PROJECT PROPOSAL

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4-WAY JUNCTION TRAFFIC SIGNAL WITH TIMING DISPLAY

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Motivation:

As we have learnt in class how 555 Timer works, we would now like to apply it to practical cases where timing design is very important. Traffic Signals are one such example of the many daily things we see which work on effective timing design. Hence, we felt that it would be good to try to recreate a simple traffic light system at a 4-way junction model along with timing display simulation on Multisim.

Overview:

The system has 2 objectives -

I.   To create a traffic light signal system.

II.   To build a timing display simulating a real time traffic signal.

Components:

Since this is just going to be a simulation, no physical components are required. Therefore, we would be needing 0 Rupees for the project materials.

Anyway, the components we will be using in the simulation are:

- 555 Timer
- Traffic Signal
- LEDs
- 7 segment displays for Timing display

Description:

As discussed in the Overview, we plan to recreate a traffic light system at a 4-way junction. Hence, we will be building traffic signals for each way in the junction.

Each traffic light will also have its own timing display attached to it. The system shall work so that at no point traffic will be disrupted between any 2 lanes.

Hence in this fashion, we plan to simulate a real traffic light system at a 4-way junction.

Team:

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