

GSM BASED VEHICLE OVER SPEED INDICATION

AIM:

Design and development of GSM based vehicle over speed indication using Arduino.

PURPOSE:

Over speed is main cause of most of the accidents. Monitoring of vehicle over speed is very important in national highways. Based on monitoring in particular roads we can place sign boards to alert vehicles. Here we propose solution like GSM based vehicle over speed indication.

DESCRIPTION:

This project includes GSM (SIM800C) module, which is connected to Arduino through UART interface. Two IR sensors connected to Arduino through digital IO pins. These two sensors monitor speed of vehicle.

WORKING:

Here Arduino calculates vehicle speed based on time. Time is inverse proportional to speed when we calculate speed. When vehicle crossed first IR sensor then count will start until vehicle crosses second IR sensor. If count is less speed is high, if count is more speed is less. Here count is nothing but time. Buzzer will come when high speeds occur. This information always updated on LCD. Speed information sent to mobile number as SMS.

TECHNICAL SPECIFICATIONS:

HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
GSM	:	SIM800C
IR sensor	:	Digital Type
Power Source	:	12v 2 amp Adaptor

SOFTWARE:

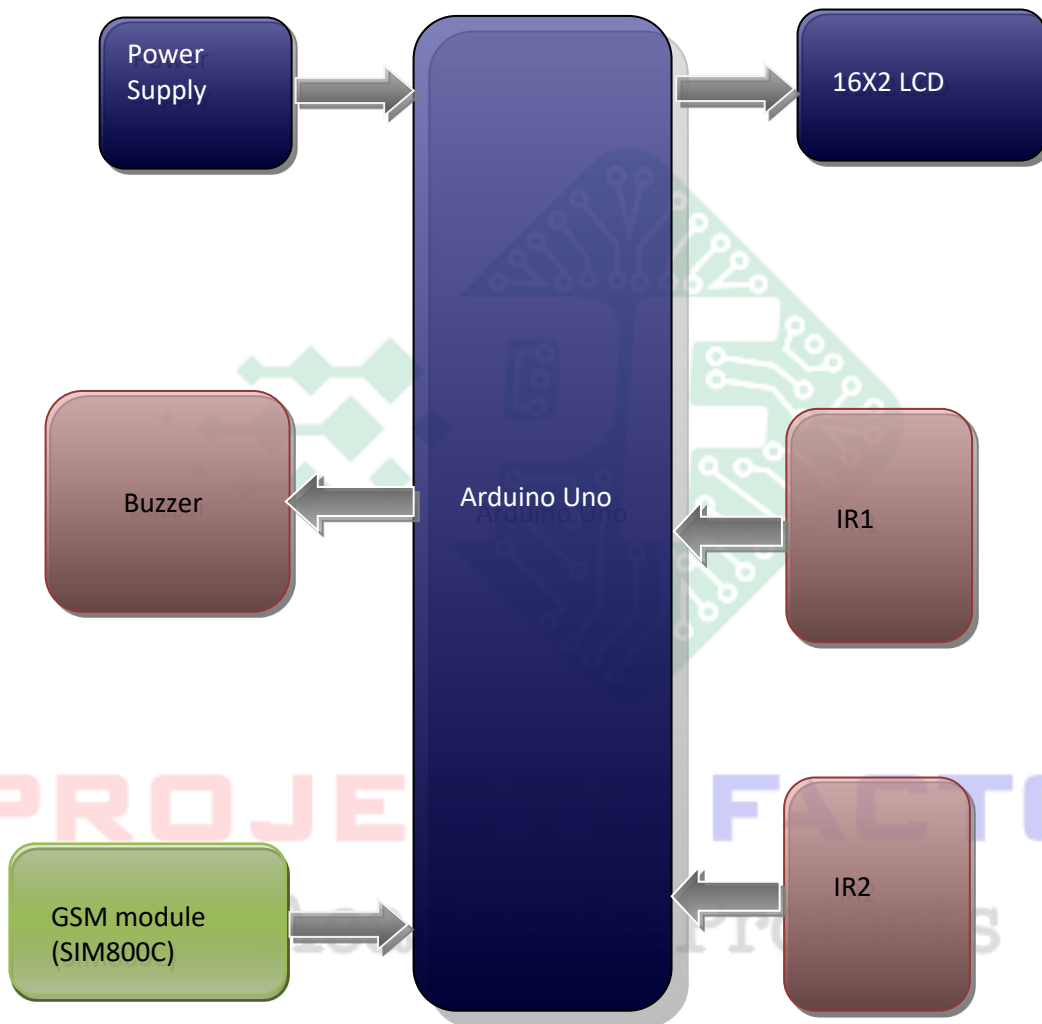
Arduino IDE
Proteus based circuit diagram

APPLICATIONS:

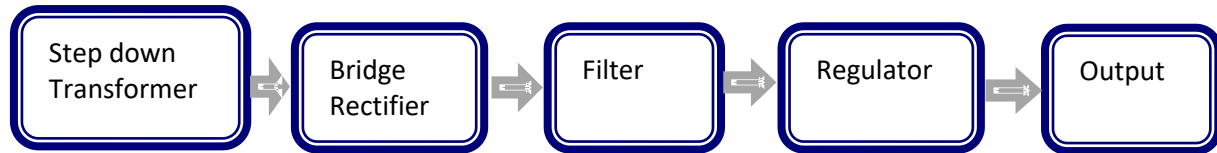
- Highway Patrolling
- Road transport

PROJECTS FACTORY
Academic Projects

BLOCK DIAGRAM:



POWER SUPPLY BLOCKDIAGRAM:



INTERFACES COVERED:

- We have covered GSM (SIM800C) module interfacing
- Two IR sensors

PROJECTS FACTORY
Academic Projects