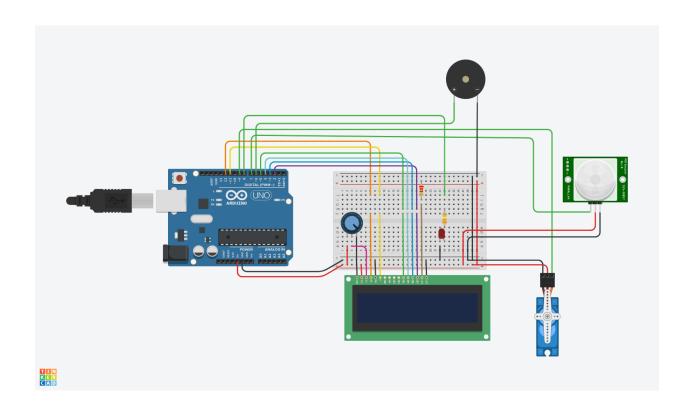Project

Drowsiness detection and alerting system

Code

#include <Servo.h>

#include <LiquidCrystal.h>

Servo servo;

LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

```
const int PIRpin=7;

const int buzzerPin=6;

const int ledPin=8;


int sensorValue = 0;

long duration, distance;


void setup()

{

  Serial.begin(9600);

  servo.attach(9);

  servo.write(0);


  pinMode(PIRpin, INPUT);

  pinMode(buzzerPin, OUTPUT);

  pinMode(ledPin, OUTPUT);


  lcd.begin(16, 2);

  lcd.setCursor(0, 0);

  lcd.print("DRIVER DROWSINESS");

  lcd.setCursor(3, 1);

  lcd.print("DETECTOR");

  delay(2000);

}
```

```
void loop()

{

  lcd.begin(16, 2);

  lcd.setCursor(0, 0);

  lcd.print("DRIVER DROWSINESS");

  lcd.setCursor(3, 1);

  lcd.print("DETECTOR");

  delay(500);


  if(digitalRead(PIRpin)==1)

  {

    lcd.clear();

    lcd.setCursor(1, 0);

    lcd.print("Driver Drowsy !");

    lcd.setCursor(0, 1);

         digitalWrite(buzzerPin,HIGH);


    digitalWrite(ledPin,HIGH);

    delay(500);

    digitalWrite(ledPin,LOW);

    delay(500);

    digitalWrite(ledPin,HIGH);

    delay(500);

    digitalWrite(ledPin,LOW);

    delay(500);
```

```
        digitalWrite(buzzerPin,LOW);


  servo.write(90);

  delay(5000);

  servo.write(0);
 }
}
```