

## **GSM AND GPS VEHICLE TRACKING WITH GOOGLE MAPS ASSISTANCE**

### **AIM:**

Design and development of GSM and GPS vehicle tracking with Google maps assistance.

### **PURPOSE:**

Now a day's transportation is very primary necessity of all countries. Daily there are millions of vehicles travelling across the globe. Tracking of vehicles on google maps is very important. Vehicle tracking application helps of cab services, transport departments, public transport, and goods transports...etc. Here we proposed GSM and GPS based vehicle tracking with Google maps assistance.

### **DESCRIPTION:**

This project includes GSM (Sim800C) module, which is connected to Arduino through UART. GPS module connected to Arduino through UART interface. Two pin button connected to Arduino digital pin.

### **WORKING:**

Arduino continuously GPS data from GPS module. Arduino sends tracking details to register mobile number in three ways. In first way – Arduino sends GPS location data in constant time interval like 1 minute. In second way – Arduino sends GPS location data when user sends notification SMS to Arduino. In third way – Arduino sends GPS location data when driver press button. In all three ways SMS will be send to mobile number and SMS contains Google maps assistance. Every time latitude and longitude information displayed on LCD.

## TECHNICAL SPECIFICATIONS

### HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
GSM	:	SIM800C
GPS	:	NEO-6M
Button	:	2 pin leaded
Power Source	:	12v 2 amp Adaptor

### SOFTWARE:

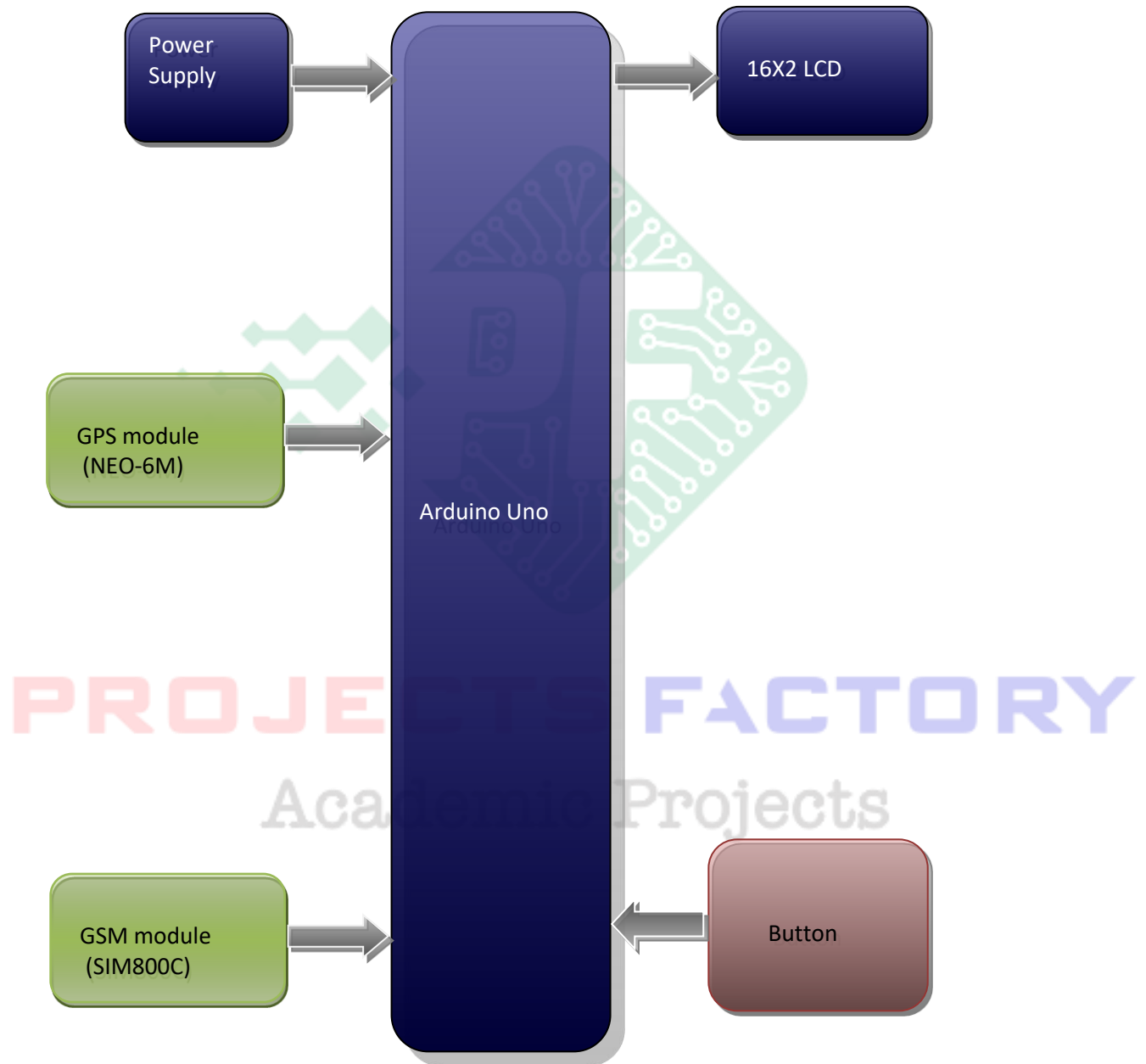
Arduino IDE

Proteus based circuit diagram

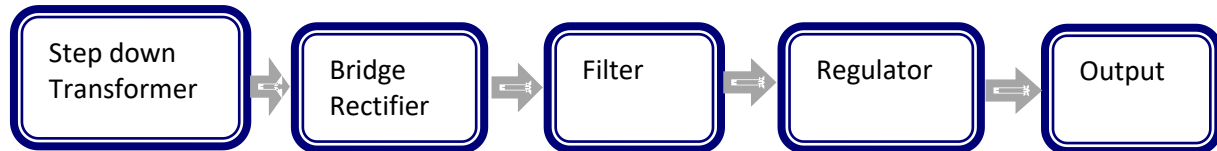
### APPLICATIONS:

- Transport Application
- Tracking Application
- Bus Tracking
- Bike Tracking

**BLOCK DIAGRAM:**



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERED:

- We have covered GSM (SIM800C) module interfacing
- GPS (NEO-6M) module interfacing

**PROJECTS FACTORY**  
Academic Projects