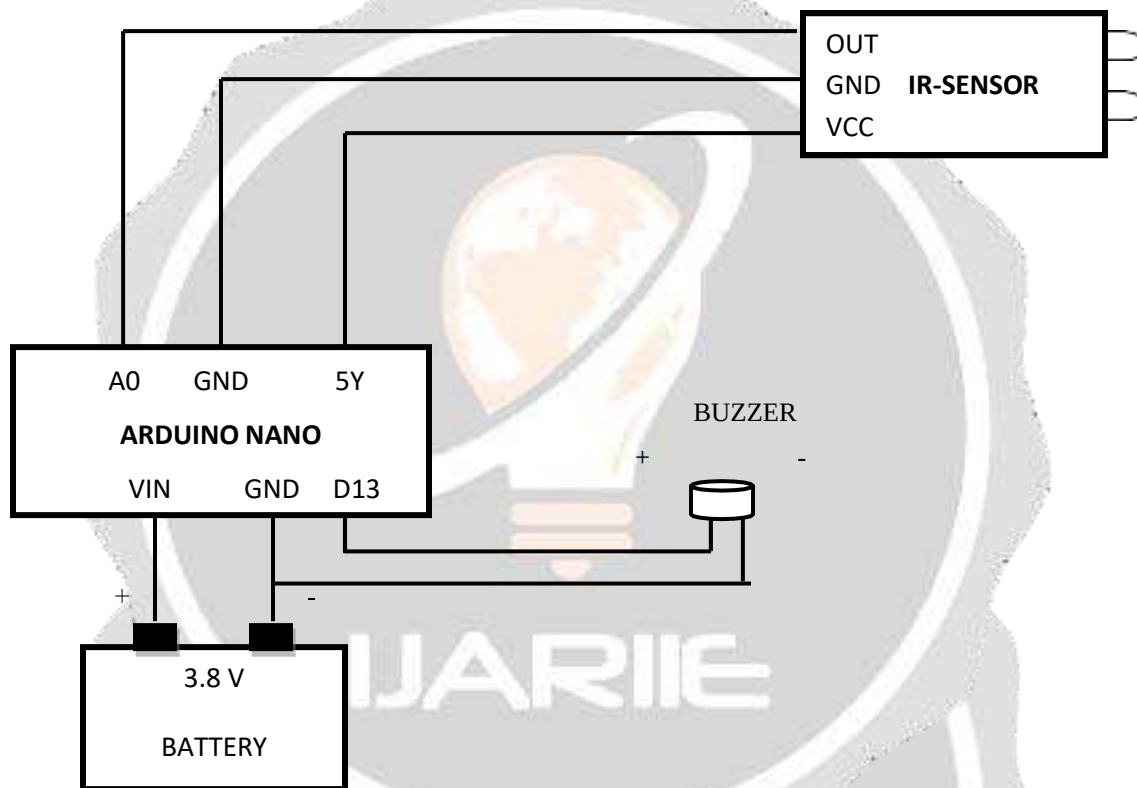


Figure 2: Circuit Diagram

4. CONCLUSIONS

Drowsiness detection is used to detect drowsiness quickly. This system prevents the driver from falling asleep while driving. The buzzer alerts the driver if the eyes are closed for a period of time that can be set in the code.[2] This paper is intended to protect drivers from drowsiness-related accidents. It is applicable to all types of vehicles. This system can be used in both cars and motorcycles. It may concentrate on the use of other external factors such as sleeping hours, vehicle state, weather conditions, and mechanical data for fatigue measurements.[1]

5. ACKNOWLEDGEMENT

Perseverance, Inspiration, and Motivation have always been important factors in the success of any endeavor. It is difficult to understand the wide spectrum of knowledge at this level of understanding without proper guidance and advice, so we take this opportunity to express our heartfelt gratitude to our respected Project Guide, Mrs. Joshi. G.S, who as a guide evolved an interest in us to work and select an entirely new idea for project work. He has been extremely cooperative and helpful in resolving all of our problems. I would also like to thank my institution, my friends, and my faculty members, without whom this project would have been a distant reality.

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WASTE FOOD MANAGEMENT AND DONATION APP

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Abstract - In this project we have tried to provide a solution for food waste through our app. Our android app contains two modules first one is the donation module and another one contains volunteer module. In donor module the person can donate his good quality food he can do this through providing food information to the app. In Volunteer module the person or any organization who is in need of food can put up his requirements on the app

Key Words: Donor, Volunteer, Food Donation, Waste Food, Android app, Annadaata, Firebase

1. INTRODUCTION

A huge increase can be seen in food waste. As per data given by Food and Agriculture Organization, 1/3rd of food produced for human consumption is wasted globally, which makes for almost 1.3 billion tons of food waste per year. On the other hand, also as per WHO, 20% of the population face extreme food shortages Hence there is a need to come up with a solution that can avoid food waste & can help to feed the needy, Overview of the App. This android-based Food Waste Management system can assist in collecting the leftover food from people who wish to donate food among those in need Organizations or any person who are helping poor communities to battle against starvation & malnutrition can raise request for food supply from donor through this application Once the request is accepted, the volunteer can collect the food from the donor's place for its distributions to this way this android-based food waste management system will help in feeding the poor and needy people

2. IDEA BEHIND THE PROJECT

As per the knowledge the technology is going advanced and growing day by day. Over main motto is to help needy people. The idea behind over project can be use by many people who wish to donate things to needy organizations Also, many organizations like to ask for various things required by them such as clothes, food grains, books utensils. In this mobile app, we have tried to reduce food wastage by giving waste food to people or organization who need it. The needy will add to a request, in case of any leftover food donor have. This request is sent to the list of donors. The Available Donor then accept the request. We are going to manage the delivery system by appointing delivery person who will collect the food from the donor and distribute among the needy people. Second option for delivery system is that volunteers who wish to help to donate food can join us for distribution in near by areas. For eg: they can distribute food in government school, government hospital, orphanage, old age homes. And the third option is the Food Bank if we receive food in odd times we can give it to food bank where the care of food is taken. Safety and Hygiene are maintained in food banks. So. food wastage or food spoilage cannot occur.

3. LITERATURE SURVEY

Food waste" pertains to the edible and inedible parts of food removed from the food chain, which need to be managed through recycling or disposal (Östergren et al., 2014). Food waste may also be interpreted as the loss of edible food at different stages of the food chain, including harvest, production, processing, distribution and consumption (Ivert et al., 2015; Segrè et al., 2014). Food waste comprises two types based on the kind of waste: Unavoidable food waste: expired or spoiled ingredients, food scraps such as meat scraps (e.g. end pieces of baked ham after slicing, meat pieces after trimming) and vegetable scraps (e.g.

tomato ends, outer leaves of lettuce, potato peels, vegetable stems); and

Avoidable food waste: meal scraps such as peeling or trimming waste arising from the less proficient handling of food items; overproduction for banquets, events and catering; poor ordering procedures; poor food rotation practices, causing food spoilage; and poor inventory systems, leading to food and plate waste such as unconsumed pasta (Derqui and Fernandez, 2017).

Academics categorize food waste based on the stages of waste generation, such as pre- and post-consumer food waste (Prescott et al., 2019b). Pre-consumer waste occurs at the production level, and post-consumption waste occurs at the consumer level. Scholars argue they associate different factors with food waste generation at these stages. Accordingly, various mitigation approaches perhaps can reduce such waste (Papargyropoulou et al., 2016). Furthermore, thorough diagnoses of food waste generated at various stages are crucial for ensuring the effective management of waste (Dhir et al., 2020). Food waste is an important concern because it threatens the environment and sustainability. In fact, it is a serious concern in the hospitality and tourism domain (Okumus et al., 2020). Close to 1.3 billion tonnes of edible food is wasted annually, leading to severe financial, environmental and health outcomes (Gustavsson, 2011). Past research has identified several adverse outcomes of food waste, such as threats to food security (Wang et al., 2018), climate change and greenhouse gas emissions (Kallbekken and Sælen, 2013; Katajajuuri et al., 2014) and monetary loss (Hennchen, 2019). For instance, the annual emissions because of food waste in Finland constitute more than 1% of the country's yearly greenhouse gas emissions (Katajajuuri et al., 2014). Similarly, scientists found the ecological impact of food waste in hotels, cafés and restaurants nearly twice the size of the arable land in Lhasa (Wang et al., 2018). Notably, sustainability has come under intense focus in the hospitality industry in the wake of the COVID-19 pandemic (Jones and Comfort, 2020). In addition, studies have underscored the nutritional loss associated with food waste. For instance, Blondin et al. (2017) revealed that, in the USA, fluid milk waste results in 27% and 41% losses, respectively, of the vitamin D and calcium required under school breakfast programme meals. Consequently, scholars argue that reducing food waste is critical from financial (e.g. food cost) and non-financial (e.g.

sustainability) standpoints (Okumus, 2019). In fact, research reports suggest that, by saving one-fourth of the food being wasted, we can feed 870 million hungry people (Khadka, 2017). Similarly, the sustainable development goals of the United Nations (UN) have also emphasized responsible production and consumption, underscoring the importance of mitigating food waste (Gustavsson, 2011).

4. ANALYSIS OF EXISTING SYSTEM

In present , a current system for the food waste reduction app is the proposed system which only consists of NGO and Restaurants and User and Donor respectively. But in our app any person who has good quality food can donate food and any needy who can be any person or organisation can request for food.

5. ALGORITHM

STEP 1 : Start the application

STEP 2 : Register by filling the necessary details.

STEP 3 :Select the Option of donor or volunteer accordingly.

STEP 4 : If you wish to donate go to donation page by clicking on Donor button.

STEP 5: Then click on create donation.

STEP 6: Fill up the necessary details and click Submit.

STEP 7: If you wish to see donation request then click on Request for Food option.

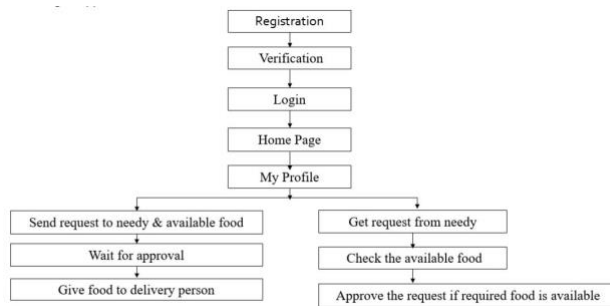
STEP 8 : If you are in need of food then go to request food option which is on volunteer page.

STEP 9: Fill up your requirement and click on Request button.

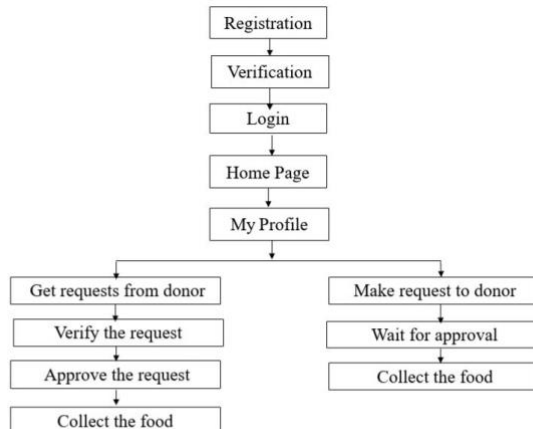
STEP 10 : If you wish to see available food list by donors click on Available Food Button.

6. WORKING OF APPLICATION

a) If user is donor:



b) If user is volunteer:



7. RESOURCES REQUIRED

Computer/Laptop

- Microsoft Windows 7/8/10 (32-bit or 64-bit)
- 3 GB RAM minimum, 8 GB RAM recommended (plus 1 GB for the Android Emulator)
- 2 GB of available disk space minimum, 4 GB recommended (500 MB for IDE plus 1.5 GB for Android SDK and emulator system image)
- Java Language.

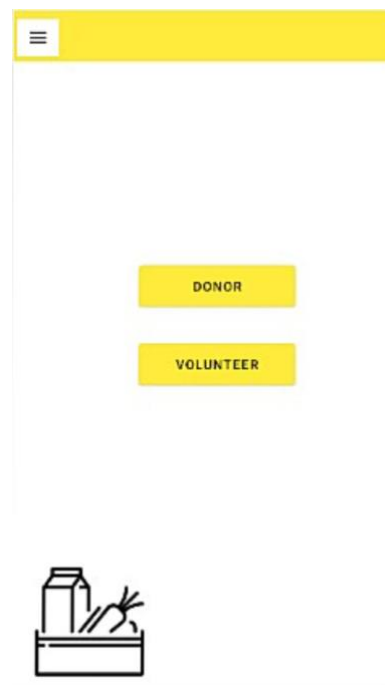
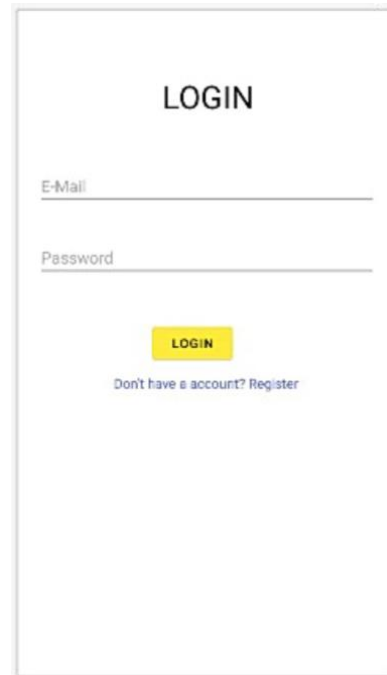
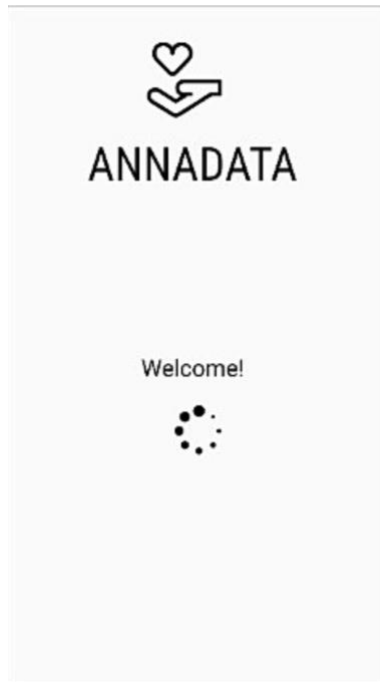
Software Requirement

- Windows 7 or higher (used windows 10)
- SDK Tools
- Android Studio
- Firebase Database

Requirements for Mobile Device

- Android OS based mobile with version 4.0 Android (Ice Cream Sandwich)
- Basic sound functionality
- Internet Connectivity
- Camera
- Screen touch facility

8. GUI of Application



 My Profile

 Settings

 About

Donation

ID

Mobile No.

Address

Pickup Start Time:

8

9

10

:

34

35

36

AM

Pickup Close Time:

8

9

10

:

34

35

36

AM

NEXT

CREATE DONATION

GET FOOD REQUEST FROM DONOR



Available Food Information

☐ Chapati

Specifications

☐ Bhaji

Specifications

☐ Dal

Specifications

☐ Rice

Specifications

☐ Sweet Item

Specifications

☐ Others

Specifications



DONATE

10 . Future Scope

The future scope of the project can be that it is a app which will reduce food wastage . So it can be a medium through which we can stop food wastage little by little. This app is also useful in providing good quality food to needy people and organisations.

11. Acknowledgement

Perseverance, Inspiration & Motivation have always played a key role in the success of any venture. At this level of understanding it is difficult to understand the wide spectrum of knowledge without proper guidance and advice, Hence we take this o to express our sincere gratitude to our respected Project Guide Mrs. Arati Deshmukh who as a guide evolved an interest in us to work and select an entirely new idea for project work. He have been keenly co-operative and helpful to us in sorting out all the difficulties. We would also like to thank our Principal Mrs. Geeta Joshi, for their continuous advice and support. My deep sense of gratitude to Matrathwada MitraMandal's Polytechnic for their timely advice and encouragement in our project development. I would also thank my Institution and my faculty members without whom this project would have been a distant reality.

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Car Speed Detector Using Arduino Uno

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Abstract -

From the advent of increased transportation, over speeding of vehicles has become one of the major causes for accidents and killing many lives. This paper presents a system, developed for over-speed detection of the vehicle or human beings and alert corresponding persons by giving buzzer automatically and also sends messages to their mobiles. Presently, RADAR gun or LIDARS are extensively used for over speed detection but it requires a person to pull the trigger for detecting the speed. In this work it has been proved that automation provides better performance than a human handled system. The working of the Arduino based car speed detector project is very simple. Arduino continuously reads the inputs from the IR Sensors. When a car moving in front of the setup reaches the first sensor, Arduino becomes alert and capture a time stamp the moment the car leaves the first IR Sensor In this project, I will show you how to design and build a simple Car Speed Detector circuit using Arduino UNO and IR Sensors.

Keywords: Power supply, Arduino UNO, IR sensors, LCD display, BUZZER.

1.INTRODUCTION - There are definite rules laid out by authorities about driving cars on roads. The most common rule in any country is speed limit in certain roads i.e., you will be in violation of the law if your car speed exceeds this limit. In order to detect the speed of a moving car, the patrolling officers usually depend on a handheld gun that works on Radar Technology or Lidar Technology. This is a tedious process as the officer has to manually check for over speeding for each vehicle. What if the Car Speed Detection is made automatic? A simple automatic detection of speed of a vehicle is designed in Arduino Car Speed Detector

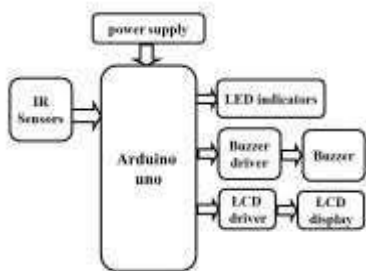
project, where you can place the system in one place and view the results instantly without any human intervention. In this project I am going to show you how to measure the speed of running car (or man) from outside. Police department uses this type of system to prevent over speed of vehicles. Our project is a little different from the system used by police but the overall car speed detector concept is same two IR sensors are placed apart on one side of road. When any vehicle crosses the sensors, the internal timer of Arduino counts the time between activation of sensor. Now speed is measured by using simple distance time relationship.

2. LITERATURE SURVEY - Vishal Pande et.al [1] has proposed a framework for autonomous speed control of over speeding vehicle using Radio Frequency to design a controller to control vehicles speed and display to monitor the zones which can run on an embedded system platform. Monika Jain [2] presented a device to detect the rash driving and alerts the traffic authorities in case of any violation. This frame of reference intends to design a system aimed at early detection and alerts vehicles driving patterns which is related to rash driving. The speed limit is by the police at very location who uses the system depending on the traffic. This device reports, displays and data base system for over speed violation management. Ni Hlaing et.al [3] designed a system that detects the speed of the vehicle in the roads, main highways and the places where the drivers over speed. If the speed exceeds the limit, the information will be sent to PC

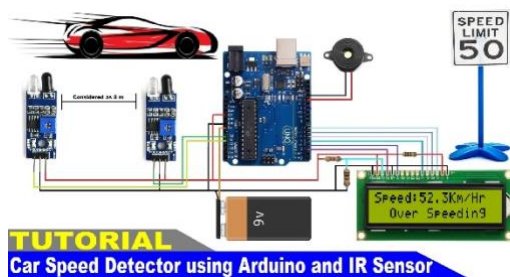
(Personal Computer) which starts the camera which captures the vehicle of over speed. Amar Narayan et.al [4] developed speed estimation system that alerts drivers about driving conditions, robust and reliable and helps to avoid joining traffic jams is an important problem that has attracted lots of attention recently. Nehal Kassem et.al [5] introduced a novel RFbased vehicle motion and speed detection system which can detect vehicle motion estimates the vehicle speed in typical streets with an accuracy of 90% and detects motion with an accuracy of 100%.

3. Implementation:

Vehicle speed detection using Arduino and IR sensors



3.1 Block diagram of Vehicle speed detection using Arduino and IR sensors



3.2 circuit diagram of Vehicle speed detection using Arduino and IR sensors

The main controlling device of the project is an ARDUINO UNO. IR sensors, LCD display and buzzer are interfaced to the Arduino. The Arduino

continuously read the data from IR sensors and display the vehicle speed on LCD module and also active the buzzer if the Arduino get high speed from sensors. To perform the task, Arduino UNO is loaded with an intelligent program written in embedded 'C' language.

4. Related Work:

The brief introduction of different modules used in this project is discussed below:

4.1: Arduino



Fig: ARDUINO UNO Arduino is a most commonly used physical computing platform and an interactive developing environment. It is a standalone platform that interacts with Arduino software on the computer. The Arduino software consist of an Arduino IDE (Integrated Development Environment). Arduino IDE is used for programming. Arduino uno is the most frequently used development board though it is not a first board in the market. Arduino uno is a microcontroller based on ATmega328p. It consists of crystal oscillator, voltage regulator, communication protocol etc. It has 14 digital input/output pins, out of which 6 can be used for PWM and 6 analog pins.

4.2. IR sensors:



Fig: IR sensor The IR sensor module consists mainly of the IR Transmitter and Receiver,

Opamp, Variable Resistor (Trimmer pot), output LED in brief. IR LED Transmitter. IR LED emits light, in the range of Infrared frequency. IR light is invisible to us as its wavelength (700nm – 1mm) is much higher than the visible light range.

4.3. Buzzer:



Fig: Buzzer Basically, the sound source of a piezoelectric sound component is a piezoelectric diaphragm. A piezoelectric diaphragm consists of a piezoelectric ceramic plate which has electrodes on both sides and a metal plate (brass or stainless steel, etc.). A piezoelectric ceramic plate is attached to a metal plate with adhesives. Applying D.C. voltage between electrodes of a piezoelectric diaphragm causes mechanical distortion due to the piezoelectric effect.

4.4 LCD display:



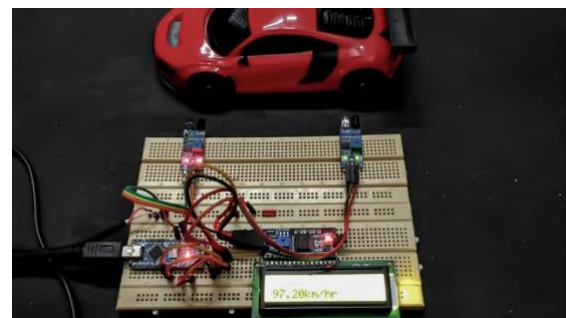
Fig: LCD display Liquid crystal display is very important device in embedded system. It offers high flexibility to user as he can display the required data on it. 16*2 means 16 characters per line by 2 lines respectively. The vehicle speed will display on LCD.

5. CONCLUSION:

The existing model presents an Integrating feature of all the hardware components which has been used and developed in it with Arduino. The Presence of each and every module has been reasoned out and placed very carefully. Hence the contributing to the best working unit for “Vehicle speed detection in using Arduino and IR sensors” has been designed perfectly. The device provides an automated solution to continuously monitor the vehicle speed and display the vehicle speed on LCD module and the system able to give the over speed alerts through buzzer. Thus, the project has been successfully designed and tested. By using this project, we can reduce the road accidents. In future, this system can be extended by integrating a camera which could capture the image of the number plate of the vehicle and sends to the traffic authorities or the corresponding vehicle owner.

6. ACKNOWLEDGEMENT - We would like to thank all the authors of different research papers referred during writing this paper. It was very knowledge gaining and helpful for the further research to be done in future.

7. RESULTS: The project Vehicle speed detection using Arduino and IR sensors was designed to detects the vehicle speed with the help of IR sensors and monitor the speed on LCD display and active the buzzer if the vehicle speed was high.



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It's far the future era of connecting the whole international at one location. all of the objects, things, and sensors may be linked to the percentage of the records acquired in numerous locations and manner/analyses that record for coordinating the packages like traffic signaling, mobile fitness tracking in clinical packages, industrial protection making sure techniques, and many others. As per the estimation of technological professionals, 50 billion gadgets could be related to IoT by way of 2020. IoT offers a wide variety of connectivity of gadgets with diverse protocols numerous homes of applications for acquiring the complete gadget to system interplay.

2. LITERATURE SURVEYS

Many pollutants tracking systems in nowadays world are designed in keeping with different environmental parameters. IoT-based total weather monitoring and reporting device afford the existing device version which could gather, method, analyze and gift your measured records on the internet server. wi-fi sensor network management model consists of an end device, router, gateway node, and control monitoring center the end device is accountable for collecting wireless sensor network facts, and sending them to the parent node, then facts are despatched to the gateway node from figure node without delay or with the aid of router. After receiving the information from the wireless sensor community, the gateway node extracts information after analyzing and packaging them into Ethernet layout facts and sends them to the server. much less formally, any computer running a server software program might also be referred to as a server. Servers are used to manage resources within the network. The net-primarily based services or information are linked via LAN and made accessible to customers via smartphones, net browsers, or different internet browser gadgets to make the system smarter, greater adaptable, and extra efficient.

3. ARDUINO

It's miles an open-source physical platform primarily based on a simple microcontroller board, and a development environment for writing software programs for the board. Arduino can be used to broaden interactive items, taking inputs from the diffusion of switches and sensors, and controlling an expansion of lights, vehicles, and other bodily outputs.

4. Applications Details

- a) facts are to be had on the android app.
- b) previous weather alerts or weather data may be viable.
- c) beneficial for the agriculture area as a gadget could be very less expensive, it could be lower priced to Farmer.
- four)by making an extensive network of this tool, we can fetch real-time records of climate from a specific region that may be available without spending a dime to assist the cause.

5. Conclusion

The studies and implementation of a machine for tracking the environmental parameters using IoT scenarios are done. The system presents a low electricity solution for setting up a weather station. The device is tested in an indoor environment and it's far correctly updated the weather situations from sensor records. it is also a much less high priced answer because of the usage of low electricity stressed out sensors and SoC contained GPRS module

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Temperature Based Speed Control of Fan Using Arduino

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ABSTRACT

In the current situation, access to electricity is reaching a critical stage. To protect and secure the future of man we need to save energy. As the motto suggests "One stored unit is one unit built". This project is an independent fan speed controller that controls the speed of the electric fan according to our need. The use of embedded technology makes this closed loop response control system more efficient and reliable. Arduino microcontroller allows for flexible and fast control. Liquid crystal display (LCD) makes the system easy to use. Sensitive temperature and fan speed values are displayed simultaneously on the LCD panel. It is highly compact as it is built using a few materials and can be connected to several applications including air-conditioners, water heaters, ice melters, ovens, heat exchangers, mixers, furnaces, incubators, heat baths and animal work tables.

INTRODUCTION

With the advancement of technology, intelligent programs are being introduced daily. It all becomes more complex and understandable. There is an increasing need for cutting-edge technology and clever electronic systems. Microcontrollers play a very important role in the development of intelligent systems as the brain is supplied to the system. Microcontrollers are still at the heart of the new technology being introduced every day. The microcontroller is primarily a single chip microprocessor suitable for control and automation of equipment and processes.

METHODOLOGY

The DHT11 temperature sensor is connected to Arduino to download room temperature data. The data is processed when the temperature is high and the fan speed is very similar when the temperature is low and the fan speed is low. In addition, if the temperature is below the normal range, the fan will be out of order. Temperature-related data, fan speed is displayed on the LCD for user use.

RESULTS AND DISCUSSION

In this post, we explained how we can design Speed Control Based on Temperature Follows with Arduino and LM35 Temperature Sensor. The microcontroller controls the speed of the electric fan according to the requirement and allows for flexible and fast control and the LCD makes the system easy to operate. The temperature sensed by the Celsius Scale and the fan speed in percent is displayed simultaneously on the LCD panel. The LM35 temperature sensor detects the temperature and converts it to an electronic (analog) signal, which is used on the Arduino UNO's small Atmega328 controller. Analog value is converted to a digital value. Therefore the audible values of temperature and fan speed are displayed on the LCD. When the temperature exceeds 30 °C the fan begins to turn. A low-frequency pulse-width modulation (PWM) signal, whose operating cycle varies to adjust the fan speed used. An inexpensive, single, small transistor such as 2N2222 or BD139 can be used here. It works well because the pass transistor is used as a switch.

Benefits: The project is an independent fan speed controller that controls the speed of the electric fan according to our need. The use of embedded technology makes this closed loop response control system more efficient and reliable. Arduino microcontroller allows for flexible and fast control.

In this post, we explained how we can design Speed Control Based on Temperature Follows with Arduino and LM35 Temperature Sensor. The microcontroller controls the speed of the electric fan according to the requirement and allows for flexible and fast control and the LCD makes the system easy to operate. The temperature sensed by the Celsius Scale and the fan speed in percent is displayed simultaneously on the LCD panel. The LM35 temperature sensor detects the temperature and converts it to an electronic (analog) signal, which is used on the Arduino UNO's small Atmega328 controller. Analog value is converted to a digital value. Therefore the audible values of temperature and fan speed are displayed on the LCD. When the temperature exceeds 30 °C the fan begins to turn. A low-frequency pulse-width modulation (PWM) signal, whose operating cycle varies to adjust the fan speed used. An inexpensive, single, small transistor such as 2N222 or BD139 can be used here. It works well because the pass transistor is used as a switch. Benefits: The project is an independent fan speed controller that controls the speed of the electric fan according to our need. The use of embedded technology makes this closed loop response control system more efficient and reliable. Arduino microcontroller allows for flexible and fast control.

IV. CONCLUSION

Arduino based fan-controlled temperature is used. Therefore, here the fan speed is controlled using Pulse Width Modulation and the Arduino board according to the temperature sensed with the help of Temperature and Humidity Sensor (DHT22). The idea of the project is to change the fan temperature automatically. The PWM method is found to be the best way to control the speed of the fans using a reasonable temperature. The system works well. The speed of the fan depends on the temperature and there is no need to control the fan speed repeatedly

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“ DRIVER DROWSINESS DETECTION USING PYTHON”

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ABSTRACT

Drivers often feel very drowsy while continuously driving for long distances without taking breaks. Drowsiness is a major factor in increasing the chances for a vehicle to meet accidents According to various studies, Number of accidents caused by drowsiness is much higher than the number of accidents caused by drunk driving.

The number of accidents caused by drowsiness can be reduced by having a proper system that can detect drowsiness, alert the driver and prevent major injuries.

It needs a proper system that will alert drivers to prevent major injuries.

The project starts an alarm when it detects the driver is drowsy and notify drivers to take a rest along with a nearby rest services area. It detects the driver's last sleeping time and suggests to take a rest.

Keyword : - *drowsiness, alarm, injuries.*

1. INTRODUCTION

The increasing number of traffic accidents due to a driver's diminished vigilance level has become a serious problem for society. Some of these accidents are the result of the driver's medical condition. However, a majority of these accidents are related to driver's fatigue, drowsiness of drivers. Car accidents associated with driver fatigue are more likely to be serious, leading to serious injuries and deaths.

Fletcher et al. in has mentioned that 30% of all traffic accidents have been caused by drowsiness. It was demonstrated that driving performance deteriorates with increased drowsiness with resulting crashes constituting more than 20% of all vehicle accidents. One can use a number of different techniques for analyzing driver's drowsiness.

In the computer vision techniques, facial expression of the driver like eyes blinking and head movements are generally used by the researcher to detect driver drowsiness.

1.1 OBJECTIVES

- a. The main aim of this is to develop a drowsiness detection system by monitoring the eyes.
- b. It is believed as the symptoms of driver fatigue can be detected early enough to avoid a car accident.
- c. Detection of the fatigue involves the observation of the eye movements and the blink patterns.

2. LITREATURE SURVEY

2.1 SYSTEM REVIEW

This survey is done to comprehend the need and prerequisite of the general population, and to do so such, we went through different sites and applications and looked for the fundamental data. Based on these data, we made an audit that helped us get new thoughts and make different arrangements for our task. We reached the decision that there is a need of such application and felt there is a need of such application and felt that there is a decent extent of progress in this field too.

2.2 PYTHON

Python is an interpreted, high-level, general-purpose programming language. Python's design philosophy emphasizes code readability with its notable use of significant whitespace. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects. Python is dynamically typed AND supports multiplied programming paradigms, including procedural, object-oriented, and functional programming.

2.3 JUPYTER LAB

Project Jupyter is a nonprofit organization created to develop open-source software, open-standards, and service for interactive computing over dozens of programming languages.

2.4 IMAGE PROCESSING

In computer science, digital image processing is the use of computer algorithms to perform image processing on digital images.

2.5 MACHINE LEARNING

Study of algorithms and statistical models that computer system use in order to perform a specific task effectively without using explicit instructions, relying on patterns and inference instead. It is seen as subset of artificial intelligence. Machine learning algorithm build a mathematical model based on sample data ,known as 'training data', in order to make predictions or decisions without being explicitly told.

3. PROJECT REQUIREMENT :

3.1 REQUIREMENTS

1. Hardware Required

- PC
- Webcam

2. Software Requirements

- Pycharm
- Open CV Face Eye Detection
- Keras -To build Classification Model
- Tensor Flow- Keras uses Tensor Flow as Backend
- Pygame- to play alarm sound

4. CONCLUSIONS

It completely meets the objectives and requirements of the system. The framework has achieved an unfaltering state where all the bugs have been disposed of. The framework cognizant clients who are familiar with the framework and comprehend it's focal points and the fact that it takes care of the issue of stressing out for individuals having fatigue-related issues to inform them about the drowsiness level while driving.

5.ACKNOWLEDGEMENT

This project is done as a semester project, as a part course titled “ **DRIVER DROWSINESS DETECTION USING PYTHON**”.We are really thankful to our course the Principal **Mrs.Geeta Joshi Ma'am** and the **HOD Mr.Vikas Solanke** , Computer Engineering of Marathwada Mitramandal Polytechnic,Thergaon,, Pune for his invaluable guidance and assistance, without which the accomplishment of the task would have never been possible.

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Pharmacy Management System

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ABSTRACT

Increasing health concerns among people demands efficiency in Pharmacy Stores. The need to migrate from originally paper-based to electronic notebooks with data storage, computational features and reliable electronic documentation has aroused. For this project, I have designed a Pharmacy Management System based on Python MySQL Database Access for small businesses. The software with an easy-to-use interface has been designed to allow stock maintenance, database access and electronic documentation for billing purposes with valued customer support. These features have been later used to compute discounts for customers, daily revenues, and determine steps to prevent potential revenue loss. Being an open-source software, it can be used by a wide variety of retail and wholesale outlets to automate the process of manually maintaining the records and cash flows. The results have been potentially generalizable. This software saves your time and money.

Keyword -

1. Introduction

This is an Open-Source Software designed for medical store management purposes for small businesses. In this era of growing demands of Pharmaceutical and Chemical products for health and medicine; every Pharmacy/Medical store, be it a small or medium sized businesses are running rampant towards efficient store management and rapid revenue computation. Instead of using the conventional style of paper-based records and documentation, electronic methods are preferred for stock maintenance, automatic updating of records while billing and reliable electronic documentation. The software would reduce daily effort wage and labor numbers. Crushing numbers can now be left to the system. The system computes and displays the daily revenue total and also notifies the products to expire the oncoming week. The system is based on Python Programming language for scripting and SQL Database Access for storage of records. The advantages of these features are explained in the next section

1.1 Technologies

In order to design maintenance software, the basic requirements would be: a powerful Platform, reliable storage capability and a simple interface. All these have been accomplished by Python, a powerful cross-platform language that can run in any device with a Windows or GNU/Linux Interface. When coding an application, there is a requirement for dynamic content fulfilled by SQL. The mainly used technologies for the coding process of the software have been introduced.

1.2 Python Programming

Python is an interpreter, object-oriented, high-level programming language with dynamic semantics. Its high-level built-in data structures, combined with dynamic typing and dynamic binding; make it very attractive for Rapid Application Development, as well as for use as a scripting. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

- Tkinter GUI & PySQL Database access has been immensely used to design this software.
- The software is designed to use this technology due to the above said reasons, to connect to the valued customers securely.

1.3 SQL

When coding an application, the decision to use SQL is a requirement for dynamic content. SQL is a database application that can be used by large or small businesses. SQL Queries can be used to retrieve large amounts of records from a database quickly and efficiently. SQL databases use long-established standard, which is being adopted by ANSI & ISO. Non-SQL databases do not adhere to any clear standard. Using standard SQL, it is easier to manage database systems without having to write substantial amount of code. With the emergence of Object-Oriented DBMS, object storage capabilities are extended to relational databases.

We have used PySQL Database access for safe and secure storage of stock data.

SQL Database has a huge advantage over the temporary storage variables list, tuples and dictionaries in python which has been explained in the next section.

2. Project AIMS and Objectives

The Project is related to Pharmacy or a Medical Stores which are in small scale and have to depend on the pen and paper. As we the know the medicine are the important things as the clothing, shelter and food. So we decided to implement a cheapest and easy way to store all the data and tally all the product. The most important thing in Medical is the Expiry check if there is an Expiry product, we cannot able to check in the bunch of paper and pen we have to check daily of expired product and to make it easy and faster its important to move forward with technology and smart. That's are all aim to make every pharmacy fast and safer and up to date.

3. Hardware and Software Requirements

3.1 Hardware Requirements

1. Monitor
2. Keyboard
3. Mouse
4. CPU

3.2 Software Requirements

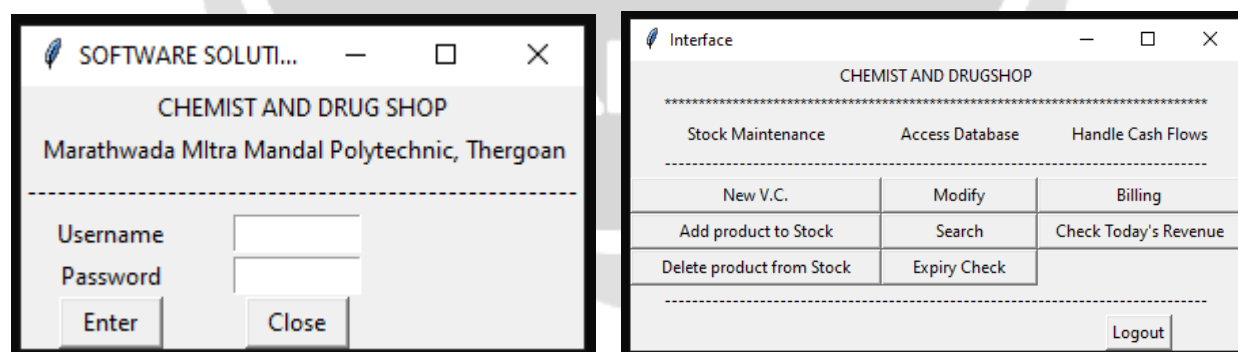
1. Operating System Windows 8 and above version
2. Python 3.0 Installed

4. Program Details

4.1 Module used in Program

No	Module	Uses
1	tkinter	Tkinter is used to create a Graphical User Interfaces (GUI) and it's the only framework built into the python standard library.
2	time	It provides a function for getting local time from the number of second elapsed since the epoch called localtime()
3	Sqlite3	It is used to integrate the SQLite database with python
4	random	Random module is an inbuilt module of python which is used to generate random number.
5	tempfile	In python module used in a situation where we need to read multiple files, change or access the data in file and gives output file based on the result of processed data.

4.2 Program Output



STOCK ENTRY
ENTER NEW PRODUCT DATA TO THE STOCK

Name:
 Type:
 Quantity Left:
 Cost:
 Purpose:
 Expiry Date:
 Rack location:
 Manufacturer:

Name	Type	Quantity Left	Cost	Purpose	Exp	Rack	Manufacturer
1. combiflame	aspirin	144	24	pain, fever	04-11-2017	1	medi
2. disprin	aspirin	414	12	headache	21-01-2022	3	medi
6. crocin	aspirin	20	20	headache	10-02-2032	3	medi

BILLING SYSTEM

Enter Name:
 Enter Address:
 Value Id (if available):

SELECT PRODUCT	RACK	QTY LEFT	COST	QUANTITY
1. combiflame	1	144	Rs 24	
2. disprin	3	414	Rs 12	
6. crocin	3	20	Rs 20	

tk
ENTER VALUED CUSTOMER DETAILS

Name:
 Address:
 Value Id:

tk
Today: 2/6/2022
Total revenue: Rs 0.0

EXPIRY CHECK
Today : 2/6/2022
Selling Expired Medicines and Drugs is Illegal

Delete a product from Stock

Enter Product to delete:

Product	Qty.	Exp.dt.	Cost
1. combiflame	144	04-11-2017	24
2. disprin	414	21-01-2022	12
6. crocin	20	10-02-2032	20

SEARCH
SEARCH FOR MEDICINE

Symptom Name

SEARCH
SEARCH FOR MEDICINE

Symptom Name

1. combiflame Rs 24 Rack: 1 Mfg: medi

5.ACKNOWLEDGEMENT

I would like to thanks of gratitude to my teacher Mrs. Arti Deshmukh Pawar as well as our principal Mrs. Geeta Joshi who gave me the wonderful opportunity to do this wonderful project on the topic Pharmacy Management System, which also helped me doing a lot of research and we came to know about so many things I am really thankful to them.

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Chatbot in Python

Ramkumar C. Malvi, Ketan M. Dharurkar, Arati Deshmukh

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Project Guide, Department of Computer Engineering, Marathwada Mitra Mandal's Polytechnic, Thergaon, Pune, Maharashtra, India..

ABSTRACT

Chatbots, or conversational interfaces as they are also known, present a new way for individuals to interact with computer systems. Traditionally, to get a question answered by a software program involved using a search engine, or filling out a form. A chatbot allows a user to simply ask questions in the same manner that they would address a human. The most wellknown chatbots currently are voice chatbots: Alexa and Siri. However, chatbots are currently being adopted at a high rate on computer chat platforms. A simple chatbot can be created by loading an FAQ (frequently asked questions) into chatbot software. The functionality of the chatbot can be improved by integrating it into the organization's enterprise software. Most commercial chatbots are dependent on platforms created by the technology giants for their natural language processing. These include Amazon Lex, Microsoft Cognitive Services, Google Cloud Natural Language API, Facebook DeepText, and IBM Watson. Platforms where chatbots are deployed include Facebook Messenger, Skype, and Slack, among many others.

Scripting Language -Python , **Development tool** - Pycharm.

1. INTRODUCTION

Chatbots, also known as conversational agents, are designed with the help of AI (Artificial Intelligence) software. They simulate a conversation (or a chat) with users in a natural language via messaging applications, websites, mobile apps, or phone.

There are two primary ways chatbots are offered to visitors:

- Web-based applications
- Standalone applications

Chatbots represent a potential shift in how people interact with data and services online. While there is currently a surge of interest in chatbot design and development, we lack knowledge about why people use chatbots.

2. LITERATURE REVIEW

Ramkumar Malvi & Ketan Dharurkar et al. paper presents on survey of various chatbot implementation techniques. The research is based on the survey of various chatbot and it is shown that how the various chatbot differs from each other's. To make chatbot the various technology has been used to make. A chatbot can be considered as a question-answer system where experts provide knowledge for solicitation of users. A chatbot is a software designed to simulate a conversation with human partner. This survey paper aims to present an overview of an existing approaches of implementing a chatbot system. In this paper it compares various chatbot from the first chatbot ELIZA to one of the latest chatbot like ALEXA, not only this is as shown various chatbots like IBM Watson, Siri, Tay, etc. It tells us about how it is implemented and how they actually work. The design and implementation of several chatbots are developed a detailed survey of those systems. I paper presents on college management Chatbot. The college inquiry chat-bots will be built using artificial algorithms that analyse user's queries and understand user's message. The User can ask the question any college-related activities through the chat-bot without physically available to the college for inquiry. The System analysis the question and then answer it to the user. The user can ask any question. In this the Chatbot usually remember the previous command in order to provide the functionality. So, whatever the user ask it will remember for it, it will help the Chatbot and it can analysis it for future references. If

the Chatbot couldn't answer the query asked by the user, then the admin will answer to that question. And that question along with answer is

stored in database so that whenever such questions will be asked so that they get answered directly from the software. Due to this admin doesn't need to answer same question manually anymore. The system replies using an effective Graphical User Interface as if a real person is talking to the user. The user just has to register himself to the system and has to login to the system. The chat-bots consists of core and interface that is accessing the core in (MySQL).

3. TECHNOLOGIES USED

- A. Hardware used – Laptop with Installed memory – 4GB and more ram
System type – 64 bit OS
- B. Platform
 - 1. Laptop/Desktop
- C. Software Tools Used
 - 1. Python
 - 2. This software requirement specification (SRS) report expresses complete description about proposed System. This document includes all the functions and specifications with their explanations to solve related problems.

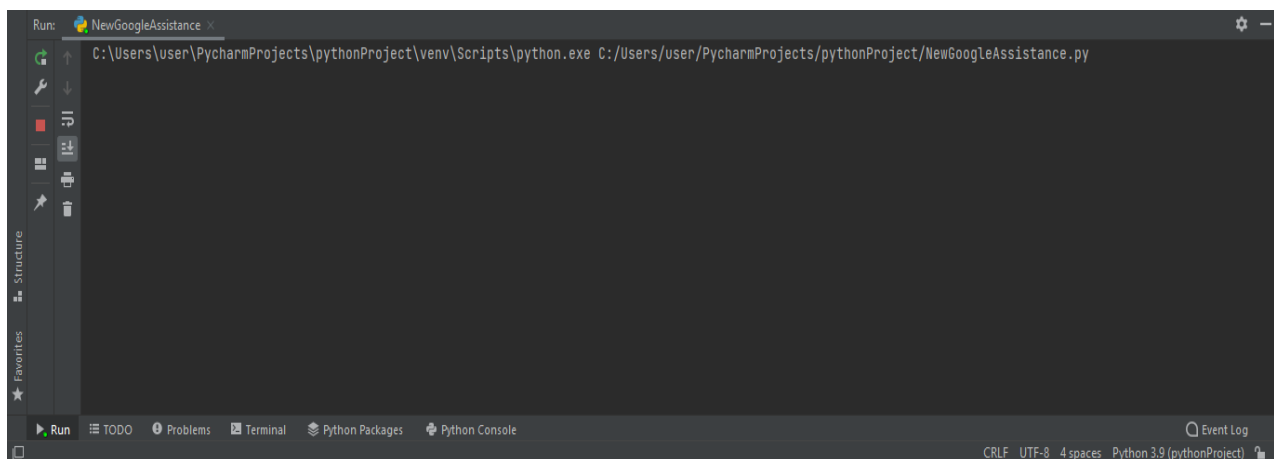
Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

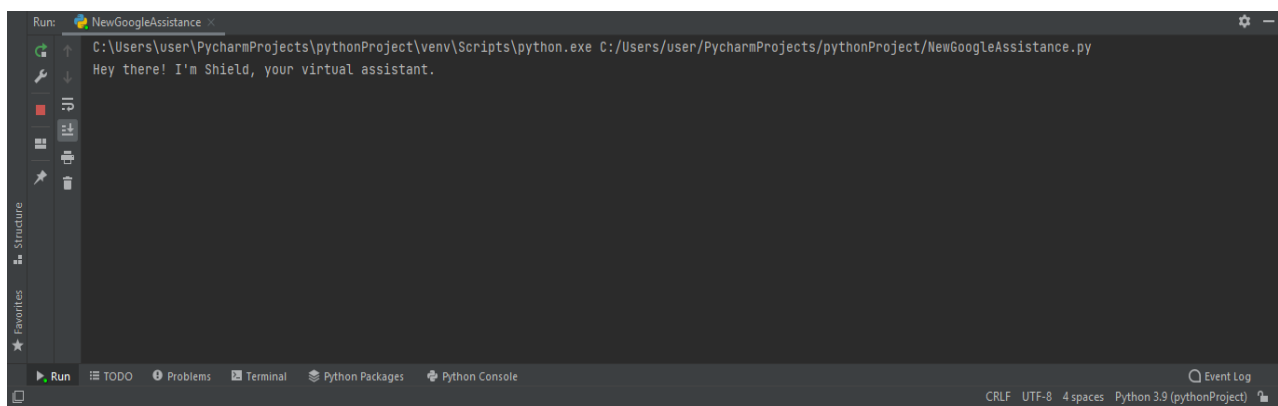
4. METHODOLOGY

The chatbot development methodology blends several modern frameworks and methodologies including design thinking, AI innovation sprints, and agile software development

Artificial Intelligence is the driving force behind the creation of innovative products like autonomous vehicles and chatbots. Recent advancements in Natural Language Processing (NLP) have made chatbots, also referred to as virtual assistants, a great option for improving the customer experience. Answering frequently asked questions, filing claims, checking the status of an order and getting feedback from customers are among the most popular use cases for chatbots. Building a chatbot that offers a good experience to customers requires collaboration from an interdisciplinary team of business analysts, service designers, data scientists, machine learning engineers and software developers. The chatbot development methodology blends several modern frameworks and methodologies including design thinking, AI innovation sprints, and agile software development.

5. SCREENSHOTS OF APPLICATION



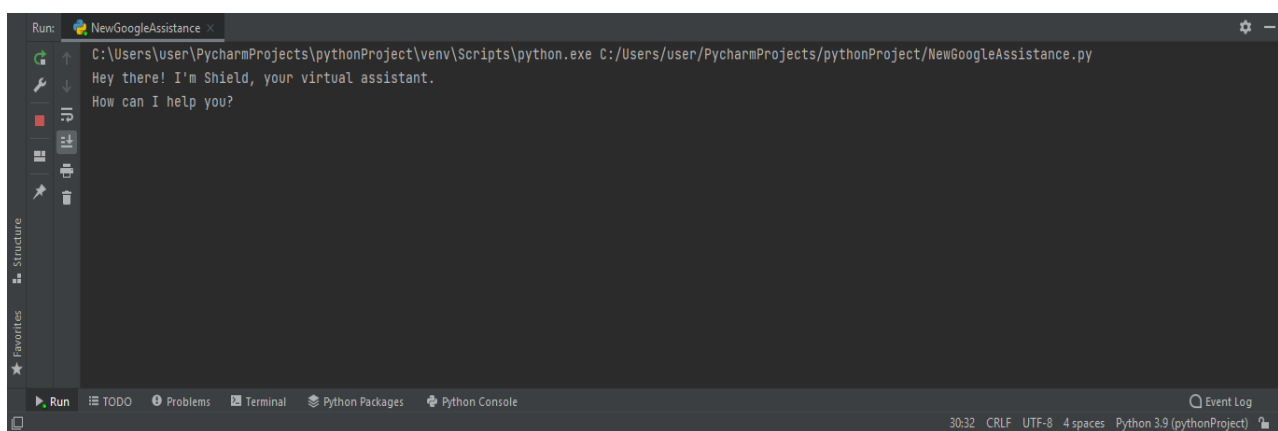


Run: NewGoogleAssistance

```
C:\Users\user\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/user/PycharmProjects/pythonProject/NewGoogleAssistance.py  
Hey there! I'm Shield, your virtual assistant.
```

Run | TODO | Problems | Terminal | Python Packages | Python Console | Event Log

CRLF UTF-8 4 spaces Python 3.9 (pythonProject)

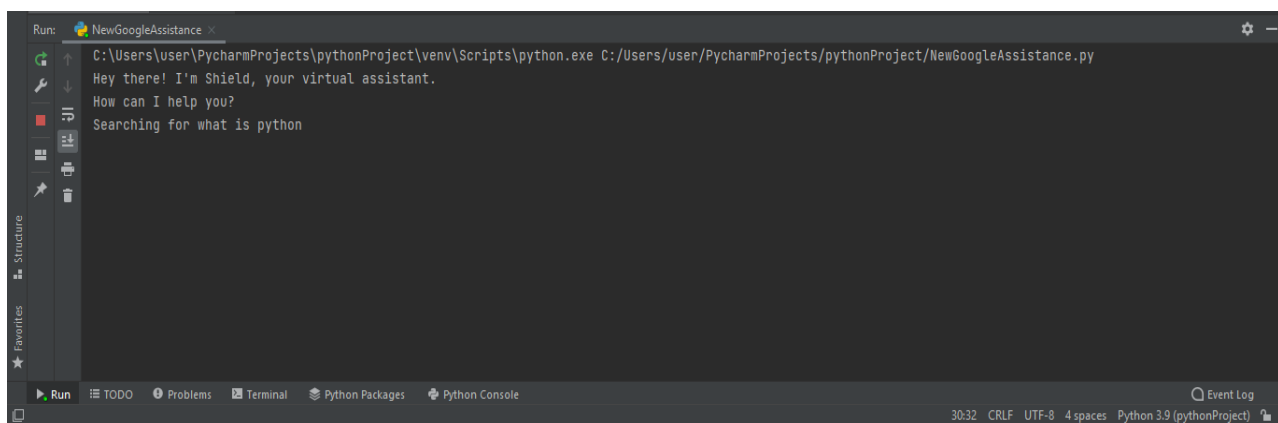


Run: NewGoogleAssistance

```
C:\Users\user\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/user/PycharmProjects/pythonProject/NewGoogleAssistance.py  
Hey there! I'm Shield, your virtual assistant.  
How can I help you?
```

Run | TODO | Problems | Terminal | Python Packages | Python Console | Event Log

30:32 CRLF UTF-8 4 spaces Python 3.9 (pythonProject)

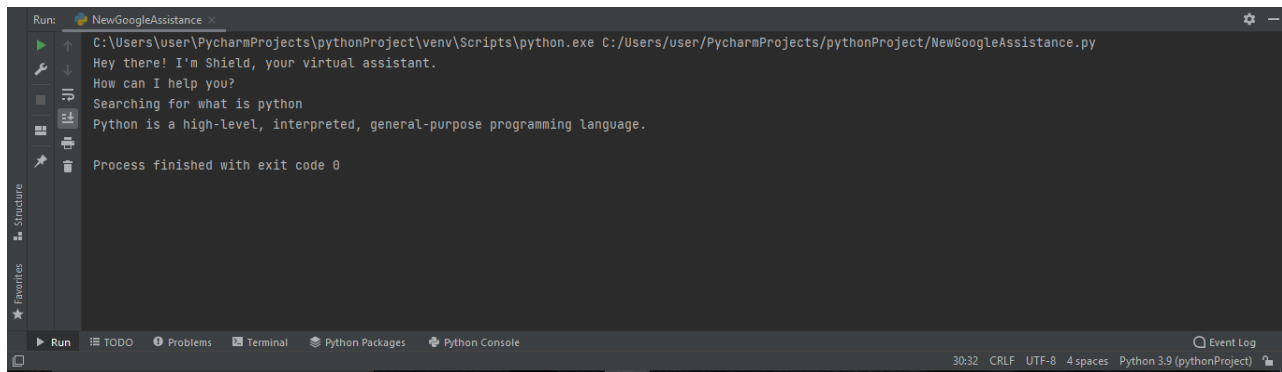


Run: NewGoogleAssistance

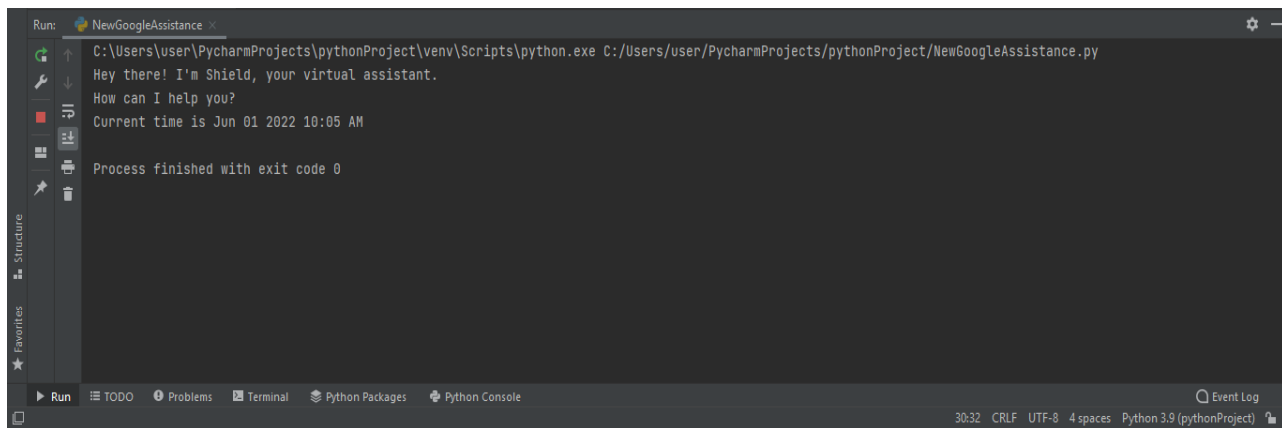
```
C:\Users\user\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/user/PycharmProjects/pythonProject/NewGoogleAssistance.py  
Hey there! I'm Shield, your virtual assistant.  
How can I help you?  
Searching for what is python
```

Run | TODO | Problems | Terminal | Python Packages | Python Console | Event Log

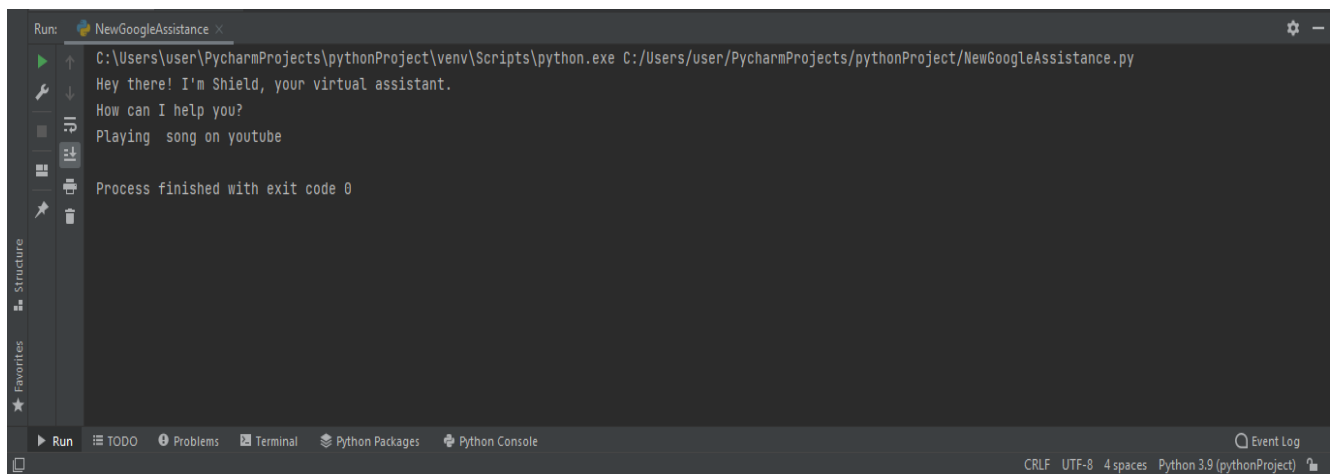
30:32 CRLF UTF-8 4 spaces Python 3.9 (pythonProject)



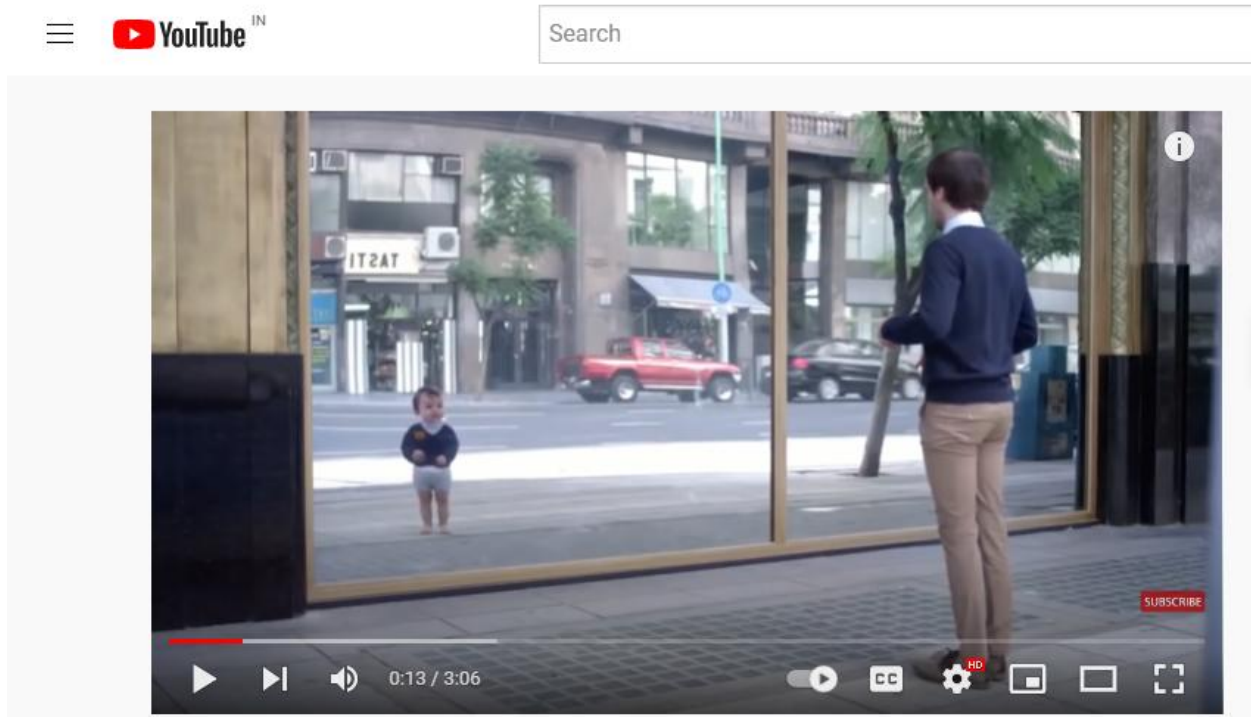
```
Run: NewGoogleAssistance x
C:\Users\user\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/user/PycharmProjects/pythonProject/NewGoogleAssistance.py
Hey there! I'm Shield, your virtual assistant.
How can I help you?
Searching for what is python
Python is a high-level, interpreted, general-purpose programming language.
Process finished with exit code 0
```



```
Run: NewGoogleAssistance x
C:\Users\user\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/user/PycharmProjects/pythonProject/NewGoogleAssistance.py
Hey there! I'm Shield, your virtual assistant.
How can I help you?
Current time is Jun 01 2022 10:05 AM
Process finished with exit code 0
```



```
Run: NewGoogleAssistance x
C:\Users\user\PycharmProjects\pythonProject\venv\Scripts\python.exe C:/Users/user/PycharmProjects/pythonProject/NewGoogleAssistance.py
Hey there! I'm Shield, your virtual assistant.
How can I help you?
Playing song on youtube
Process finished with exit code 0
```



6. Conclusion

Chatbots are an extremely promising technology. They are bound to stay with us and will grow in popularity with the increasing adoption of messaging apps and new

digital communication channels. You should get used to them as more and more companies are choosing chatbots for marketing purposes and to automate customer service.

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