

Smart Traffic Management System



Gaurav Adavkar



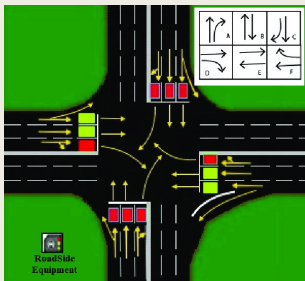
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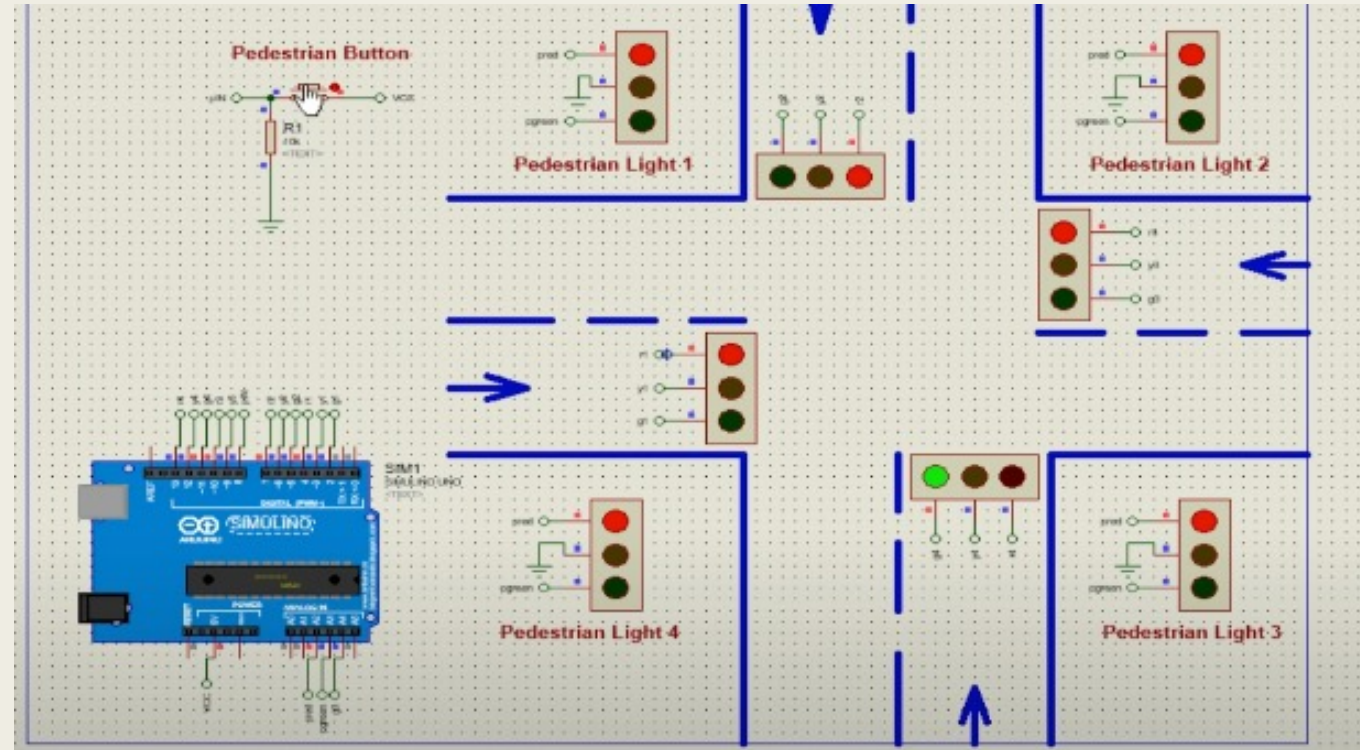


INTRODUCTION:

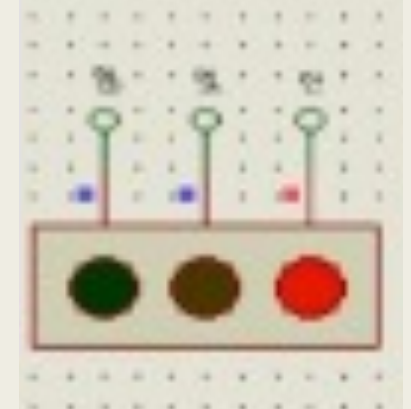
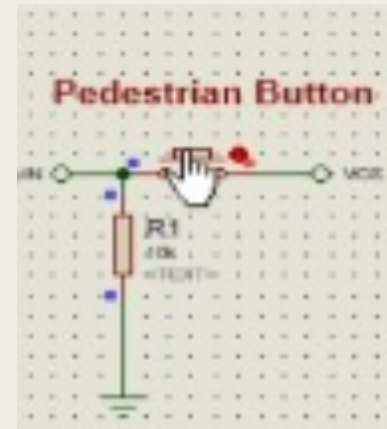
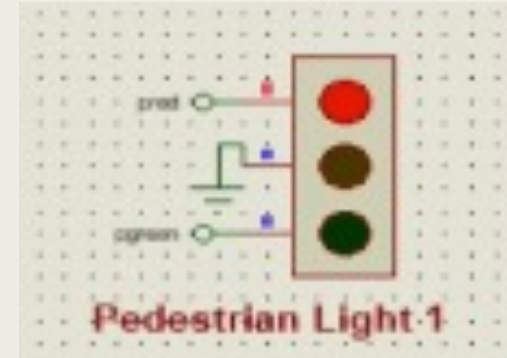
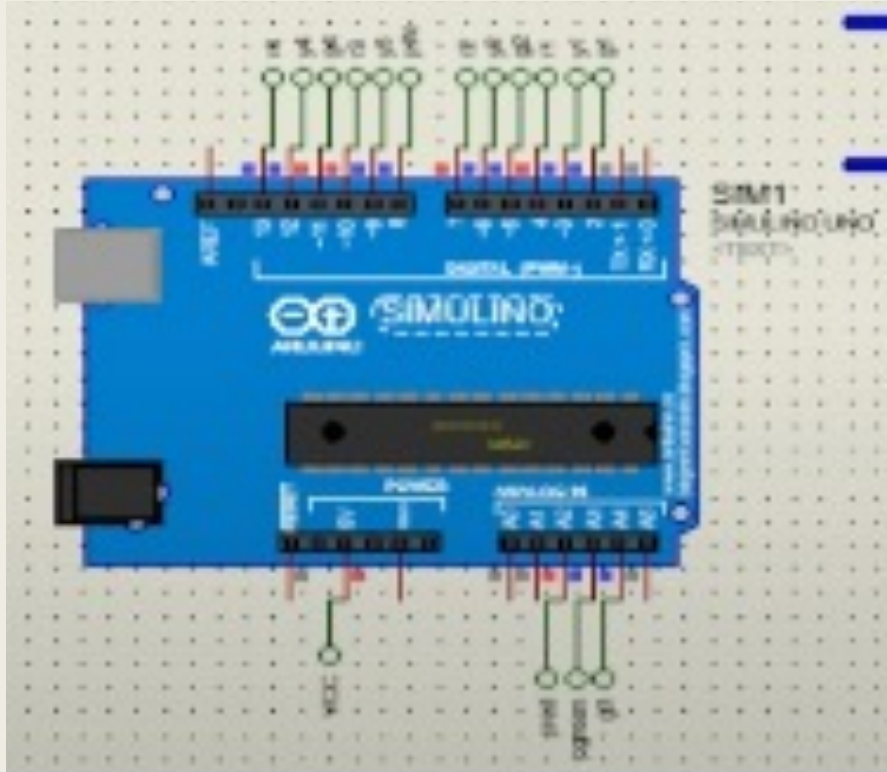
- Traffic Management efficiently done through prioritising density with a four way signal and an additional inclusion of pedestrian lights
- The entire project was simulated using Proteus Design Suite.
- The aim of the project is to simulate the running of a 4 way traffic light system, which ensures ease of traffic flow with an inclusion of pedestrian lights.

Components used in simulation:

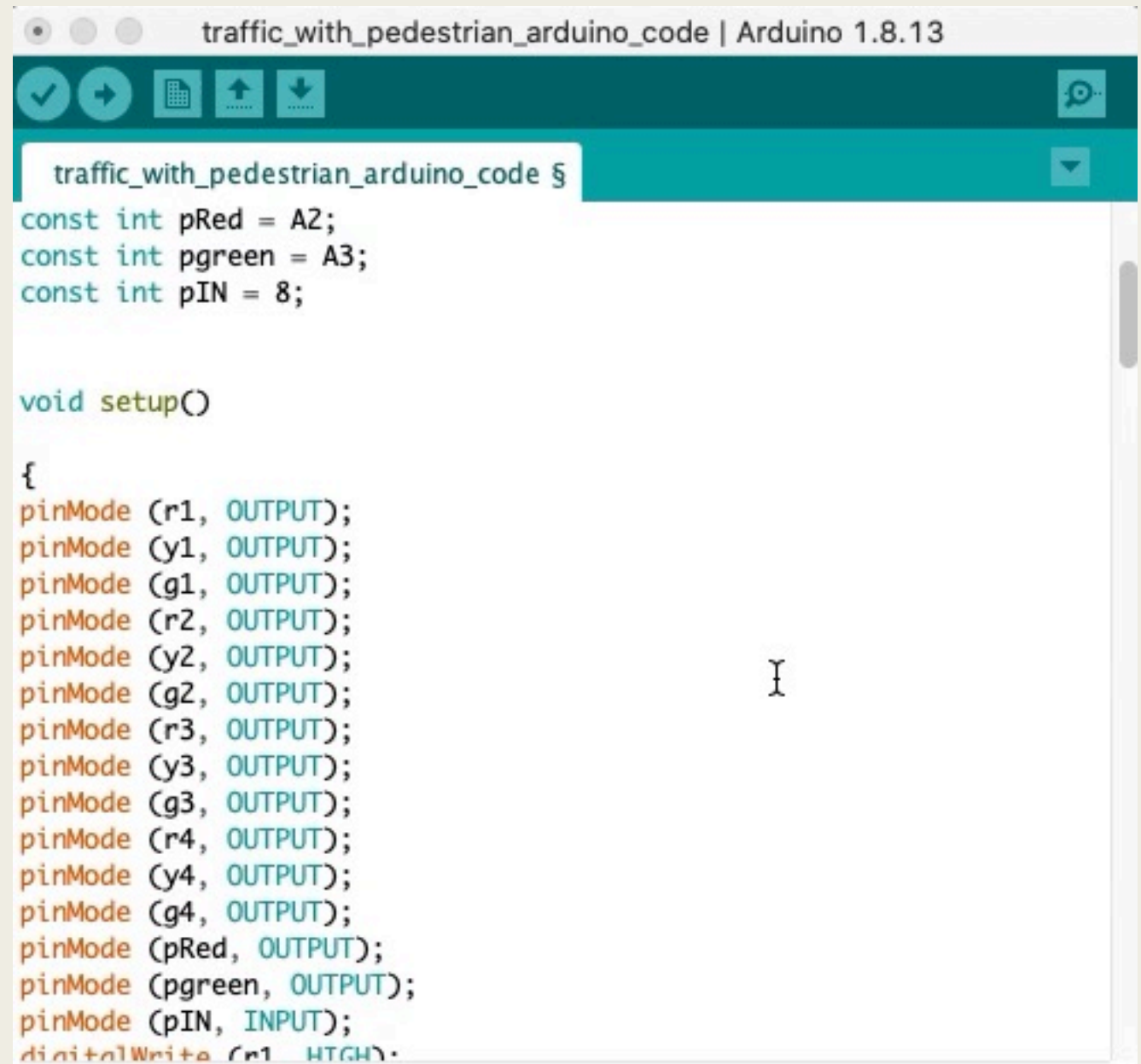
COMPONENT
PIN
PORT
MARKER
ACTUATOR
INDICATOR
VPROBE
IProbe
TAPE
GENERATOR
TERMINAL
SUBCIRCUIT
2D GRAPHIC
WIRE DOT
WIRE
BUS WIRE
BORDER
TEMPLATE



Pin alignment for components:



Arduino Code:

A screenshot of the Arduino IDE interface. The title bar at the top reads "traffic_with_pedestrian_arduino_code | Arduino 1.8.13". Below the title bar is a toolbar with icons for checking, running, saving, and uploading. A tab labeled "traffic_with_pedestrian_arduino_code" is active. The code editor contains the following C++ code:

```
const int pRed = A2;
const int pgreen = A3;
const int pIN = 8;

void setup()

{
  pinMode (r1, OUTPUT);
  pinMode (y1, OUTPUT);
  pinMode (g1, OUTPUT);
  pinMode (r2, OUTPUT);
  pinMode (y2, OUTPUT);
  pinMode (g2, OUTPUT);
  pinMode (r3, OUTPUT);
  pinMode (y3, OUTPUT);
  pinMode (g3, OUTPUT);
  pinMode (r4, OUTPUT);
  pinMode (y4, OUTPUT);
  pinMode (g4, OUTPUT);
  pinMode (pRed, OUTPUT);
  pinMode (pgreen, OUTPUT);
  pinMode (pIN, INPUT);
  digitalWrite (r1, HIGH);
```

The code is color-coded: constants are in blue, function names in green, and variable names in orange. A cursor is visible on the line containing "pinMode (g4, OUTPUT);".

Video Demonstration:

