Review 1

GPS Tracking

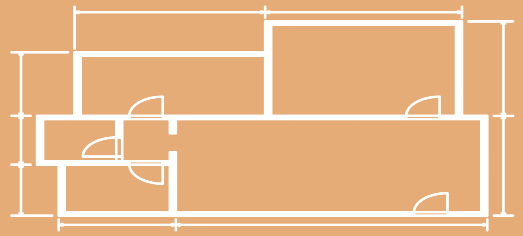
GPS GSM simulation and GPS Tracking Hardware

Whats the need

- Locating Positions
- Easy Access to Emergency Road Side Support
- Preventing Car Theft
- Mapping and Surveying
- Tracking for Law Enforcement
- Keeping Watch on Elderly People
- Finding Treasure
- Hiking and Backpacking

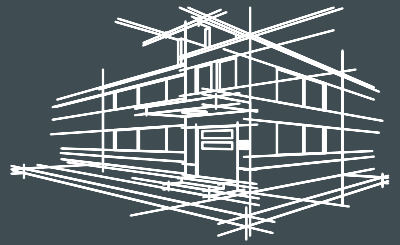
and many more .....

What I Am Working On



Simulation

Simulation will give us a better understanding of how the projct will work and the logical circuit behing it



Hardware

This will help us to put out simulations to use and visualize our Data

Components needed

Simulation

01. Proteus Software

02. GPS and Arduino modules

03. Arduino IDE

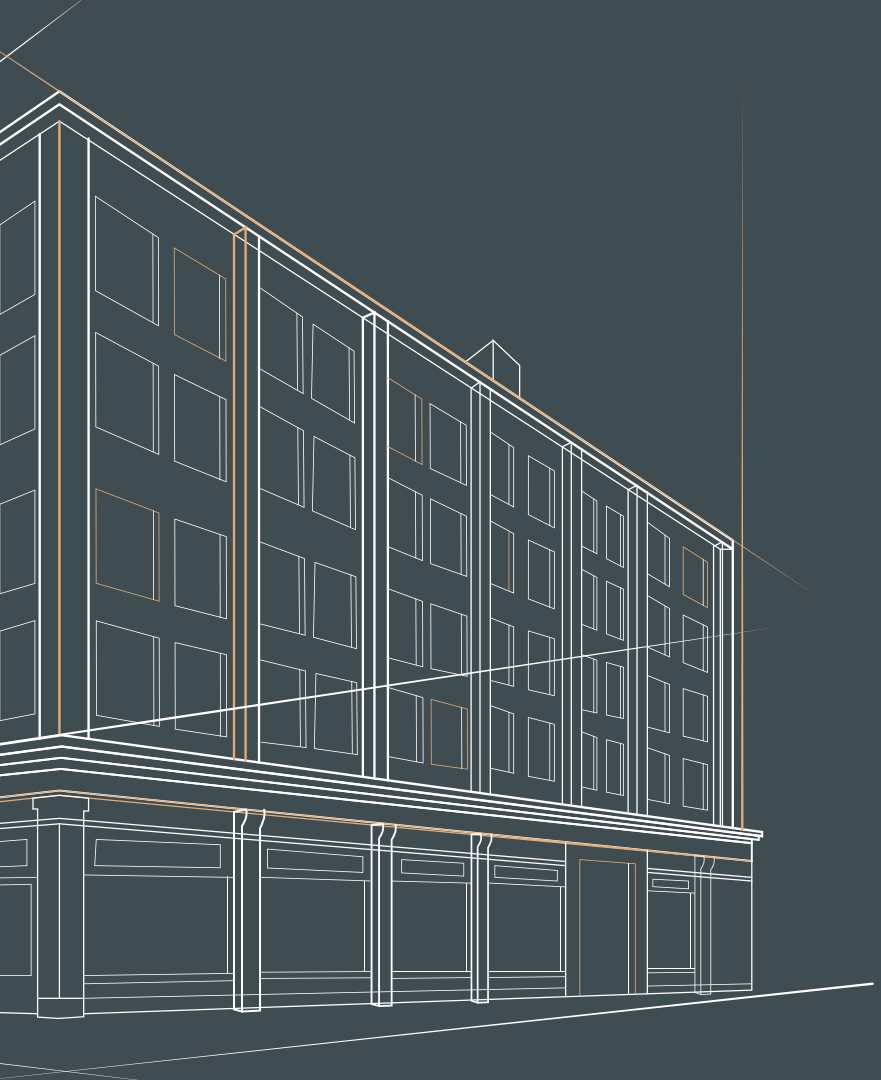
Hardware

04. Bread boards with jumper wires

05. Neo GSM module ESP module

Our Team

06. Bylnks app and website and Arduino IDE



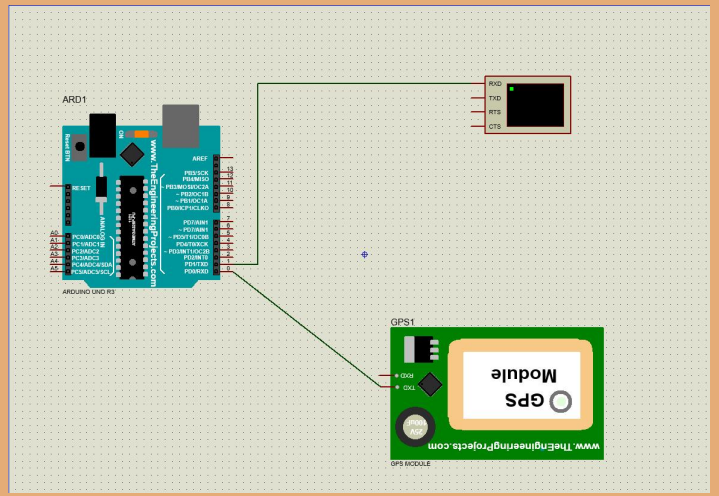
01

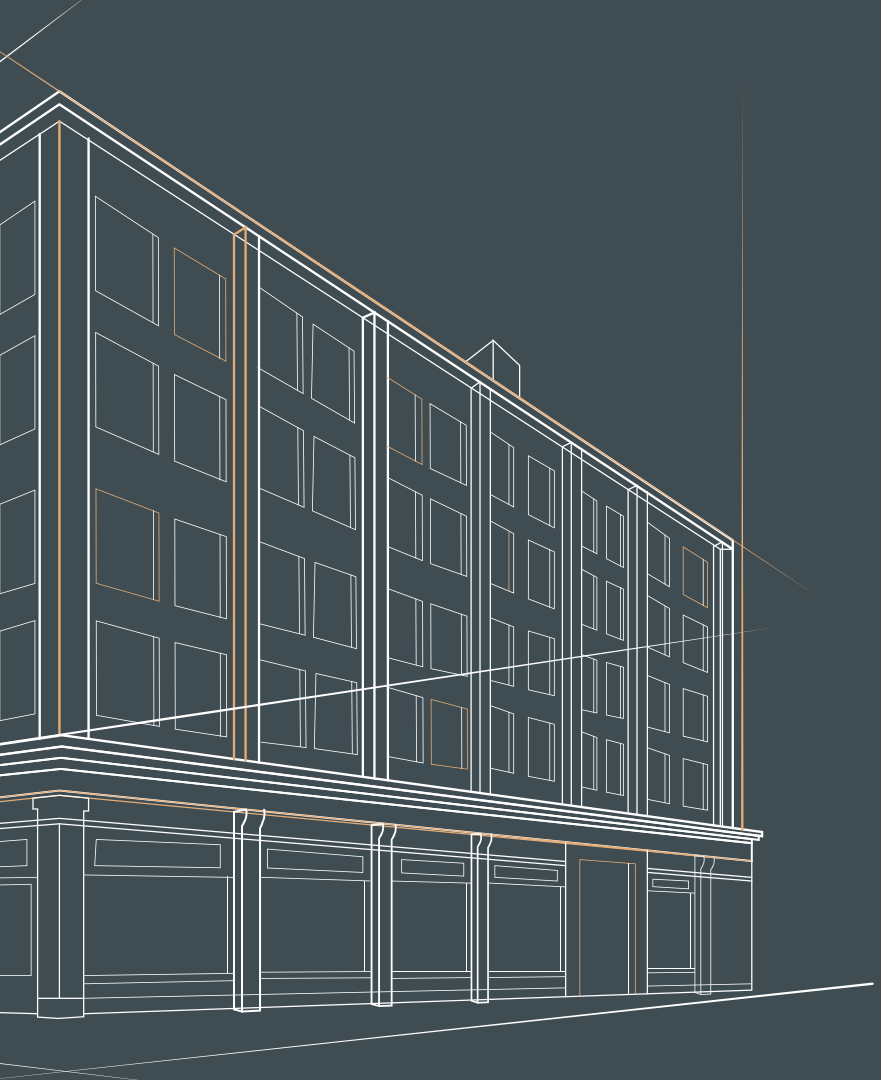
Simulation

About the Simulation

Explanation with Circuit Diagram

Our simulation will use GPS module and Arduino to Present the current latitude and longitude through a Virtual terminal We will use Arduino IDE and Tiny GPS library to code for Arduino and generate a hex file which will be uploaded in the same this will be further improved by adding V GPS module to provide real time location on google maps and add sim module to change it to women tracking system

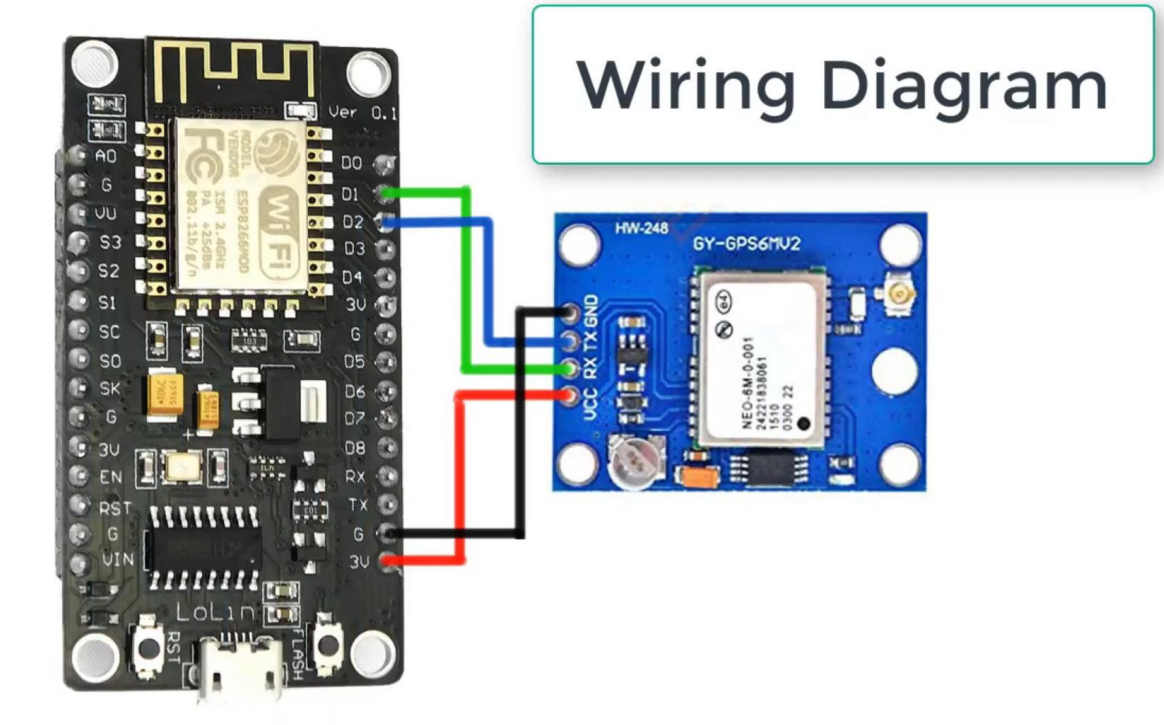




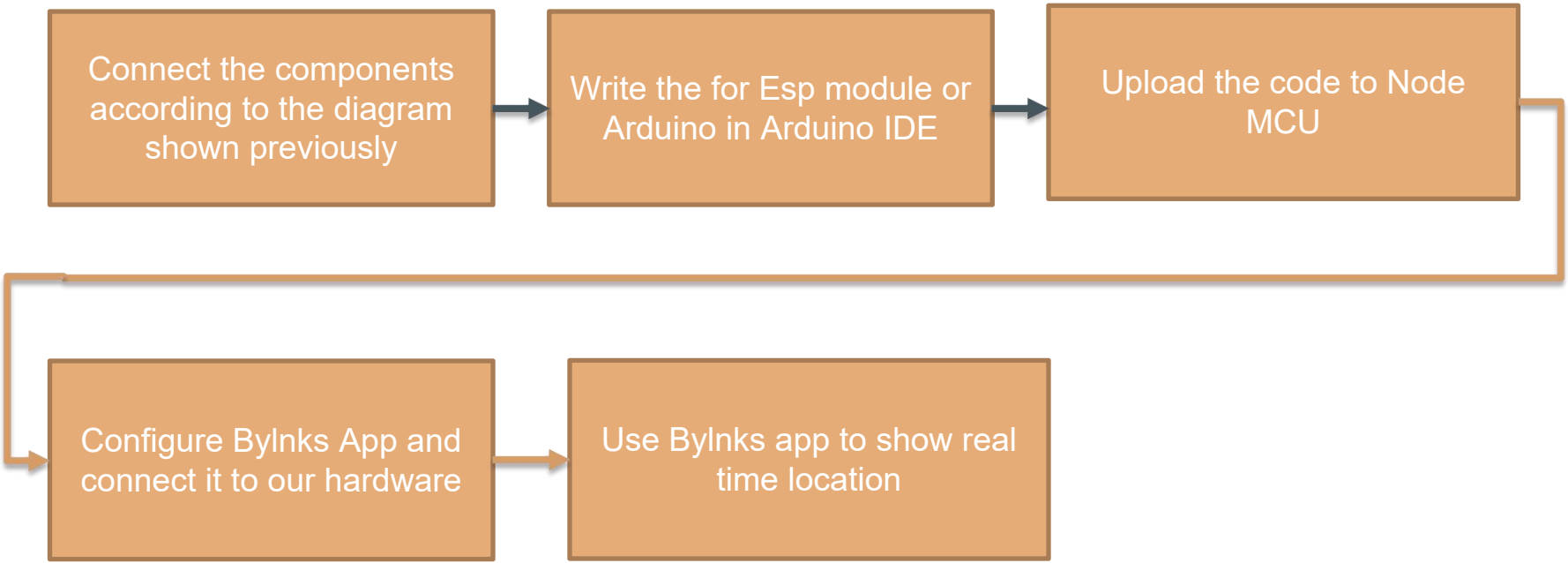
02

Hardware

Circuit Diagram



Block Diagram for hardware



Time line

Review 1

Get to know about the project ,get knowledge about it and work out the plan on how to work on it

Review 2

Make the simulation and start working on the hardware

Review 3

Make a functional Hardware with bylnks app or make a simulation with real time location

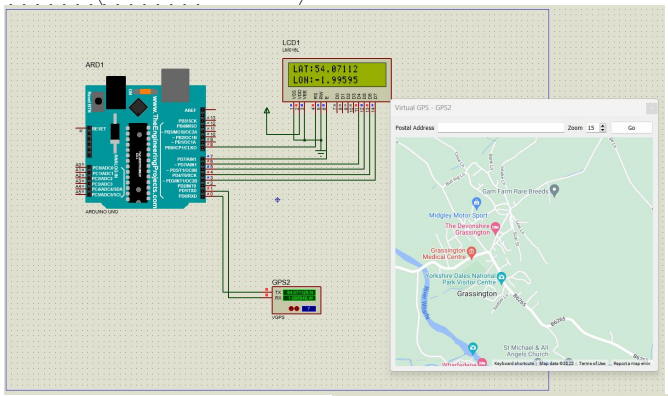
Review 2

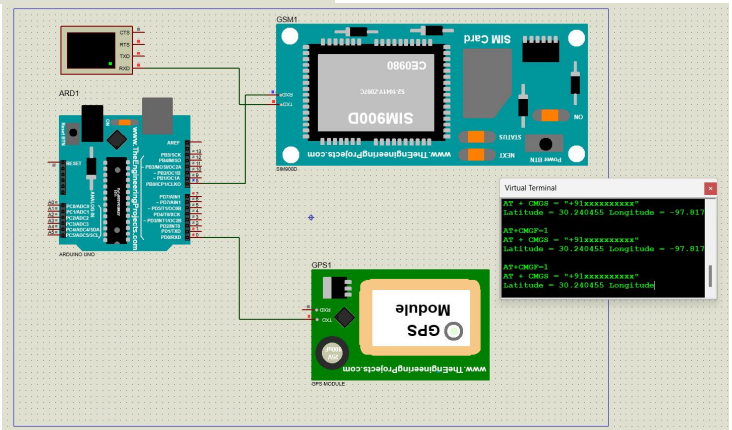
GPS Tracking

GPS GSM simulation and GPS Tracking Hardware

Simulation

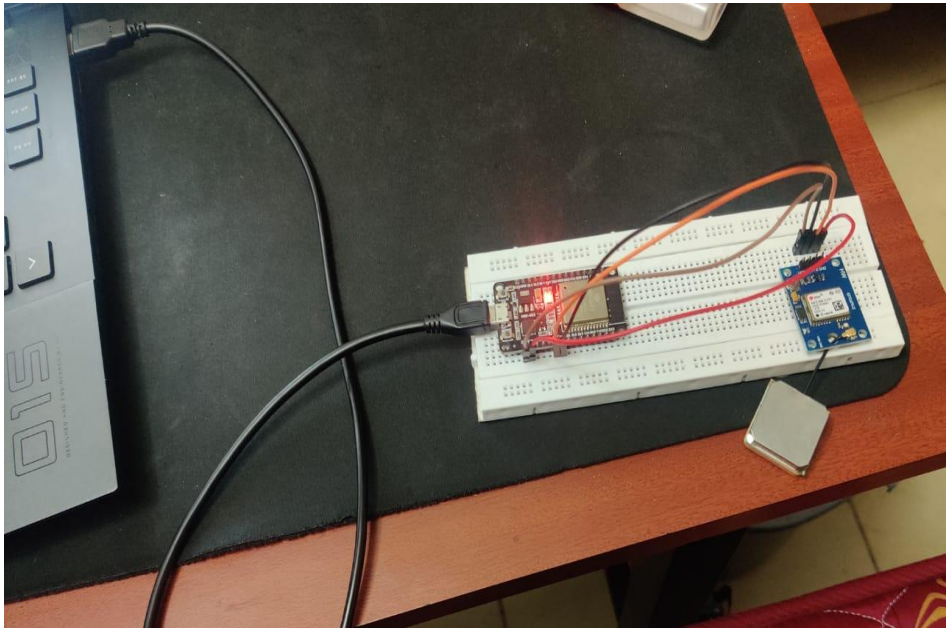
This slide represent the Simulation work done so far





- Gps and GSM module are used to Show data on the Virtual teminal
- LCD module is used to show the DATA Taken from the VGPS module and Display on Google maps
- GSM module is used to detect the mobile number and provide apropriate GPS messages

Hardware



The Hardware Component
worked on so far

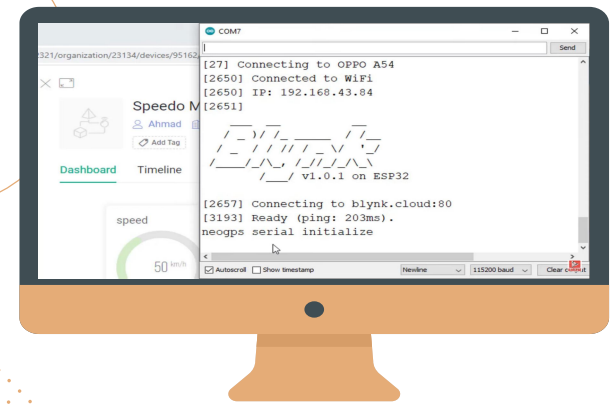
Coding

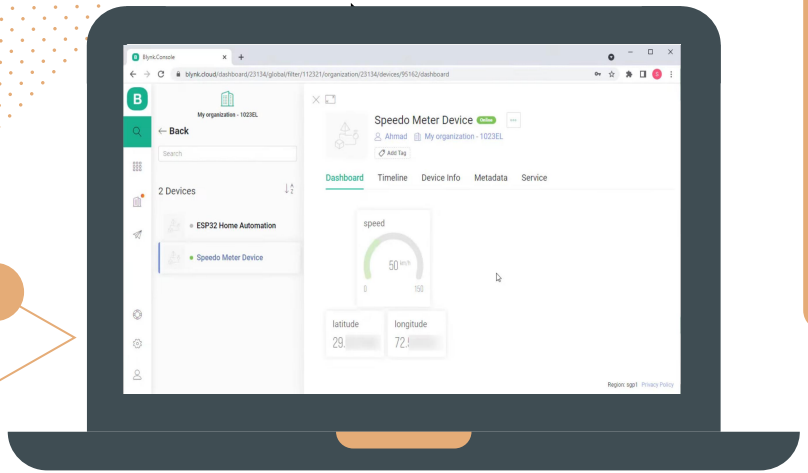
```
void sendGps()
{
  //----------------------------------------------------------
  while(neogps.available())
  {
    if (gps.encode(neogps.read()))
    {
      break;
    }
  }
  //----------------------------------------------------------
  if (!gps.location.isValid())
  {
    Serial.println("Failed to read from GPS Module!");
    return;
  }
  //----------------------------------------------------------
  //get latitude and longitude
  float latitude = gps.location.lat();
  float longitude = gps.location.lng();
  float speed = gps.speed.kmph();
  //----------------------------------------------------------
  //comment out this block of code to save space
  //used for debugging in serial monitor
  Serial.print("Latitude:  ");
  Serial.println(latitude, 6);
  Serial.print("Longitude: ");
  Serial.println(longitude, 6);
  Serial.print("Speed: ");
  Serial.println(speed, 6);
```

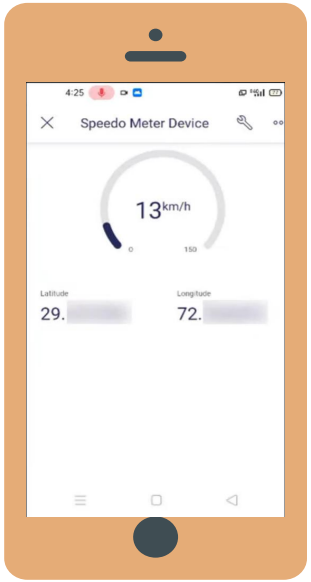
```
void setup()
{
  //----------------------------------------------------------
  //Debug console (Serial Monitor)
  Serial.begin(115200);
  //----------------------------------------------------------
  Blynk.begin(auth, ssid, pass);
  //You can also specify server:
  //Blynk.begin(auth, ssid, pass, "blynk.cloud", 80);
  //Blynk.begin(auth, ssid, pass, IPAddress(192,168,1,100), 8080);
  //----------------------------------------------------------
  //Set GPS module baud rate
  neogps.begin(9600, SERIAL_8N1, RXD2, TXD2);
  Serial.println("neogps serial initialize");
  delay(10);
  //----------------------------------------------------------
  // Setup a function to be called every second
  timer.setInterval(INTERVAL, sendGps);
  //----------------------------------------------------------
}


/*********************************************************************************
 *  loop() function
 *********************************************************************************/
void loop()
{
  Blynk.run();
  timer.run();
}
```

Images of Coding done for hardware on Arduino

Blynks app







All Platforms

You can replace the images on these mockups with your own work. Just delete them, add yours and place them on top of the screen of each device

“Thanks for listening .”