List of components

* Esp 8266 nodeMCU microcontroller (WIFI)
* Arduino Nano Microcontroller
* 1602 LCD display modules
* I2C LCD adapters
* IR Proximity sensor
* Junction Box (casing)
* LEDs (Red, Green and Yellow)
* 330 ohms Resistors
* Vero board (dotted)
* Bread Board
* L2596HVS DC buck converter (Voltage Regulator)
* DC jack
* 12 DC adapter
* Jumper Wires

BINARY OUTPUT

TRAFFIC CONTROL SYSTEM SERVER

ESP 8266 MICROCONTROLLER

TRAFFIC CONTROL SYSTEM MONITOR (CLIENT)

ARDUINO NANO MICROCONTROLLER

I2C LCD ADAPTER

1602 LCD MODULE

THREE ROADS

THREE ROADS

LED

-Red

-Yellow

-Green

THREE ROADS

3 IR PROXIMITY SENSOR

HTTP

HTTP (WIFI)

SERIAL PROTOCOL (TR-RX)

I2C (SDA-SCL)

PARALLEL-8bit DATA LINE

BINARY INPUT

Development Tools:

* Arduino IDE: ESP 8266 and Arduino Nano firmware in c++
* Django: Backend (Server system) in python
* Web3: HTML, CSS, JAVASCRIPT for Traffic monitor (client)