

## IOT BASED VEHICLE OVER SPEED INDICATION

### **AIM:**

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

### **PURPOSE:**

More number of accidents happens because of over speed. 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. “IOT based vehicle over speed indication” provides this kind of feature.

### **DESCRIPTION:**

This project includes WIFI (Esp8266/IOT 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. Buzzer will come when high speeds occur. This information always updated on LCD. At the same time information transmitted to IOT server through WIFI (Esp8266/IOT module). User can see data in IOT server from anywhere.

## TECHNICAL SPECIFICATIONS:

### HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
LCD	:	16X2 LCD
WIFI	:	Esp8266 (IOT module)
IR sensor	:	Digital Type
Power Source	:	12v 2 amp Adaptor

### SOFTWARE:

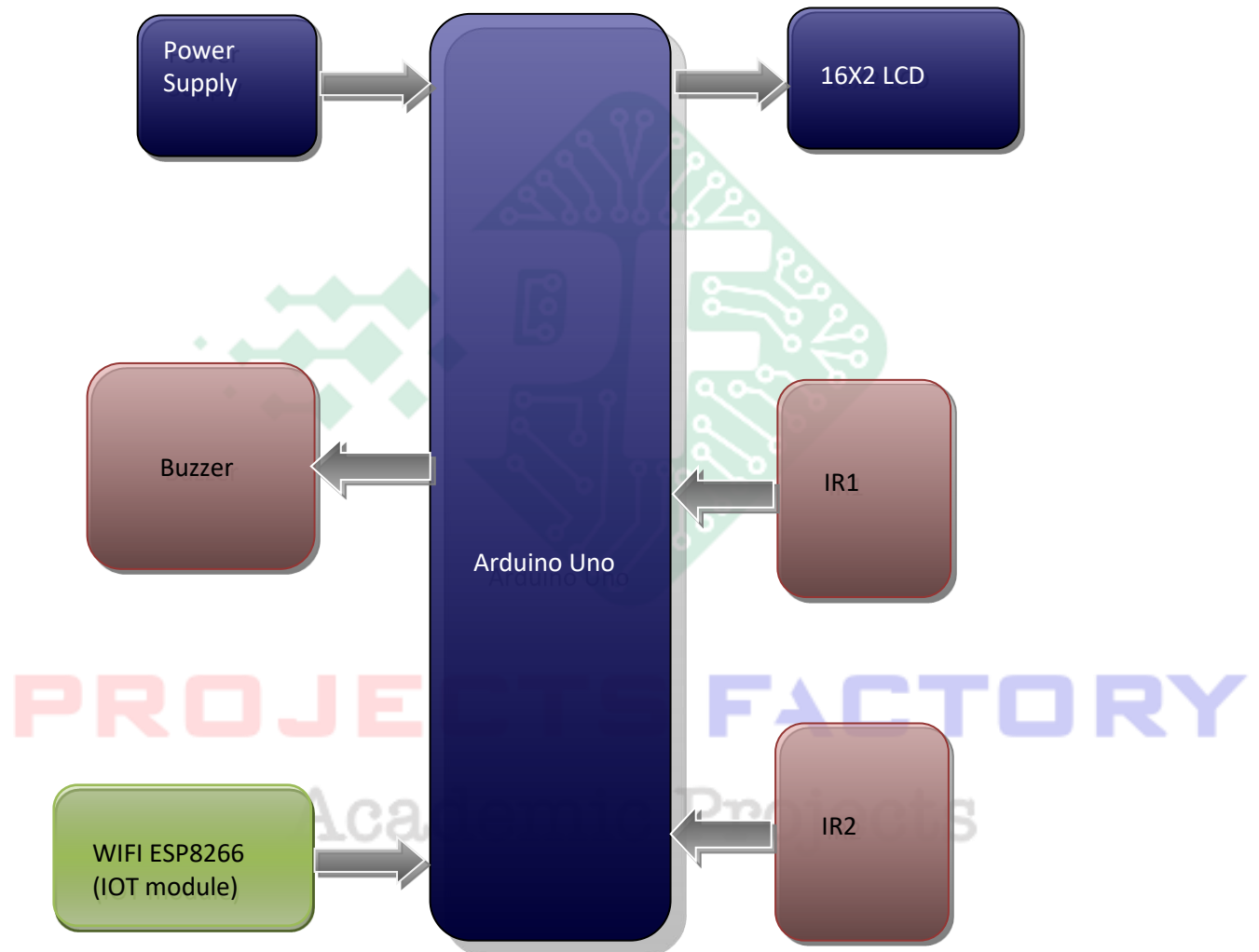
Arduino IDE  
Proteus based circuit diagram

### APPLICATIONS:

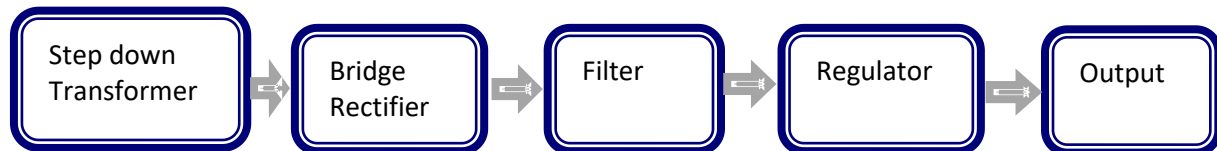
- Road transport
- High way maintenance

**PROJECTS FACTORY**  
Academic Projects

## BLOCK DIAGRAM:



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERED:

- We have covered WIFI (ESP8266/IOT) module interfacing
- Two IR sensors

**PROJECTS FACTORY**  
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