PES UNIVERSITY, BENGALURU-85

DEPARTMENT OF COMPUTER SCINENCE AND ENGINEERING

SUBJECT TITLE : MICROPROCESSOR AND COMPUTER ARCHITECTURE **CODE :UE17CS256**

PROJECT TITLE : DENSITY BASED TRAFFIC CONTROL SYSTEM

HARDWARE USED : Aurdino , IR sensors , LED’s

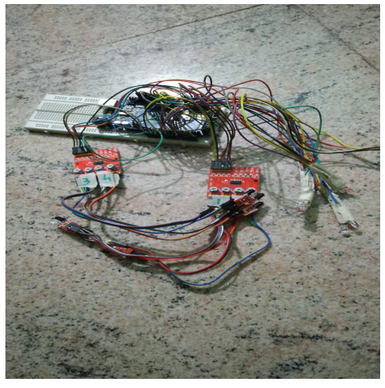
ABSTRACT :

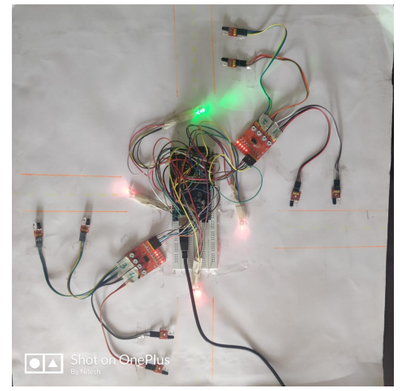
Density Based traffic control system using Aurdino (Microcontroller) is used to control the traffic based on density . The road which has higher density will have green signal and rest of the roads have red signal . If the density of the traffic is not much in any of the roads, Then it acts like a normal traffic system.

DESCRIPTION :

We have used three LED’s red , green and yellow for each road two IR sensors for each road . First of all , if there is no traffic then a normal loop is run which makes one signal green and rest all red and then another signal goes green and the remaining all are red. This loops keeps running until IR sensors kept on the road detect vehicles i.e when the density of traffic increases.Two IR sensors are kept on each road . If both the IR sensors detect vehicles it means traffic density of this road is more , so the signal in that road becomes green and rest all become red . The same goes for all the roads . After this loop continues again as before. By doing so Traffic reduces by considerable amount.

CIRCUIT





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