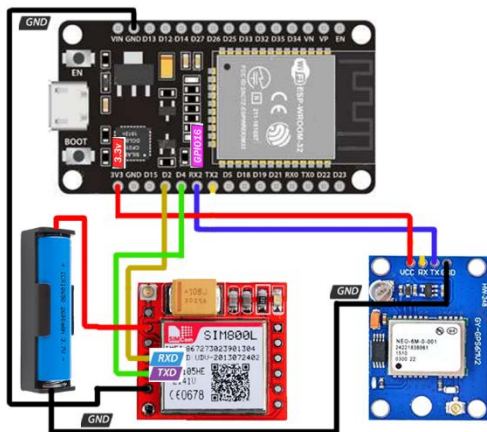


Gps Tracker

Arduino-based vehicle tracking system using global positioning system (GPS) and global system using GSM modules. GSM modem with a SIM card used here uses for the communication technique. The system can be installed or hidden in your vehicle. After installing this circuit, you can easily track your vehicle. It is also possible to create an application in which you can see in real-time the location of the vehicle.

Schematics:



Pre-requisites:

- Android things compatible board
- Android things development environment
- Firebase real-time cloud database account setup
- The following Components:

1.Arduino Uno : <https://docs.arduino.cc/hardware/uno-rev3>

2.Gsm 800l module :

https://www.elecrow.com/wiki/images/2/20/SIM800_Series_AT_Command_Manual_V1.09.pdf

3.Gps NEO module : https://content.u-blox.com/sites/default/files/products/documents/NEO-6_DataSheet_%28GPS.G6-HW-09005%29.pdf

4.Batteries or a step-down module or any module that can provide 3.5-4.2V and a peak of 2A to the sim800L

4.Resistors

5.Wires

Software Applications Used:

Arduino IDE.

Setup and Build

To setup, follow these steps below.

1.Upload the code in the Arduino uno board.

2.Setup a real time database in firebase. Get the connection id and password and fulfill the variables in Arduino.

3.Start up the device.

4.Now data should be uploaded into the firebase.

For the gps tracker we need:

-A gsm cartela with internet.Preferably a provider with 2G connection like Vodafone or orange.

-A Firebase realtime database in which will upload coordonates latitudine and longitude.

The gps module will lock up to 3 satellites and will return the position to Arduino.From which the cords will be send via the GSM module with a https connection into firebase