

MINI PROJECT – I

(2020-2021)

IOT Based Intelligence Traffic Management System



Institute of Engineering & Technology

Team Members

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SYNOPSIS

The project is divided into two parts:

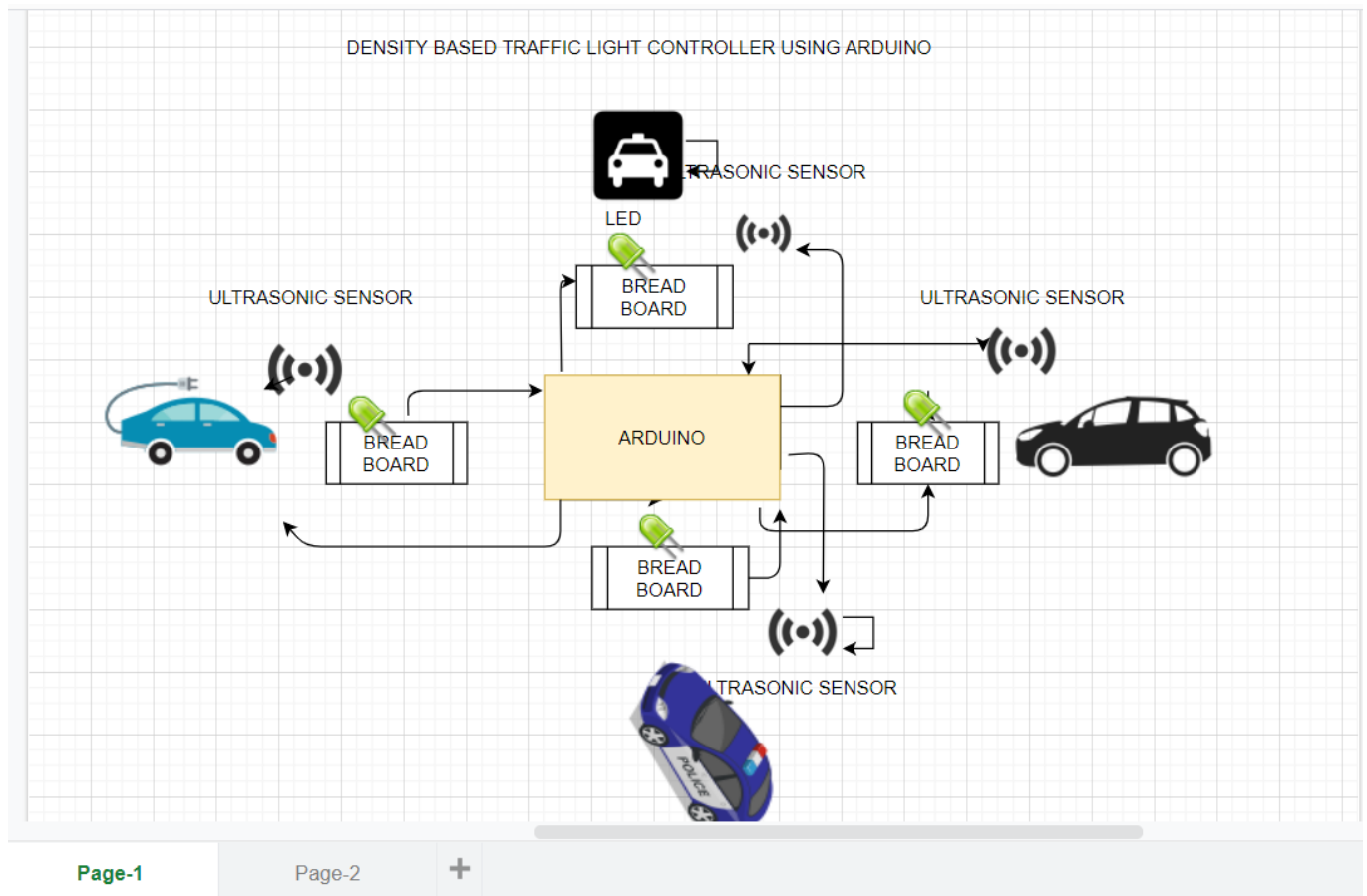
1.)Density based traffic light controller using arduino

About the project:

The main purpose of this project is, if there will be no traffic on the other signal, one shouldn't Wait for that signal. The system will skip that signal and move on the next one. The arduino is

the main part of this project.

LAYOUT OF A PROJECT:



Applications:

- 1.) Control traffic in metropolitan cities
- 2.) Controlling of signal lights
- 3.) Emergency
- 4.) Edge detection

Advantages:

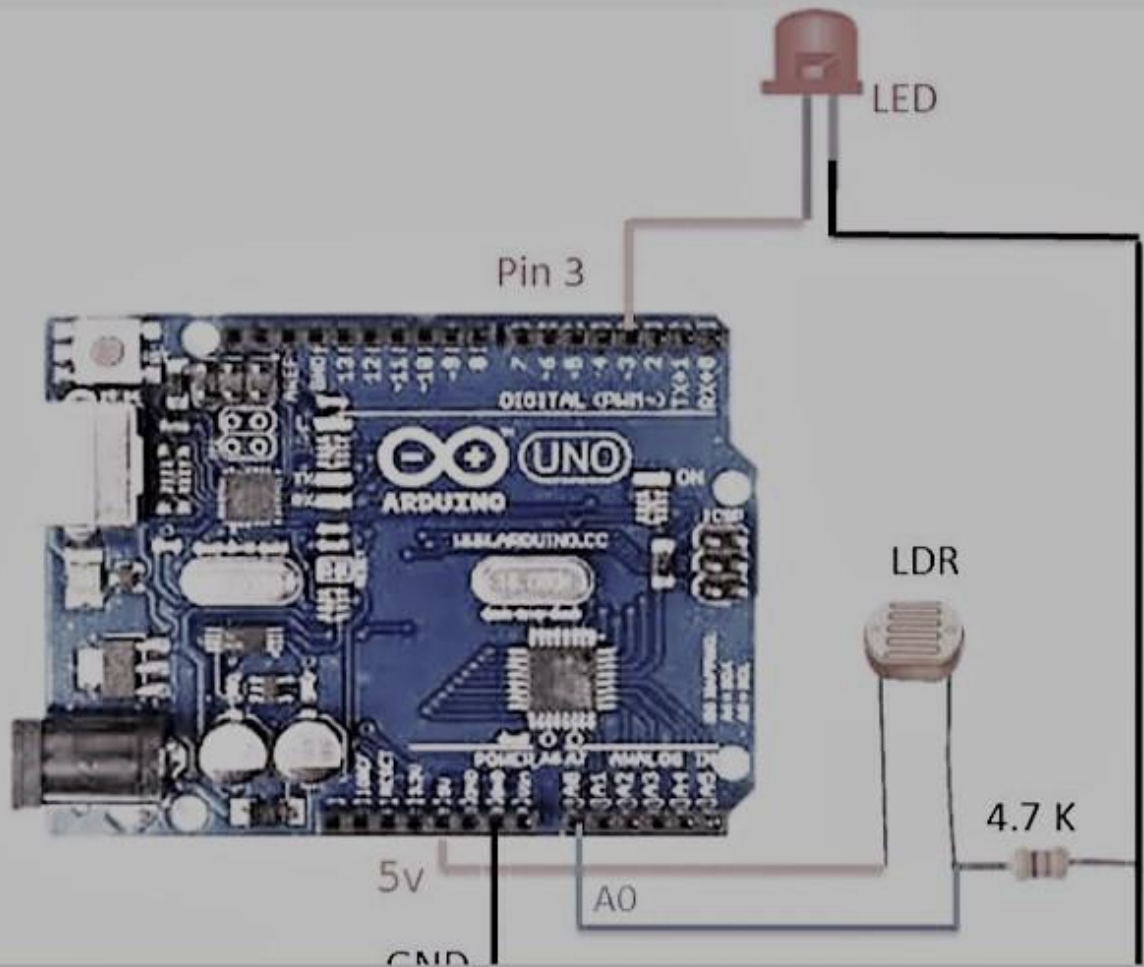
- 1.) Avoids wastage of time due to the traffic
- 2.) Fully automatic
- 3.) Low power consumption
- 4.) It provides the easy access in the traffic light

2.) Automatic street light controller using arduino

About the project:

Automatic street light control is used to control the street lights(Turn on and off based on the light). Here we make the use of LDR (Light Dependent Register) and LED(Light Emitting diode) and Arduino.

Layout of a project:



Automatic Street Light Controller

Application:

- 1.) Street lights use photo resistors to detect whether it is day or night and turn the light on or off accordingly.
- 2.) Photo registers are also used in digital cameras to detect how much light camera sees and adjust the picture quality accordingly.
- 3.) They are also used in some clocks, alarms, and other electronic devices that are semi-dependent on sunlight.
- 4.) Smoke detection

Advantages:

- 1.) No need of any manpower for maintenance.
- 2.) Our system will automatic control the switch ON/OFF.
- 3.) Faster response
- 4.) Easy to set up.

Feature & Future Scope:

In the future advancements of traffic monitoring signals (TMS), an ambulance will be able to Communicate with all base stations to obtain an open lane to reach the hospital on time.

In this proposed methodology, we will provide solution to congestion, traffic clearance for emergency vehicles and tracking of stolen vehicles. And one major plus point of the system is we have designed it in automatic mode and manual mode. In automatic mode depending upon sensors output, the decision can be made. But in manual mode, the driver takes control.