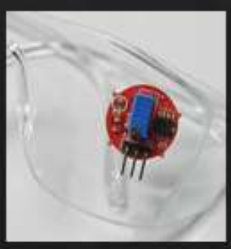
SLEEPY DRIVER DETECTION

INTRODUCTION:

The Drowsiness Detection System uses Arduino and an Infrared Sensor in wearable spectacles to monitor driver fatigue by tracking eye blinks. With a user-friendly design and real-time alerts, it aims to prevent accidents caused by drowsy driving, promoting driver awareness for safer journeys.

ABSTRACT:

The Drowsiness Detection System, utilizing Arduino and an Infrared Sensor in wearable spectacles, monitors fatigue by tracking eye blinks, providing real-time alerts for safer journeys



REQUIREMENTS:

1.Arduino Board
2.Infrared (IR) Sensor
3.Buzzer Module
4.DC Motor
5.Transistor
6.Resistor
7.Jumper Wires
8.Breadboard
9.Wearable Spectacles
10.12V DC Power Supply

FEATURES:

1.Blink Detection
2.Immediate Alerts
3.Motor Deactivation
4.Simple Hardware Setup
5.User-Friendly Operation

CONNECTIONS:

1.IR Sensor to Arduino
2.Buzzer to Arduino
3.Vibration Motor to Arduino
4.NPN Transistor to Arduino
5.Power Supply
6.Wearable Spectacles Integration
7.Jumper Wires and Breadboard
8.Adjustable Sensitivity (Optional)
9.Upload Code to Arduino

NEW LEARNINGS:

1.Sensor Integration
2.Arduino Programming
3.Hardware Interaction
4.User-Centric Design
5.Safety Applications