DENSITY BASED TRAFFIC CONTROL SYSTEM

ABSTRACT:

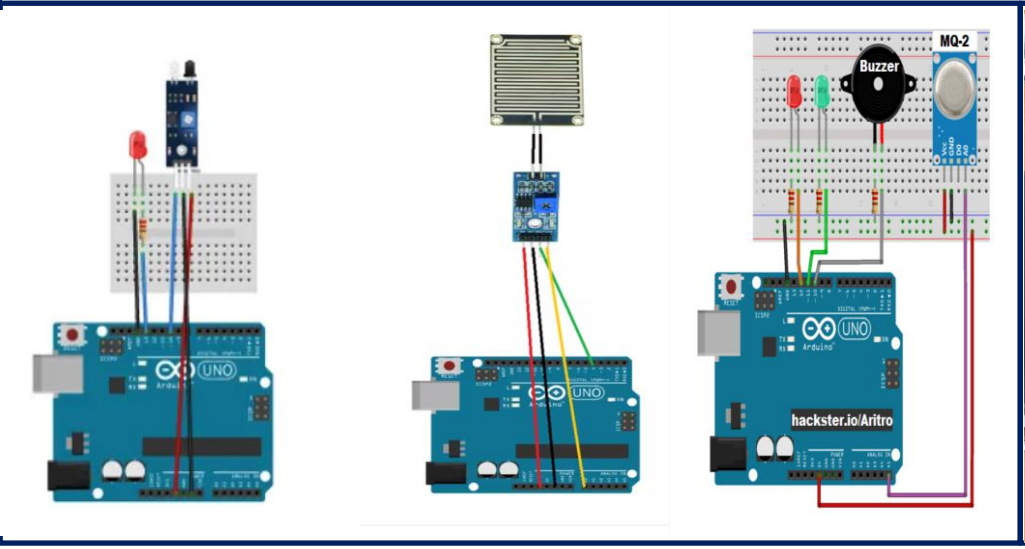
This project is designed to develop a density based traffic signal system where its signal timing changes automatically after sensing the traffic density at the intersection.

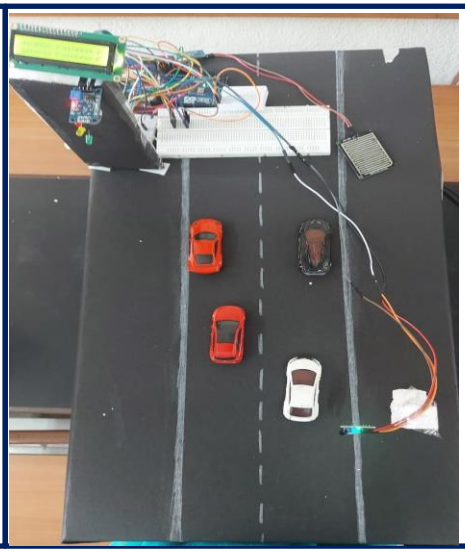
This traffic light uses an Arduino MEGA microcontroller to create an automation function together with an Infrared sensor (IR sensor) to detect the density of the traffic. All vehicles will be counted and interacted with the system thus increase delay period for the green light at each traffic light which may have high density of traffic. This reduces traffic congestion at the intersection.

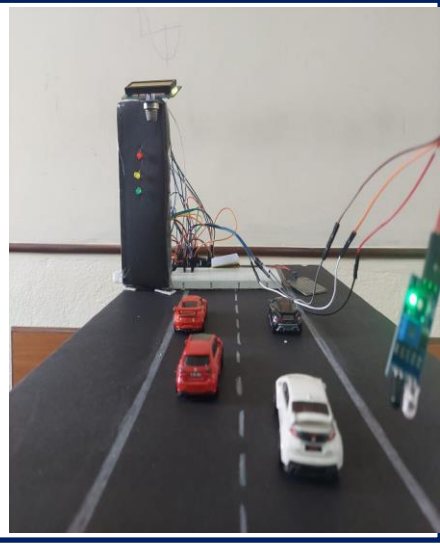
This project also includes other sensors like

Rain sensor: It detects rain and turns the traffic light green for the cyclists. Also gives a warning that there could be heavy traffic.

Smoke sensor: It detects the smoke and helps us to take precautions of any fire accidents on the road.







TEAM MEMBERS:

NEERAJA N	PES2UG20CS528
RITHIKA A	PES2UG20CS539
SUMEDA PUJA	PES2UG20CS562

MPCA TEACHER
PRAJWALA