

## **BLUETOOTH BASED TRAFFIC AMBULANCE SYSTEM**

### **AIM:**

Design and development of Bluetooth based traffic ambulance system.

### **PURPOSE:**

Traffic signals are very important to manage traffic in roads. Normal traffic signals operated based on time delay. It allows only one road and doesn't allow remaining roads. Sometimes ambulances may stuck in traffic. But it is very necessity to allow ambulance without having any time delay. Here we propose solution like Bluetooth based traffic ambulance system.

### **DESCRIPTION:**

This project includes Bluetooth (HC-05) module, which is connected to Arduino through UART interface. Red, Green and Orange/Yellow led connected to Arduino digital pins.

### **WORKING:**

Here traffic leds operated based on time delay. Means Arduino allows one road at a time and remaining roads not allowed. In one road green led and remaining roads red led. If ambulance come in one road, if it's want green signal then we can give request from mobile app. From mobile app we can give signal request for four roads. All this information

## TECHNICAL SPECIFICATIONS:

### HARDWARE:

Microcontroller	:	Arduino Uno
Crystal	:	16 MHz
Bluetooth	:	HC-05
LEDs	:	5mm red, green and orange/yellow leds
Power Source	:	12v 2 amp Adaptor

### SOFTWARE:

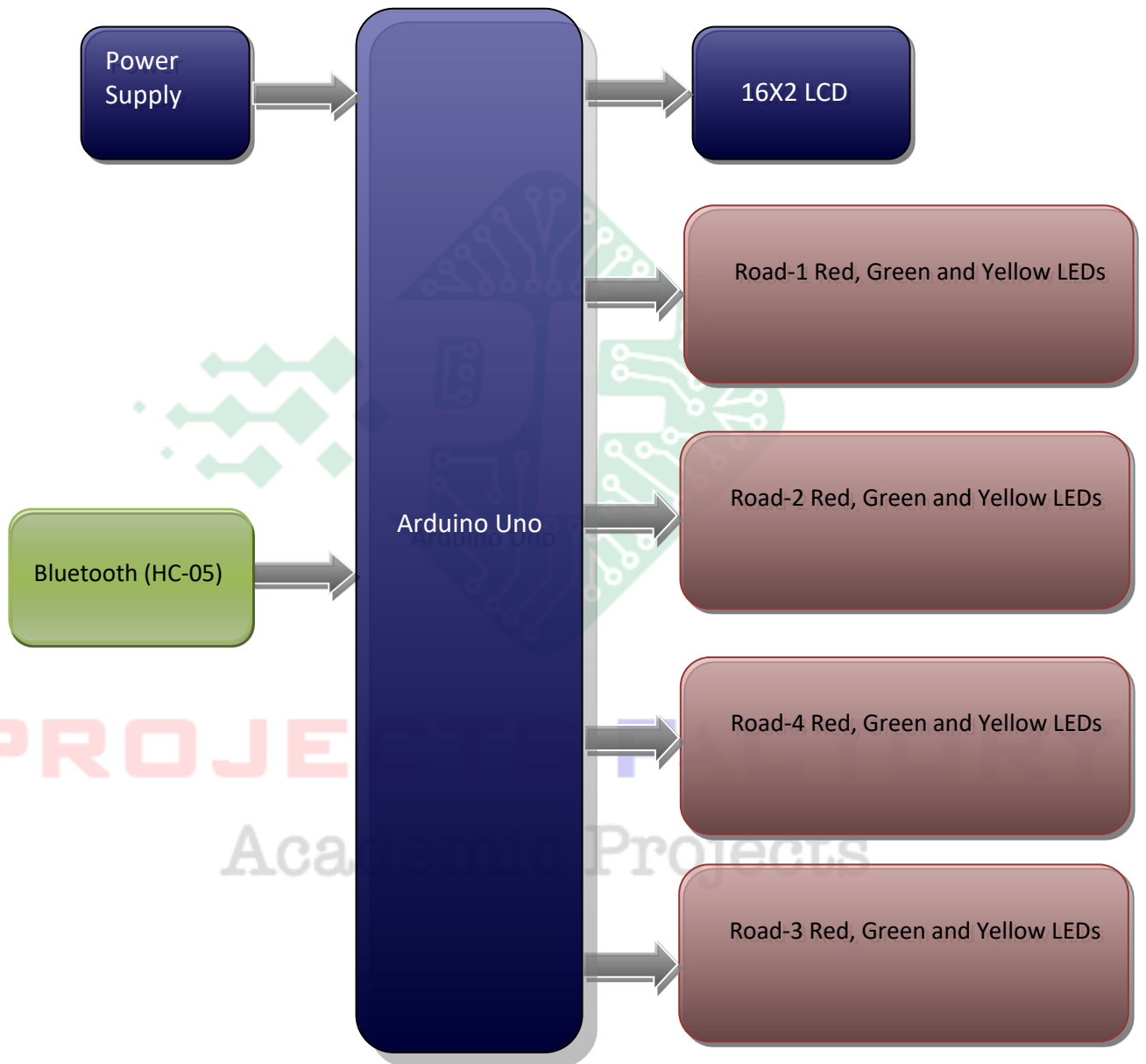
Arduino IDE  
Proteus based circuit diagram

### APPLICATIONS:

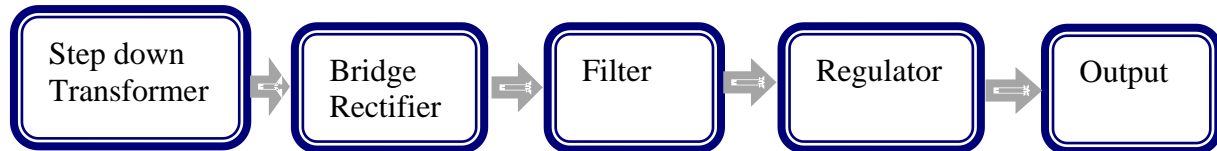
- Traffic Control system
- Smart Traffic control

**PROJECTS FACTORY**  
Academic Projects

**BLOCK DIAGRAM:**



## POWER SUPPLY BLOCKDIAGRAM:



## INTERFACES COVERD:

- We have covered Bluetooth (HC-05) module interfacing
- 5mm red led, green led and yellow/orange led

**PROJECTS FACTORY**  
Academic Projects