TRAFFIC SIGNAL CONTROL

TEAM MEMBERS

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Traffic Signal Control with Arduino

Components Required:

I started by studying the operation of sensors, Arduino, resistors, and LEDs for my traffic signal control project. I reviewed the pin diagrams of different sensors and examined how they might interfere with each other.

Programming:

I installed and configured the Arduino IDE, which involved setting up the environment for Arduino programming. I learned the basics of Arduino programming by running simple code examples and experimenting with various programs. I created small application-specific codes with the help of online resources and developed functions that could later be used in the project. I implemented control logic for traffic signals using timers and state machines to manage the different phases of the traffic signal.

Problems Faced:

While working on the Arduino programming, setting up the Arduino IDE initially took some time. During programming, I encountered several errors and issues. I resolved most of these problems by referring to online tutorials and documentation.

Conclusion:

This week was highly educational. I gained valuable insights into Arduino programming and its application in traffic signal control. I learned how to integrate sensors, actuators, and other components with the Arduino board. The experience enhanced my understanding of traffic signal management and how to effectively troubleshoot and debug Arduino-based projects.