THEFT DETECTION AND ALERTS SYSTEM

HUNTERS

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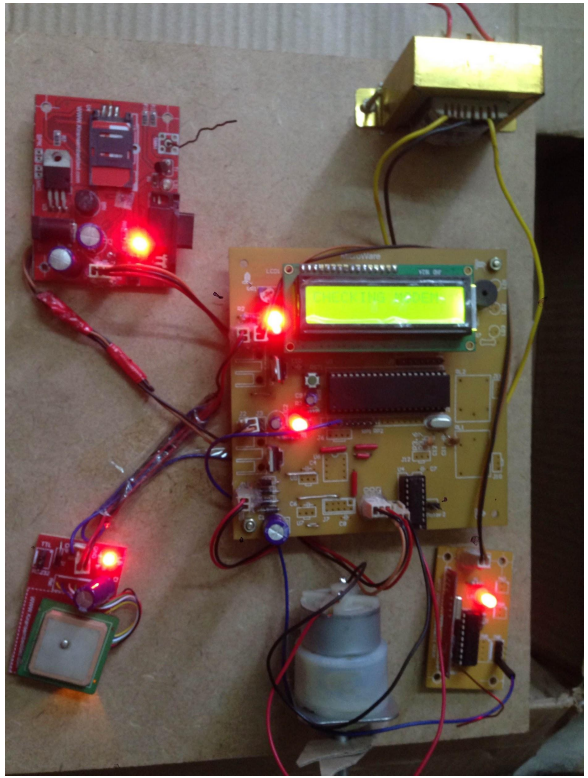
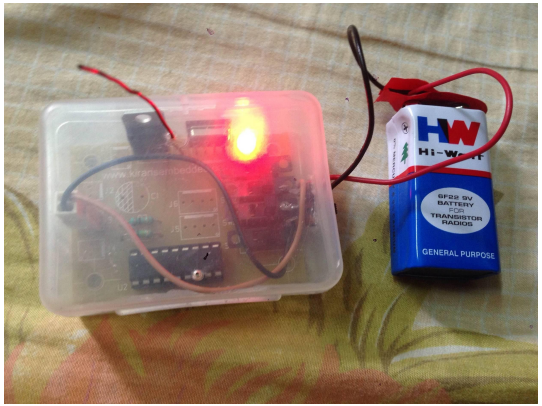
PROTOTYPE

This is the hardware kit of our project.



We have also added a buzzer to start an alarm when the vehicle stops.

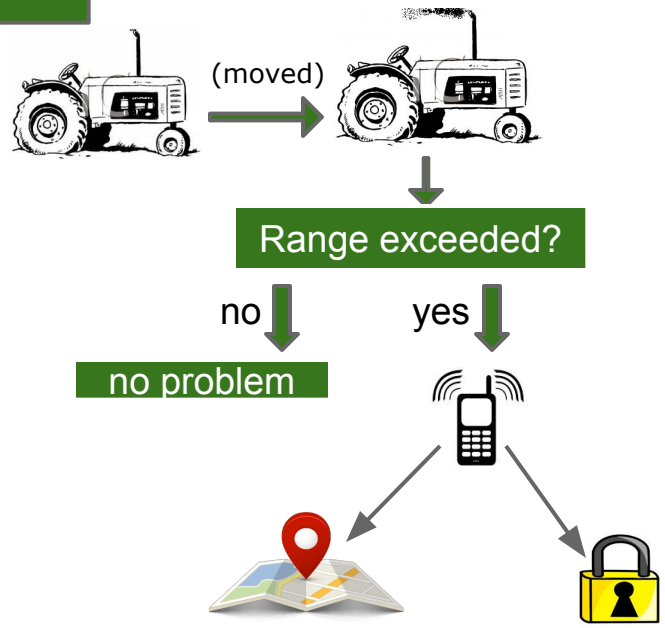
This is the Transmitter which continuously communicates with the receiver.



This is a compact device.

WORKING OF PROTOTYPE

- Initially there will be continuous transmission b/w transmitter and receiver (inside tractor) up a range of 10m approx.
- When receiver moves away from transmitter more than the limited range, the connectivity b/w them is lost and the owner gets an alert message saying "THEFT ALERT"
- We will get a message with latitudes and longitudes of the vehicle.
- By using the android application we can TRACE, START and also STOP the vehicle
- We will also receive acknowledgement messages.



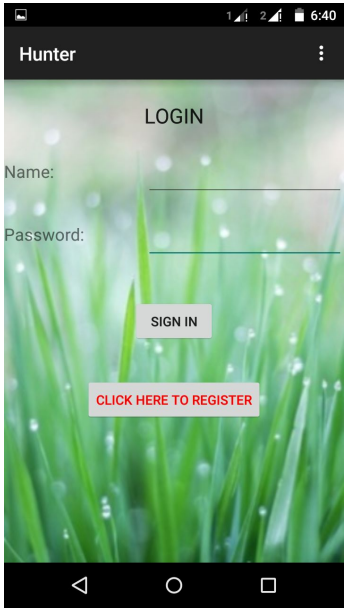
SMART ANDROID APPLICATION

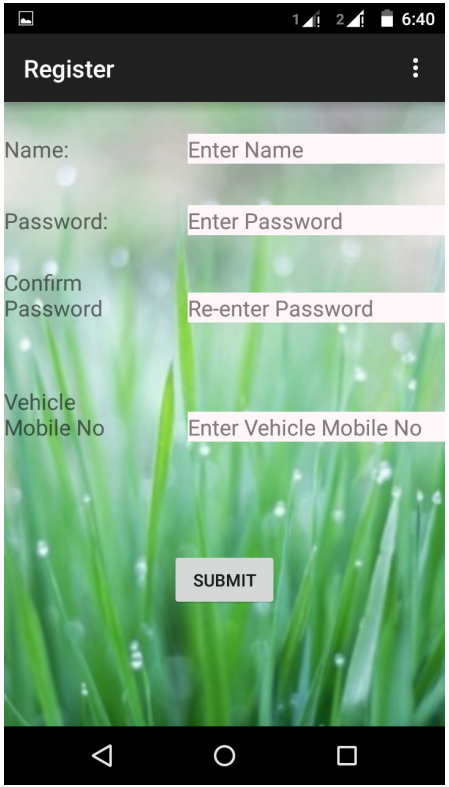
This is a user-friendly android application.

Registration has to be done for one time.

We must login (offline) in the application to trace the vehicle.

These images are the screenshots to show the registration process.



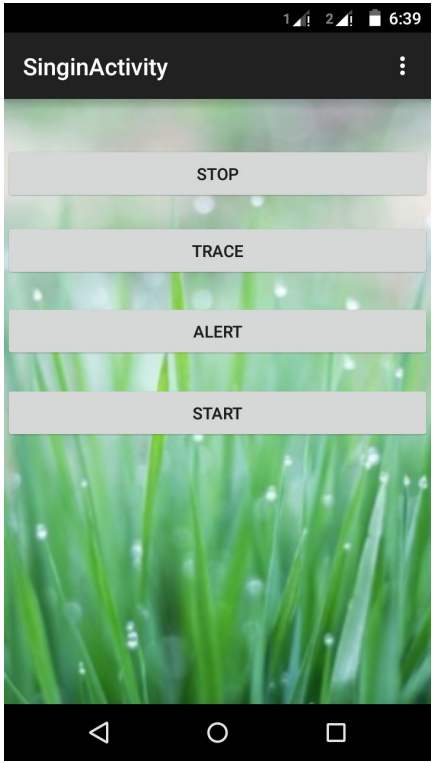


WORKING OF APPLICATION

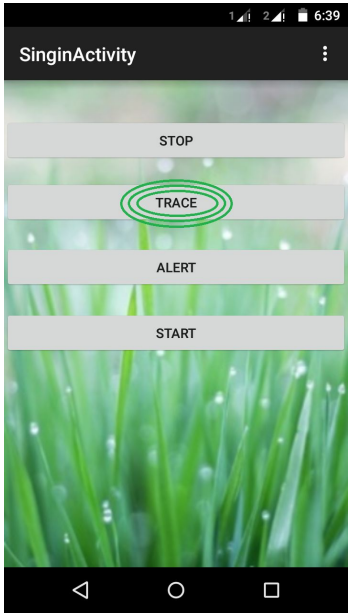
This application is an offline application.

Once we login into the application, we can see the options there, i.e., START, STOP, TRACE and ALERT.

We can select what we want to do respectively.



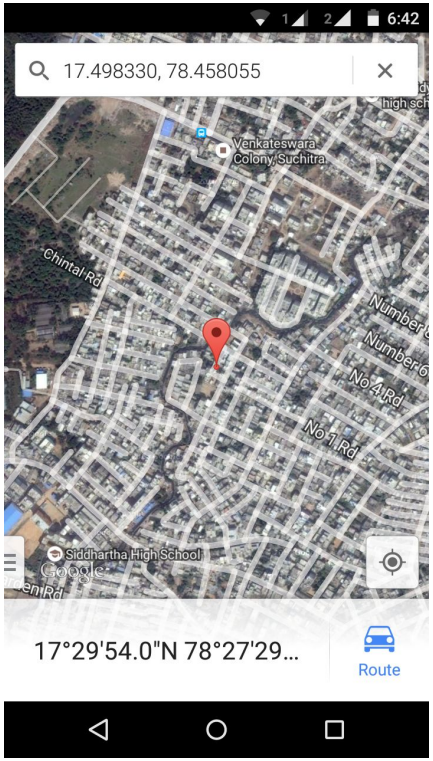
TRACING



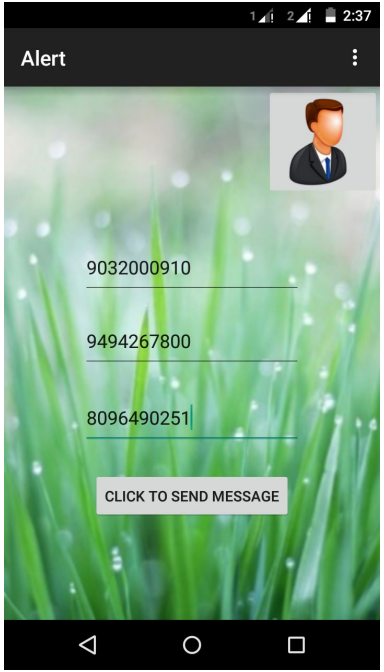
By pressing the TRACE option in the app, we can trace the location of the vehicle.

The location of the vehicle will be shown in Google maps.

We can even START and STOP the vehicle, and also give ALERTS to the people around from our contact list.

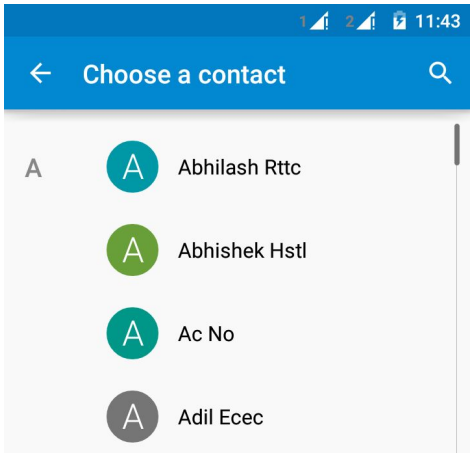


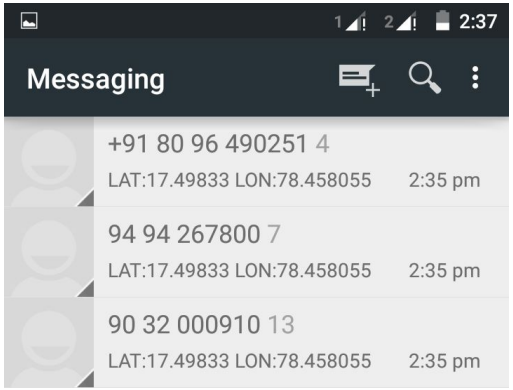
ALERTING



We can send alert message for 3 numbers at once.

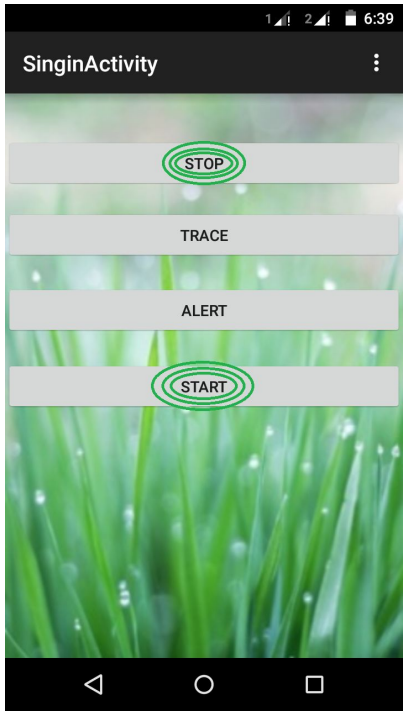
The numbers can also be selected from the contacts.





This will be very **important** because if we're **not available** at the **time of the theft**, an alert can be sent to the people from anywhere.

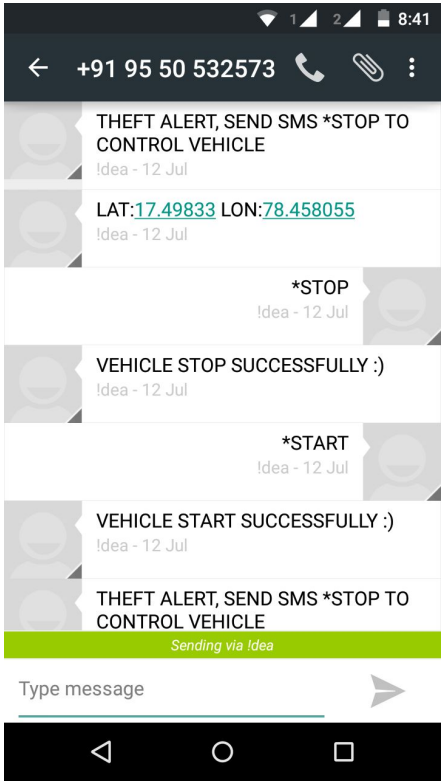
START AND STOP



The START and STOP buttons here are used to start and stop the vehicle through the application.

After stopping the vehicle by using this, an alarm will start blowing till start message is sent to it.

This is how the messages will be in background.



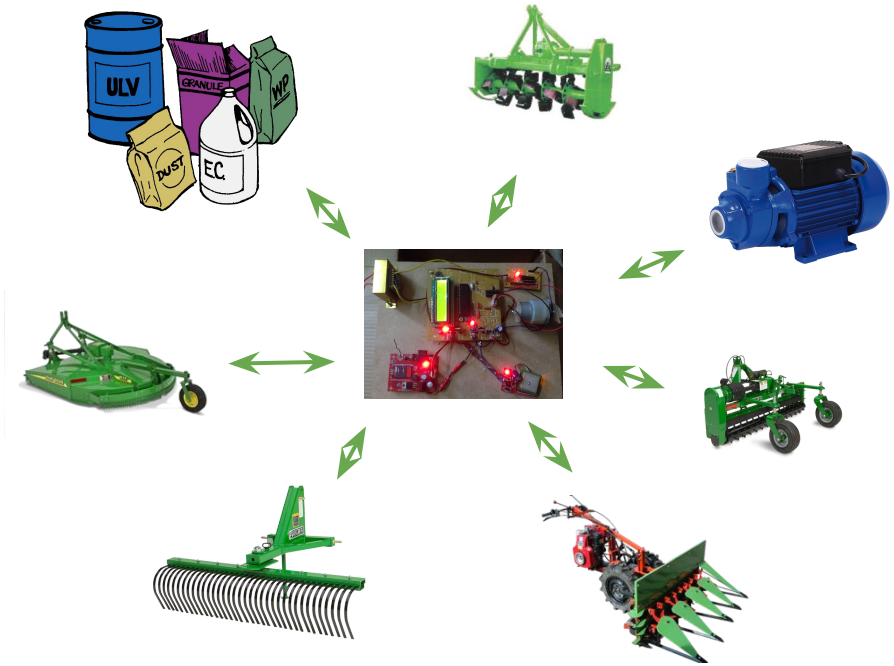
FOR OTHER FARM EQUIPMENTS

Single transceiver is attached to the passive component, they will be communicating continuously with the kit.

Itemized number will be given to each equipment.

When a particular commodity is out of range, we will get an alert saying it is out of range.

We can add as many equipments as we want.



FUTURE SCOPE

The project is all about controlling theft of a vehicle. The system is about making the vehicle more secure by the use of GPS, GSM technology and a smart android application.

This project can be further enhanced by the use of:

- **Face detection** by using camera.
- **Vibration sensors** to detect motion.
- **Accident detection** using sensors.

- ## Novelty of approach
  Our app integrates and controls GSM,GPS and RF transceiver in a novel way.

- ## Speed To Market
  The Components which are used in our project are readily available in the market. This technology meets our requirement so we can say that it can come quickly to the market.

- ## Feasibility
  This model is easily manufacturable, The app is designed to be user-friendly.

- ## Incremental Approach
  using transmitter and receiver to detect the theft in a certain range and we can see the position of the equipment using GPS.
  Here we are using GSM, GPS methods and using their applications to make this product as an incremental innovation.

- ## Price Vs Cost
  Undoubtedly It is profitable when complete structure is fabricated with IC technology as single unit.

Thank you !

JOHN DEERE