



# JISCE INT HACKATHON 2020

A presentation by Team IIC JISCE

## JINNOVATION (CORONA PROTECTIVE GLOVES)

Abstract:- As alcohol is only material which can destroy Corona, this gloves wet the figure by alcohol every 20 minuts interval. The alcohol container situated in the elbow position of Gloves' user. A very low weight pump connected with this which is working for the Alcohol evaporation. The module of Automatic Alcohol sanitizing concept will also introduced to any human contacting place (like : door knob, ATM Keypad etc) Under development stage

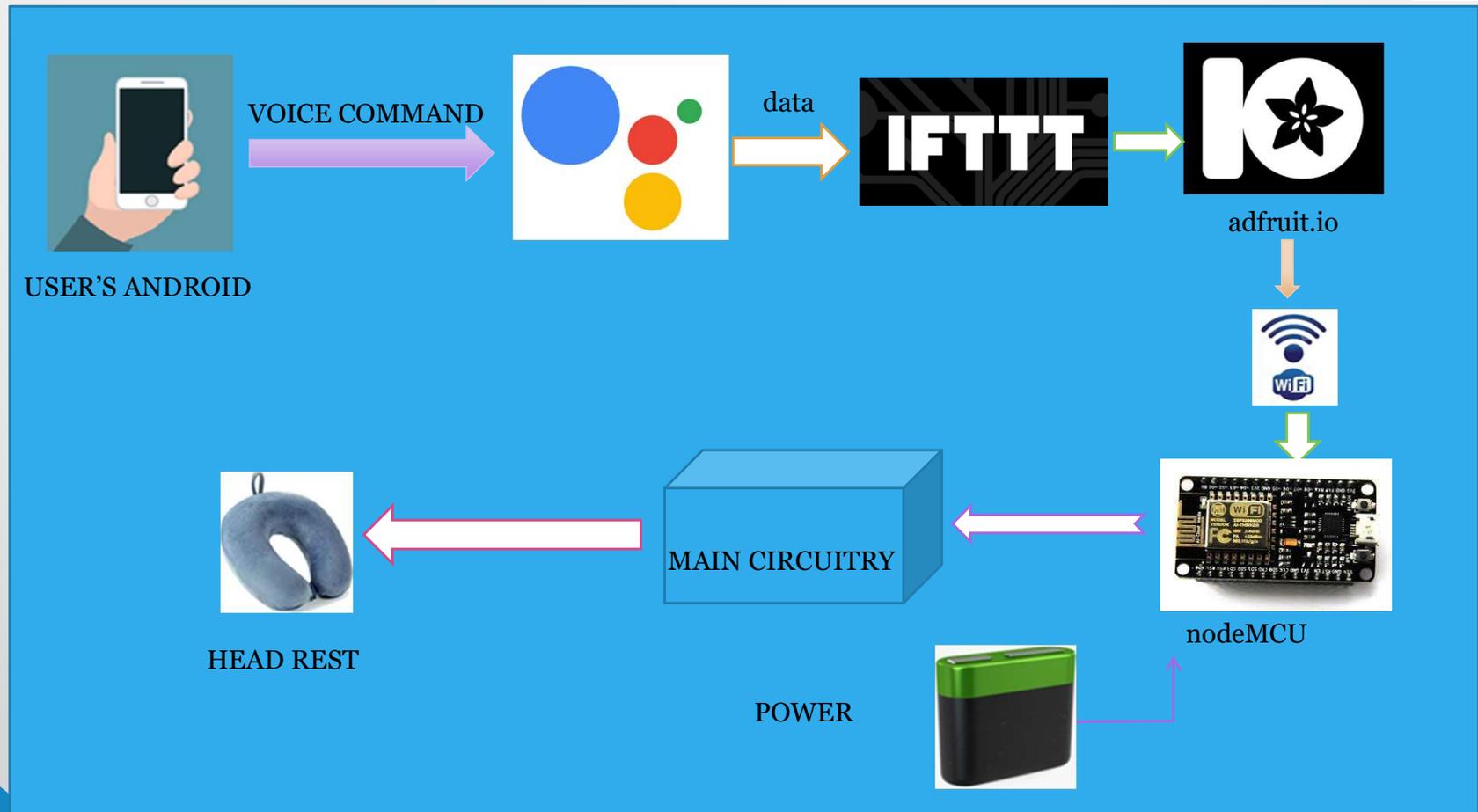




## Team MINDSPACE VISION (HEAD REST)

Abstract:- If we focus on the sleep score card of 2019 it will provide a horrifying data about people's sleep disorder.

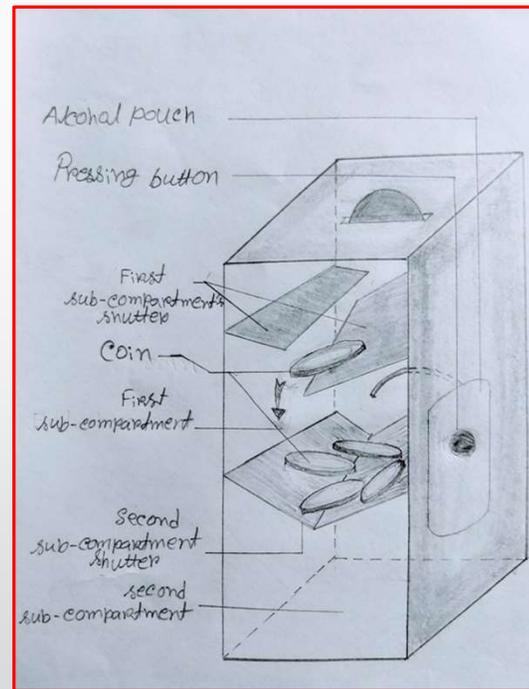
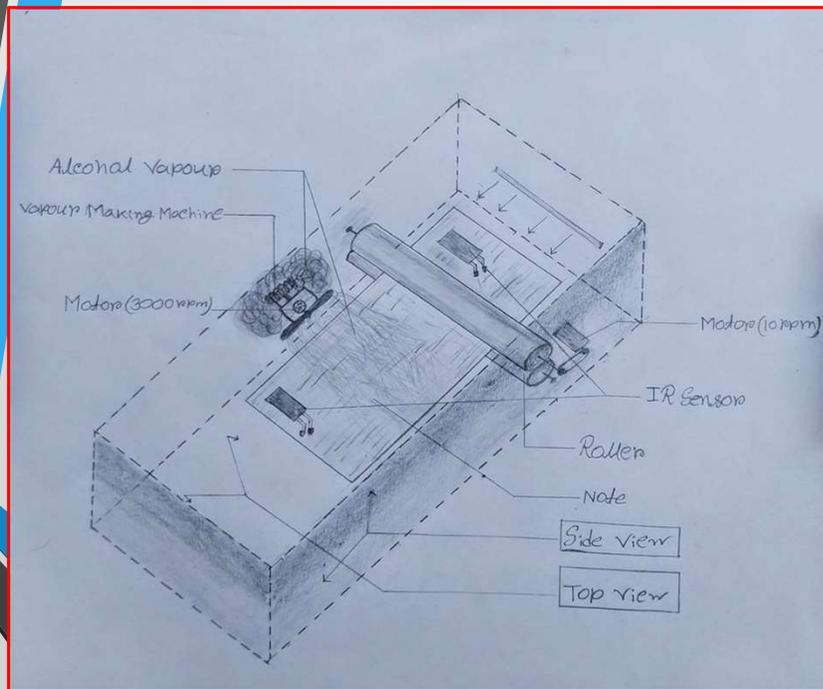
- 52 per cent of people sleep between 11 p.m. and 1 a.m.
- 31 per cent of people sleep less than seven hours;
- 80 per cent of people have insomnia.
- Delhiites stay up at night either watching shows on laptops or smartphones (27 per cent) or scrolling on social media feeds (20 per cent).
- 88 per cent people wake up 1-2 times a night.
- All these issues led us to only one problem “INSOMANIA”
- VNS ( Vegus Nerve Simulation system) can help us to overcome this problem.
- If we apply 120Hz vibration on the windpool pressure point for 10 min with an pulse of 7 second on and 2 sec off by a mini coin vibrator then the pressure points(vegus nerve) can be stimulated. Those two points are known as sleeping point.
- It can hurry up sleeping phase (Non REM) Elongation of sleeping period upto 7 hours.



BLOCK DIAGRAM

# TEAM INNOVATION (ALCOHOL BASED MONEY DISINFECTOR)

Abstract:- COVID-19 is spreading through currency too fast that is too dangerous to us. According to WHO, alcohol has a capability to disinfect COVID-19. In the “alcohol based money disinfector machine”, alcohol vapour and liquid alcohol are used to disinfect coins and notes. And it will be a low cost and carriable device.

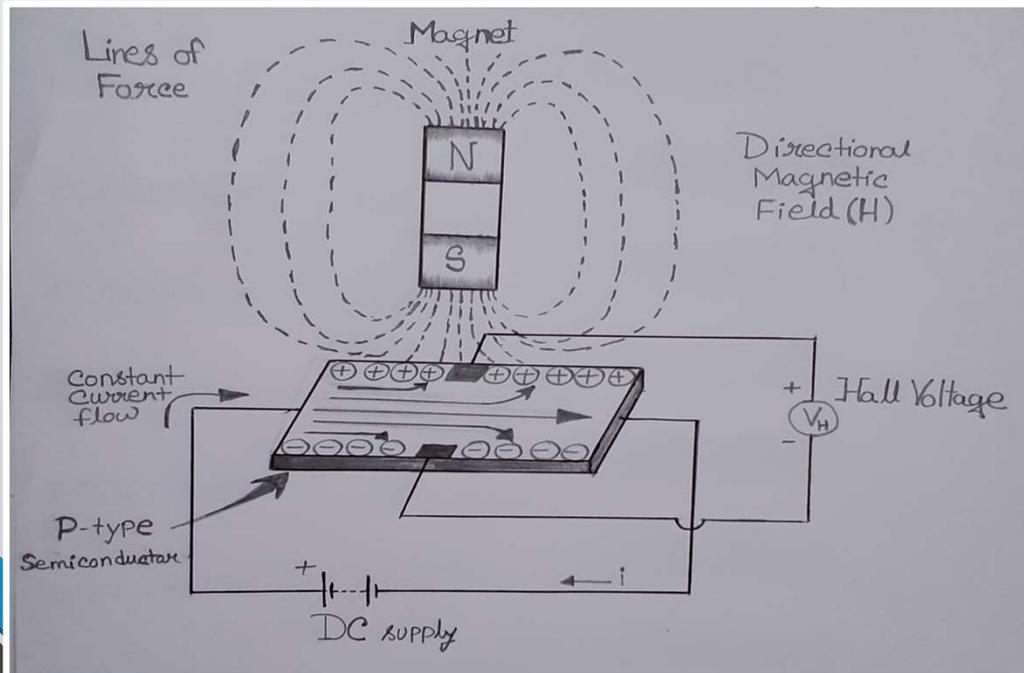


NOTE DISINFECTING COMPARTMENT

COIN DISINFECTING COMPARTMENT

# TEAM SMART HAT (CORONA PROTECTIVE SMART HAT)

Abstract:- COVID-19 is spreading through by Computer, touching doors, hand shake too fast that is too dangerous to us. According to WHO, alcohol has a capability to disinfect COVID-19 and apart from that we need to maintain social distance to protect our self. This product will help the people to maintain social distance by hall sensor.



## TRICHAMPIONS (Triphibian Robot)

Abstract:- Triphibian robot is an exploring robot which can navigate through land, water & air, and which can be controlled manually as well as can be controlled by voice commands.

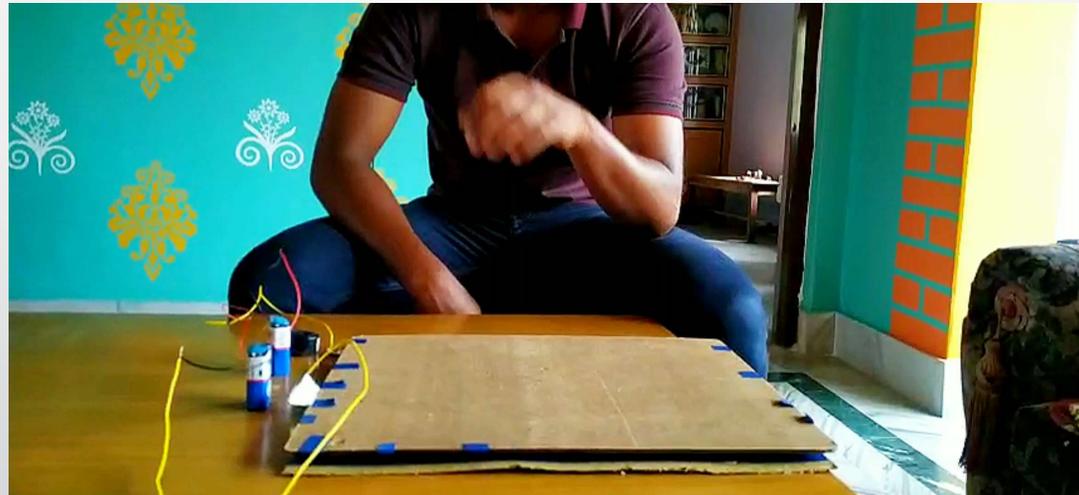
The main objectives are summarized below:

- Can be controlled manually by a single controller and via voice commands in any smartphone using google assistant.
- Can go to any location given within range of 500m.
- Can detect the body temperature and to send the information if found to be above threshold value.



## TECHSQUAD (Automatic Doorbell Mat)

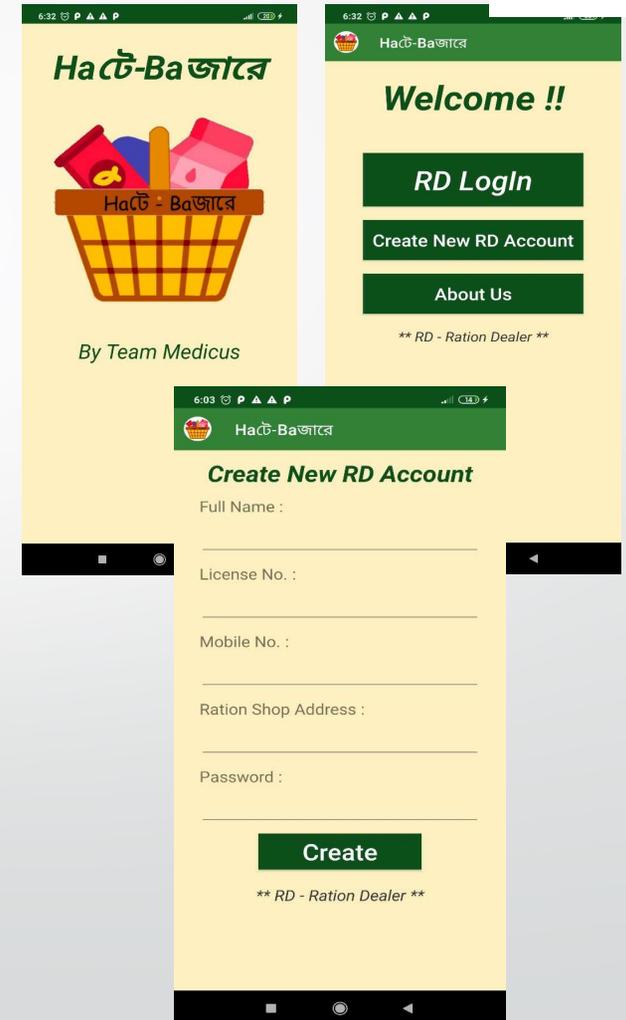
Abstract:- In this fast moving world, we all need a secured shelter and with the usage of minimum energy. So here is our project Automatic doorbell mat which give you Security and Automation in minimal cost. Whenever someone visit at your door, it automatically informs you about the arrival of the visitor and in addition to that it record the movement outside and send that immediately to your linked device and upload to the drive for future requirement.





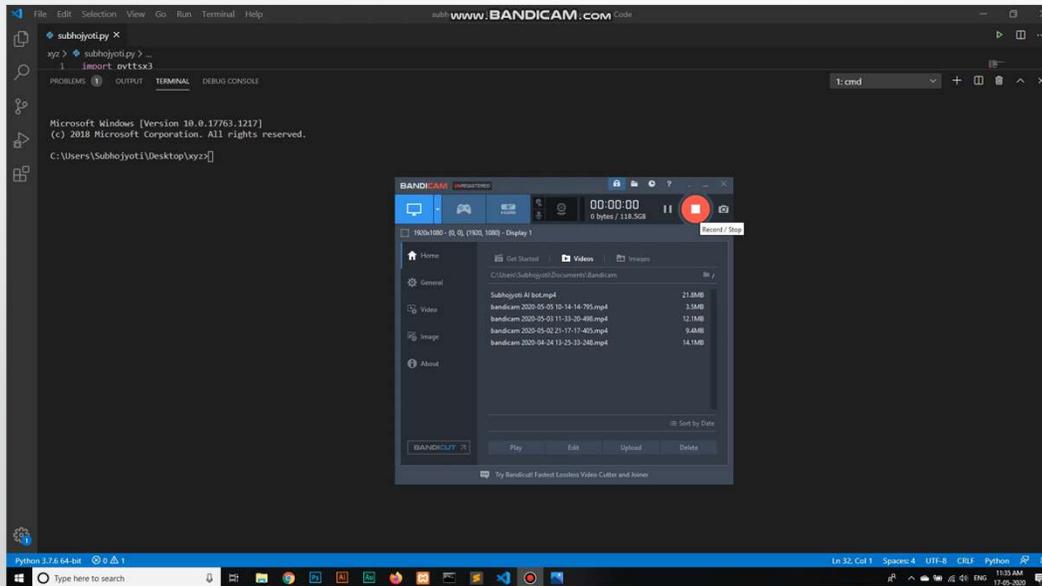
## MEDICUS (Hatey Bazare)

Abstract:- The adverse effects of the Novel Corona Virus or COVID – 19 on countries like United States of America, Italy, and Spain depicts how fast this virus can spread due to our irresponsible living habits. Till date, social distancing is the solution to prevent the communal outspread of this pandemic. In this situation, other than fighting Corona Government's primary concern is to ensure proper food security for every citizen. But availing foodgrains like rice, wheat, and sugar at a lower price through Public Distribution System is one of the primary commodities to survive. On the other hand, crowd management at such Fair Price Shops is a hectic job for the Government. Hence in this paper, we look forward to discussing a unique method of distributing foodgrains with the help of an Android App, named Hatey Bazarey, specially designed for Ration Dealers. Its sole purpose is to reduce the mental pressure of Ration Dealers by mobilizing the Fair Price Shops. Through this system, we aim to provide home delivery service of the lower-priced items as well as to keep a detailed record of the distributed items in a digital platform. This in turn ensures transparency to the prevailing public distribution system and also minimizes the threat of communal outspread of Corona due to public gathering.



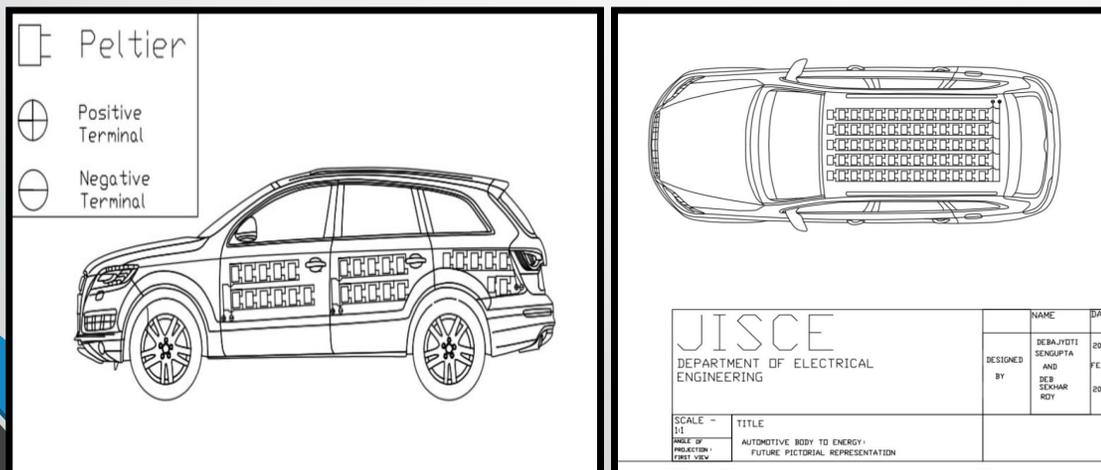
# AIELECTRUM (PYTHON BASED SMART APPLICATION)

Abstract:- Here we are trying to make a system which can be easily acceptable in our busy scheduled world. And complete our job within a few minutes using our voice command. In our tight, busy scheduled world we may have mistakes some basic tasks. And we are wasting a lot of time while typing. Our product have some key features along with beneficial for human life and it gives you notification reminder for your work.. For blind people it can execute command using voice and do most of the task. And Specially for those who are Visually Impaired & Old age.

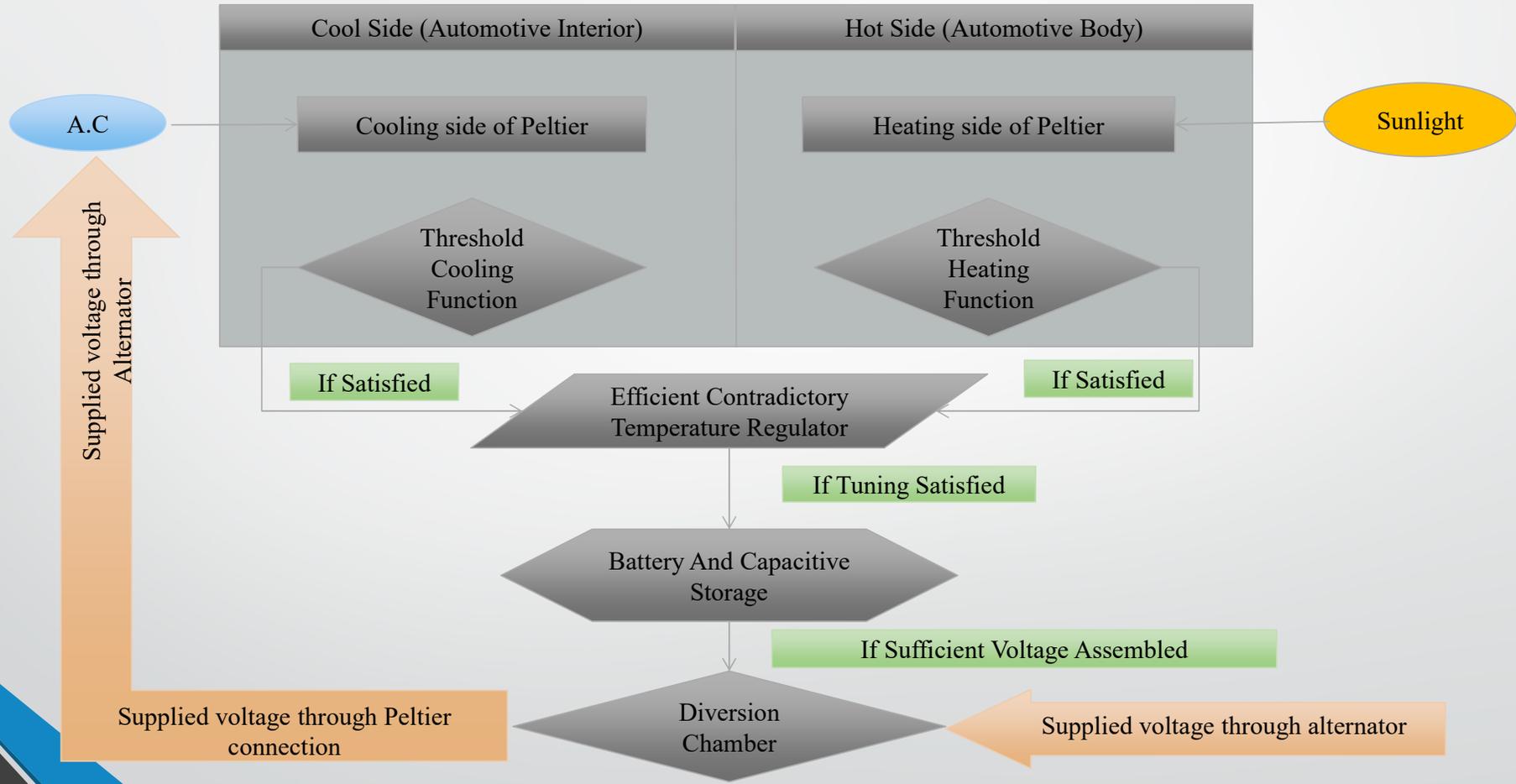


# MI6-KINGSMEN (AUTOMOTIVE BODY TO ENERGY)

Abstract:- In the 21st century, multiple factors affect our car's fuel efficiency. Out of which, using the AC in the car does lowers car's fuel efficiency by an average of 1.27 kilometres per litre depending on the age and size of the car. The AC lowers the fuel efficiency because it is diverting energy from the engine to power itself, not the car. For such ideas, a high require of hardware equipment to be set the power to the AC has from somewhere, other than the engine for the AC to get its energy and well as reduction of intake of fossil fuels. So in the present day, planning of various system of application for non-conventional ideas for creating efficient electricity are in the state of advancement. A new system of application of a non-conventional idea for creating efficient electricity can be yielded from an automotive body where some thermoelectric elements are precasted under it.



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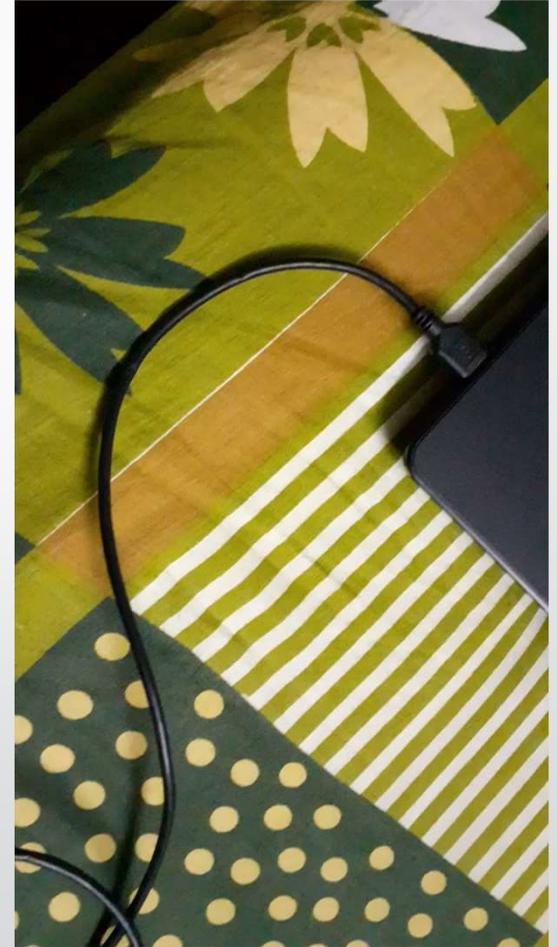


**WORKING PRINCIPAL**



## ELECTRIFIELD 2020(SOLAR POWERED SMART IRRIGATION SYSTEM USING IOT)

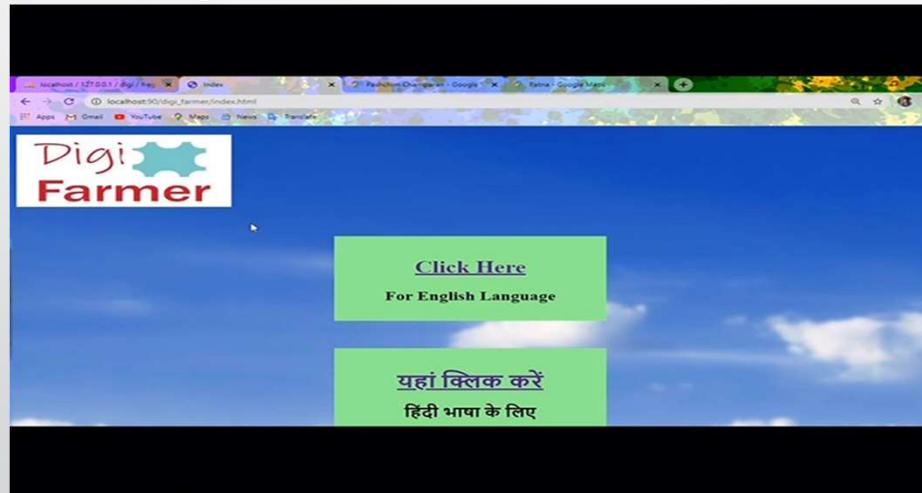
**Abstract:-** Cost effective solar power can be the answer for all our energy needs. Solar powered smart irrigation systems are the answer to the Indian farmers who generally face the problem of frequent power cuts or non-availability of grid supply. This system consists of solar powered water pump along with an automatic water flow control using a moisture sensor. It is the proposed solution for the present energy crisis for the Indian farmers. This system conserves electricity by reducing the usage of grid power and conserves water by reducing water losses. The idea here is to provide smart irrigation system which is being operated by using solar energy which is available in ample amount from the nature. And the data will be monitored by using app.





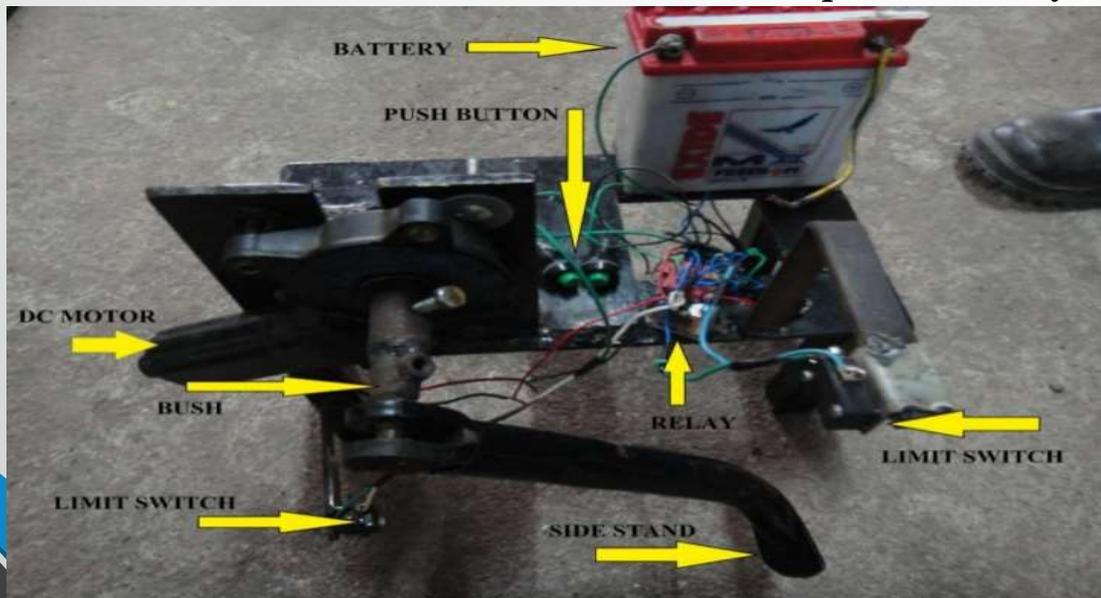
## AGRI FOX (DIGIFARMER)

**Abstract:-** By this website the farmers can see the real time price of their crop in wholesale market. Farmers also have the flexibility to pre-book the slot regarding their crop cutting time and they can contact to their nearby local wholesaler to sell the crop and receive the online payment from the wholesaler. Now our rural area can also make more contributions towards Digital India. For the availability of pre booking slot service, we are facilitating with proper planning of transportation for their crop from field to market with the minimum transportation cost. By this method Govt. can get the information of the income of the farmers as well as the wholesalers. The Govt. can even get the figure of exact quantity of crops produced within the season and black marketing of unlawfully storing crops in cold storage can be reduced.



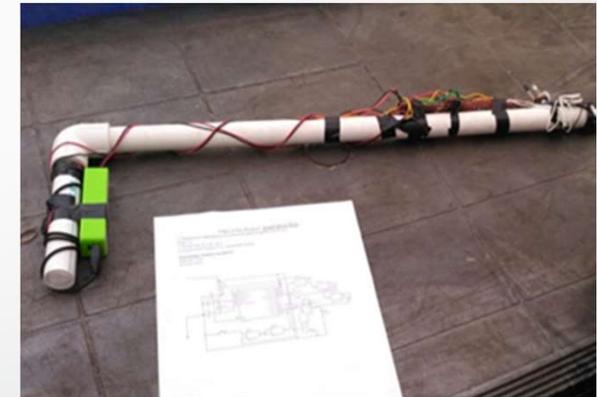
## JIS FIGHTERS (AUTOMATIC SIDE STAND SYSTEM)

Abstract:- In now a days two wheelers plays a important role in transport. Due to humans carelessness accidents happening. In that most important in due to forget to hold this side stand in two wheeler. In earlier days buzzer method in used for remedy in this case and next gear pedal method. But two methods are not efficient. In now a days people are most of them want simple operation. So we designed fully automatic self side stand method. It's most efficient compared to other, While we switch on the bike. By self start method is used start this vehicle. By using this method we can relieve this side stand from it's position easily.



## ALPHA 4 (A NOVEL DEVICE FOR LOCATION TRACKING AND OBSTACLE IDENTIFICATION FOR BLIND PERSON)

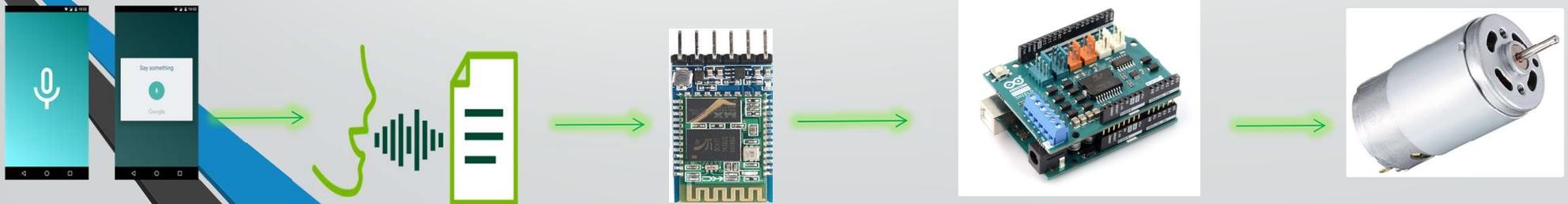
**Abstract:-** Human being have five basic senses. The sensing organs associated with each sense send information to the brain to help us to understand and perceive the world around us. Vision or sight is one of the most important of them but there are people who can not see and they are visually impaired. They are facing a lot of problem in their day to day life. these people always have need for other people to help them or guide them. our project is based on making them independent to do their chores . We are making a novel device for location tracking and obstacle identification of object. our device help them to identify obstacle in their way with the help of two IR sensors .one in the front and one AT the end of stick for the holes and speed braker in their path. It has GPS AND GSM through which we can know their location when they are in any type of danger or lost on just pressing of the power button on it. There are some similar type of devices in the market but our project main objective is to make this device cost efficient and compact . we want it to make it less in weight so it will not become a burden for them to carry.



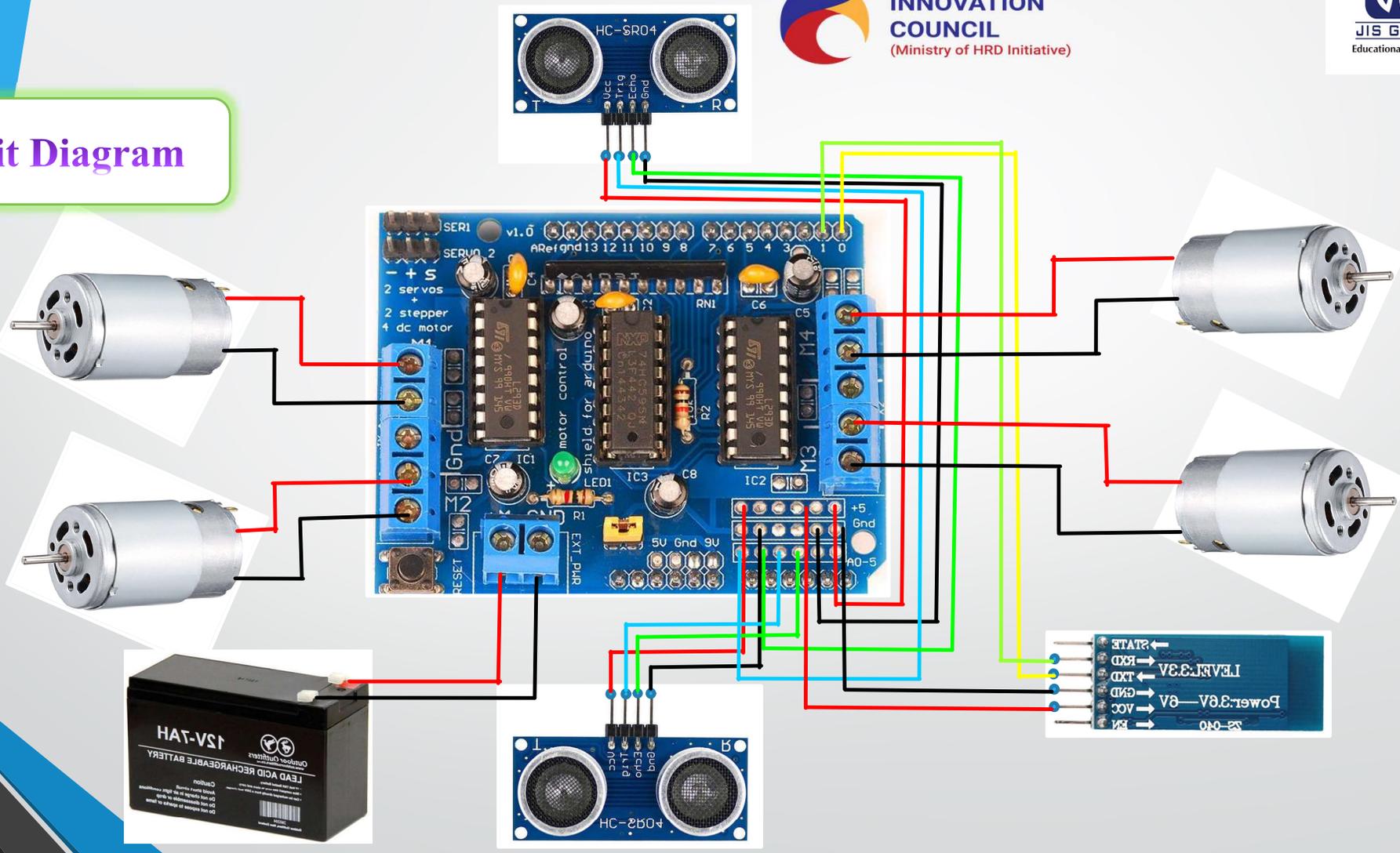
## TEAM TECHBUDDY (VOICE CONTROLLED INTELLIGENT WHEEL CHAIR)

Abstract:-

- Always have to depend on someone.
- During climbing the stair always need someone to push the wheelchair
- Sanitize the wheelchair again and again after a certain period of time.
- It's nearly impossible for the disabled person to sanitize the surrounding area.
- The Wheelchair will be totally voice controlled
- It will climb the stair without anyone's help
- It will sanitize itself and it's surrounding area
- It will give voice warning if any person will come very close to the wheelchair



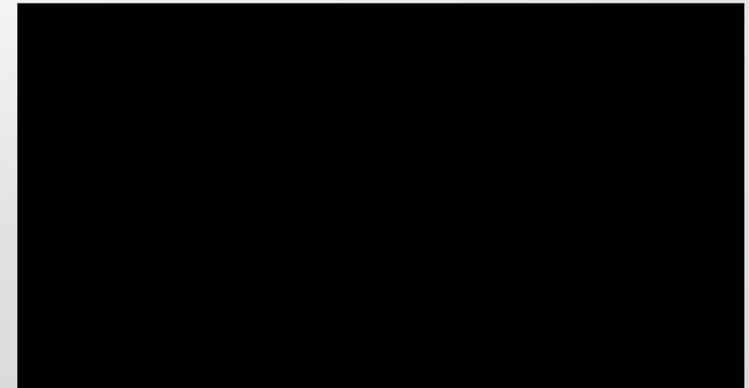
# Circuit Diagram





## ELECTRIKA (A NOVEL SYSTEM FOR PHYSICAL CONTACT ALERT AND CROWD LIMIT IN A MARKET AREA)

**Abstract:-** As per government instruction people should maintain minimum 1 meter distance in any place they are travelling such as market area, road etc. But it has been found that people forget the same and not maintain properly. Proposed prototype will be tied in the neck to alert the person through vibration alarm if any one comes nearer to him. Due to the pandemic COVID-19 government has restricted access to the crowded area such as the market without urgent requirement. Still in the morning many local markets were found overcrowded. Also people in the market are advised to avoid any contact with other people in a crowded area. But people fail to maintain this due to several activities such as purchasing commodities, waiting in the queue etc.



Vid. 1: Simulation done on count of people in the market area



## TEAM X (SMART AUTOMATED ATTENDANCE SYSTEM USING ARTIFICIAL INTELLIGENCE)

**Abstract:-** Attendance Monitoring System is essential in all organizations for checking the performance of students and it is not an easy task to check each and every student is present or not. In all organization, attendance is taken manually by calling their register numbers or names and noted in attendance registers issued by the department heads as proof and in some organizations the students wants to sign in these sheets which are stored for future references. This technique is repetitive, complex work and leads to errors as few students regularly sign for their absent students or telling proxy attendance of the absent students. This method additionally makes it more complex to track all the student's attendance and difficult to monitoring the individual student attendance in a big classroom atmosphere. In this article, we use are using the technique of utilization face detection and recognition framework to continuously recognize students going to class or not and marking their attendance by comparing their faces with database to match and marking attendance. This facial biometric framework takes a picture of a person using a camera and contrasts that image and compares the image with the image with is stored at the time of enrolment and if it matches marks the attendance and monitors the student performance continuously. We may use the concept of artificial intelligence concept to monitor student attendance like capturing the motion pictures of the student when present in class to analyze the student data how much time the student presents in class.



Automated Attendance System

### Admin Log In

**User Name:**

**Password:**

Jis College Of Engineering

Automated Attendance System

### Automated Attendance System

Jis College Of Engineering

Automated Attendance System

### Enroll Student

**Name:**

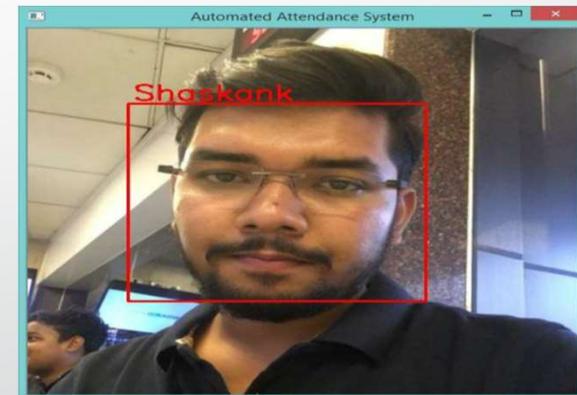
**Department:**

**Year:**

**Roll No:**

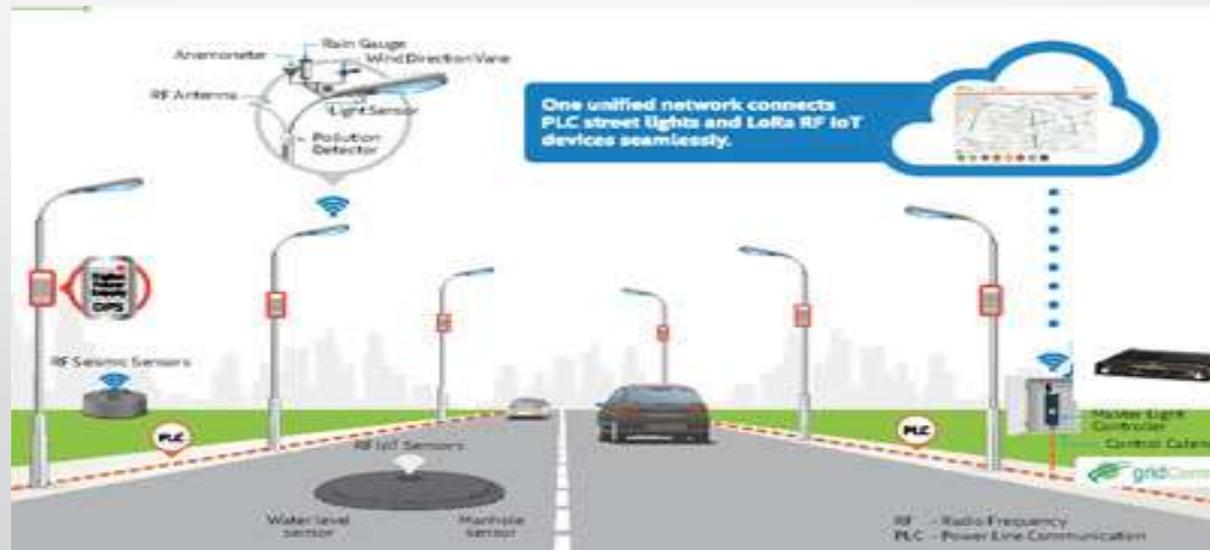
**Email:**

Jis College Of Engineering



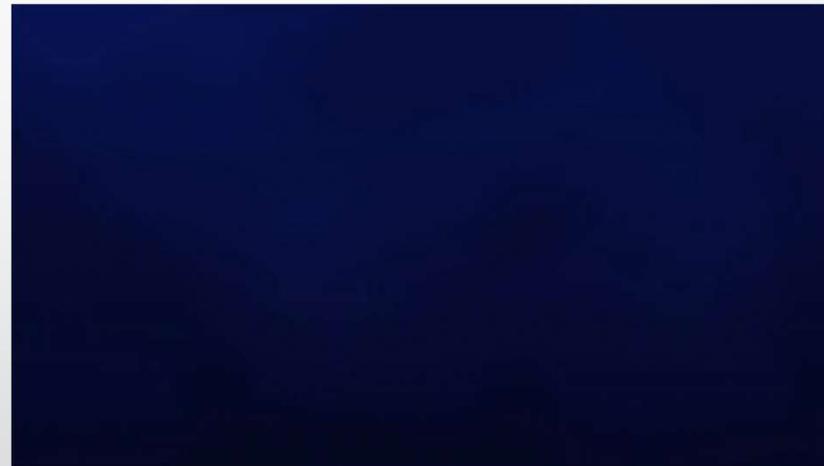
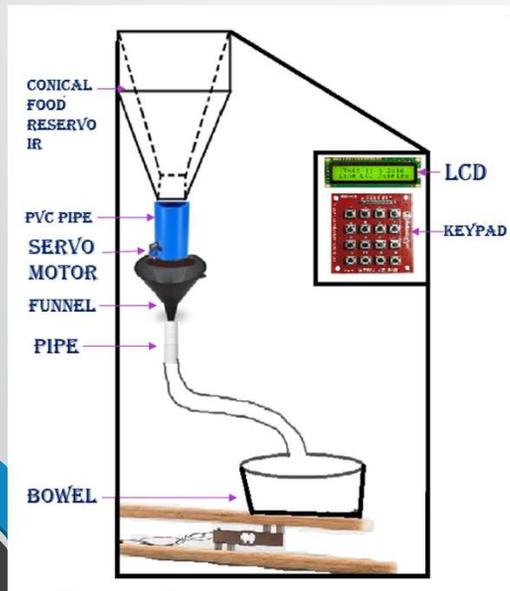
## ROKU (SMART HIGHWAY MANAGEMENT SYSTEM USING LI-FI)

Abstract:- In recent past optical communication has taken over other modes of communication due to its large bandwidth, high speed communication and large number of channels. Light Fidelity or LI-FI is based on the technology of WI-FI which uses LED as the source to make a fully functional bidirectional high speed wireless network system. Unlike others it does not depend on the radio frequency but uses visible light spectrum which provides 10,000 times faster speed. Though it has some challenges but let us discuss how we can use LI-FI to make a better future.



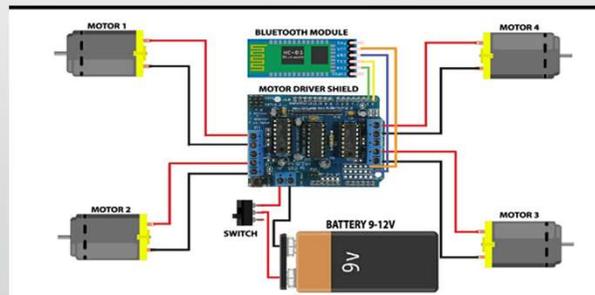
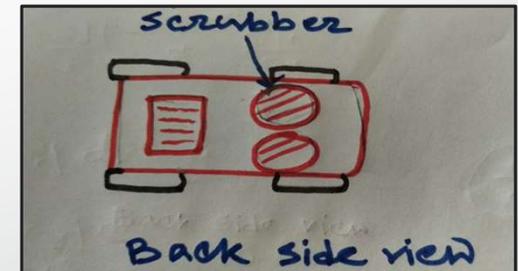
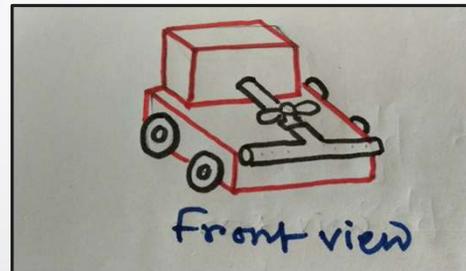
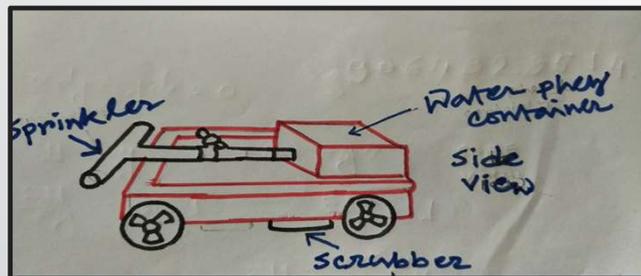
## ELECTRIKA (AUTO PET FEEDER)

**Abstract:-** A conical structure created using ply board for reserving the dog food. Servomotor is used to control the outflow of the food through the pipe connected to the bowl. The bowl is placed on a load cell to inspect the weight of food. User can assign the timing and quantity of food through key board to supply food depending on the instantaneous weight of food in the bowl.



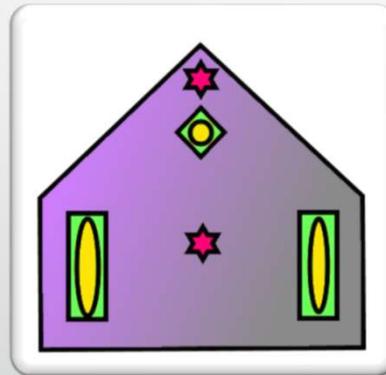
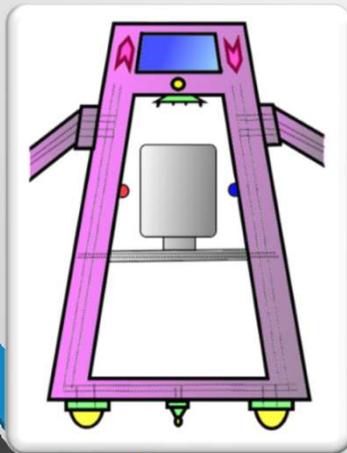
## THE ROOKIES (FLOOR CLEANER)

Abstract:- Our project is a wheel type machine with motion control. After turning on the machine it will spray water-phenyl mixture on the surface. The scrubbers attached with the machine will mop the surface by rotating at high speed. Fans will also be attached with the machine to dry the cleaned wet surface. The machine will be controlled by smart phone. It will be powered by rechargeable batteries. The scrubbers are easily replaceable.



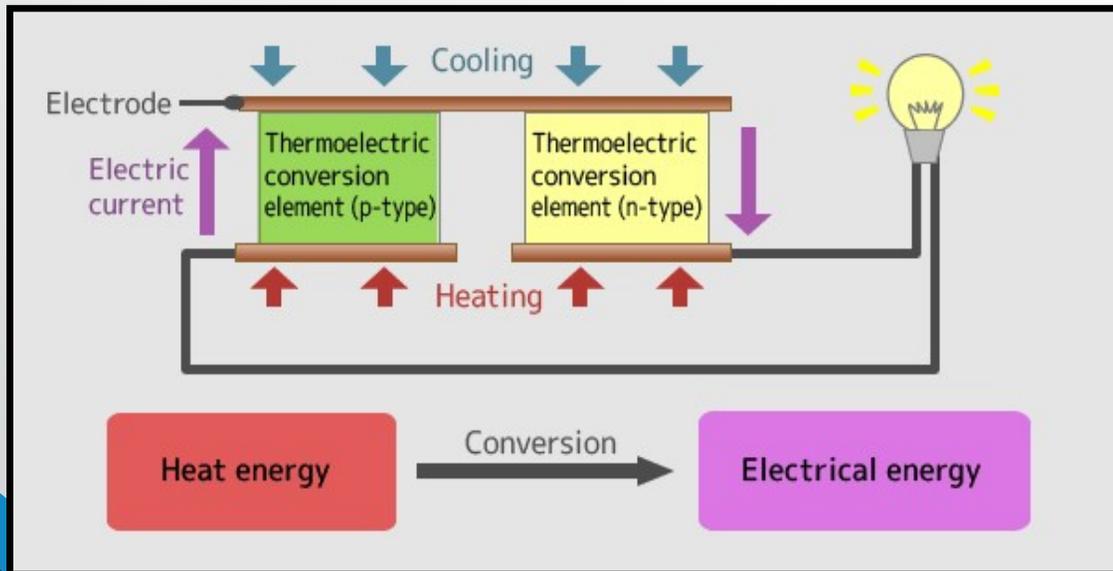
## MEDICUS (ROBOCARE NURSE)

Abstract:- This project represents a robot system that can be used in the hospitals to fight this recent pandemic issue of COVID – 19. As healthcare workers are getting effected while treating the COVID-19 patients if robots can replace them in the preliminary works like sanitizing the hospital rooms, checking patients temperature daily basis, assisting the patients while they require nurses then we can save the headworkers from this pandemic as they are the backbone of the society now. So we try to build a robot that can be able to treat patients, sanitize hospital rooms, able to give medicine to the patients and also will be able to communicate with each other and can upload and download using medical server and can provide data summery to the human care. Salient features of this robot are AI based applications, Specially designed arms, Integrated chair,

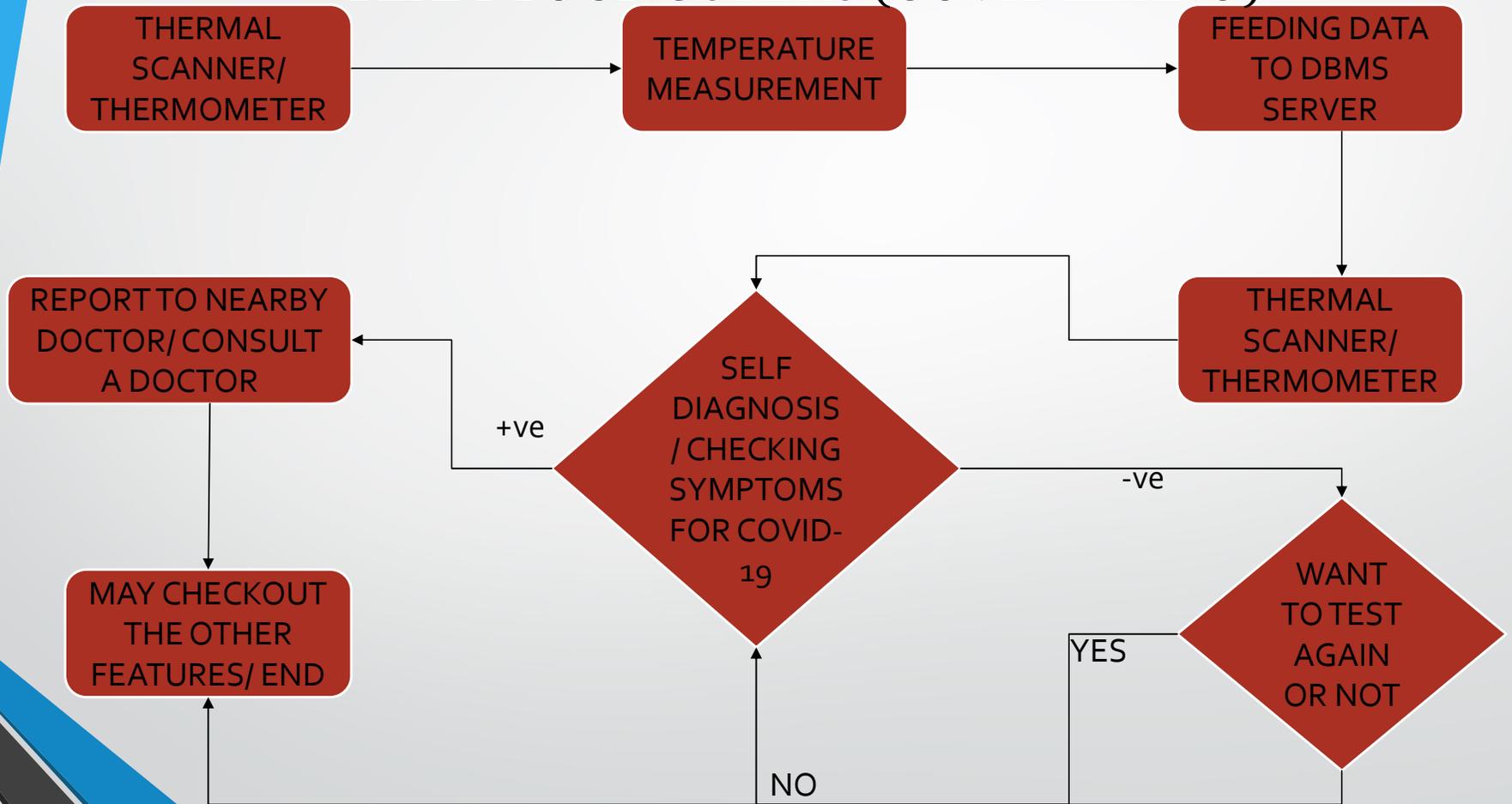


## TEAM DELTA (THERMOELECTRIC GENERATION TO PRODUCE POWER)

Abstract:- This project shows the direct conversion of thermal energy into electric energy in order to encourage the conscious use of energy and to reduce waste. The conversion of thermal energy into electrical energy occurs in a thermoelectric generator through the Seebeck effect. In this TEG there are no moving parts and it cannot be producing any waste during power production hence it is considered as a green technology.

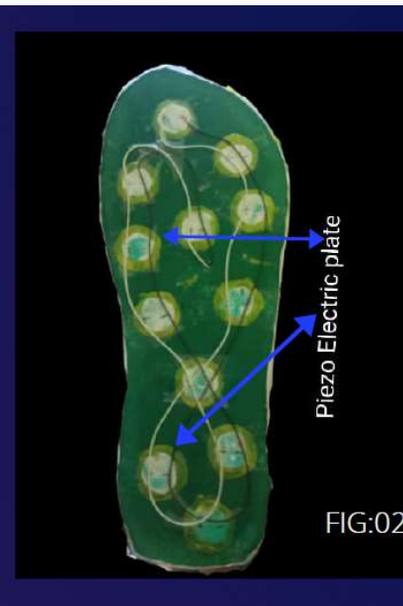
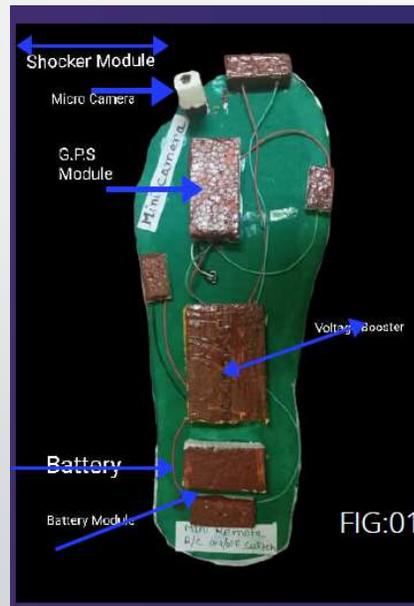


## TEAM YOUNGSTERS (COVIDLERNO)



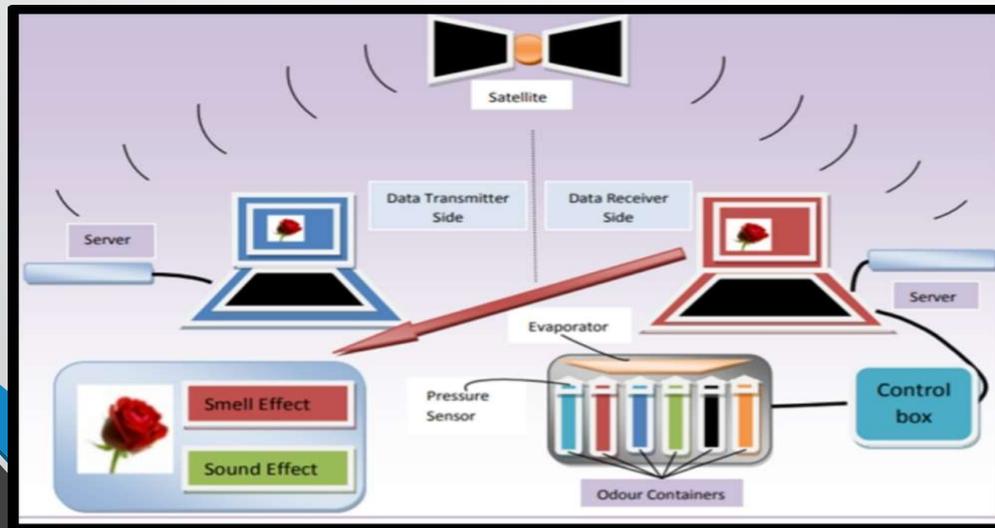
## DEFENDERS (PIEZOELECTRIC WOMEN SAFETY SHOE WITH GPS )

Abstract:- The rate of crime against women increasing day by day. especially harassment, molestation, kidnapping, and domestic violation. Rape is the fourth most common crime against women in India. According to the Records 24,923 rape cases were reported across India . Many preventive measures have been taken by the government to stop these activities but still has not affected the growth rate of these crimes and has remained unaffected.



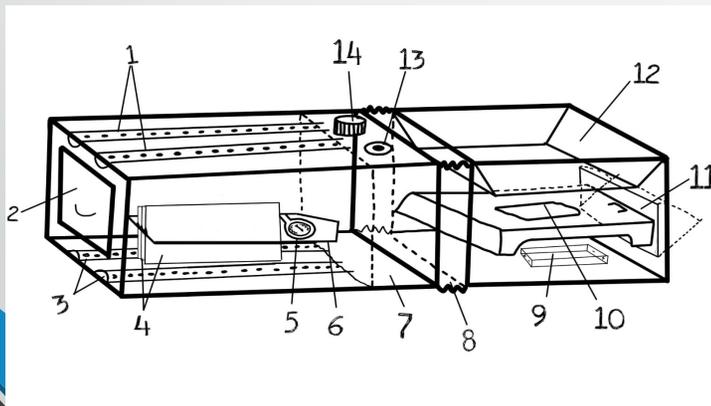
## TEAM ESSENCE (ESSENCE EFFECT CREATION THROUGH INTERNET TECHNOLOGY TOWARDS ODOR TRANSFORMATION ASPECT)

Abstract:- VR and Gaming Technology does not meet the requirement of perceiving smell. People of 21st Century demands more innovation in virtual reality. VR technology will soon overtake the market of 3D technology. To cope up with the increasing standard of technology we are making a device that can help perceive smell through data. The device is going to introduced the desirable features of essence with VR, gaming, home automation, film and many other industries to make the virtual reality more attractive and popular also.



## CLEANSED COINERS (DESIGN AND DEVELOPMENT OF A COST EFFECTIVE, ECHO FRIENDLY "CLEANSED COINER" SYSTEM.)

Abstract:- Money is the most important source to live a healthy and prosperous life. Money, we grab it all the time with our germy hands and so do other people. Currencies and coins can carry more germs than a household toilet. The bacterial presence on coins appears to be far more transient. Viruses and bacteria can live on most surfaces for about 48 hours, but paper money can reportedly transport a live flu virus for up to 17 days. Sterilizing notes and coins will help in reducing the health problems related to currency contamination. UV ray driven machine is not used so corrosion of coins can be avoided. We are using very normal, easily available materials so as to make the machine cost effective. This device is portable so it can be used in shops, banks or anywhere the user want to use.



1. Pipelines
2. Entry/Exit door
3. Pipelines
4. Notes
5. Coin section
6. Tray
7. Storage area (Liquid Chemical)
8. Polymer Coating
9. Battery
10. Notes
11. In/Out Door
12. Peltier Module
13. Refilling Area
14. knob



**THANK YOU**