Innovation, Employability Professional Readiness for and Entrepreneurship

ASSIGNMENT 1

SMART HOME

SUBMITTED BY,

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BATCH:- B12-6A2E

SMART HOME

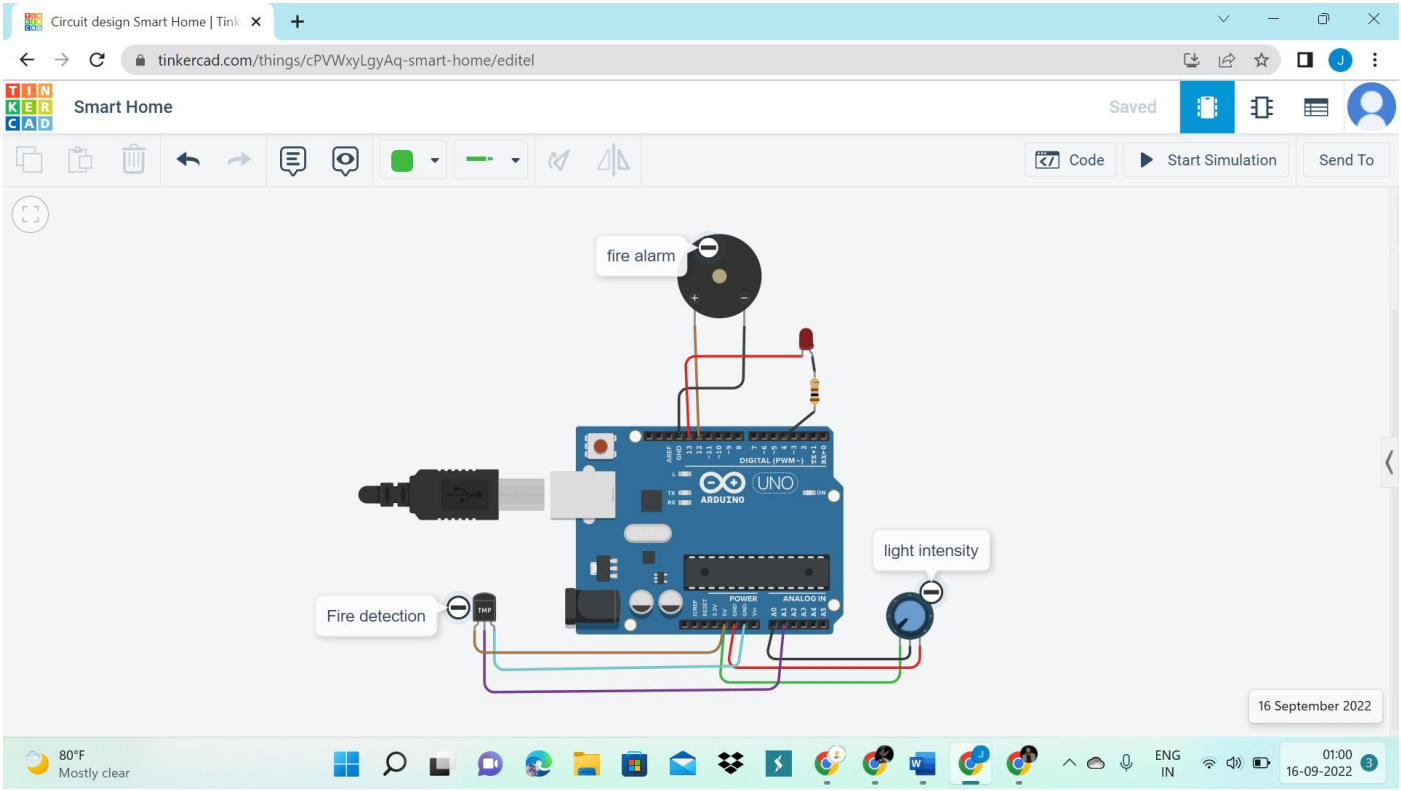
CODE FOR SMART HOME:-

```
void setup()
{
  pinMode(4,OUTPUT);
  Serial.begin(9600);
  pinMode(12,OUTPUT);
}

/*
void loop()
{
  int a=analogRead(A0);
  int brightness=a/4;
  analogWrite(4,brightness);

}
*/
void loop()
{
  int a = analogRead(A0);
  Serial.print("Analog Value: ");
  Serial.println(a);
  int b = map(a,0,1023,0,255);
  Serial.print("mapped Value: ");
  Serial.println(b);
  analogWrite(4,b);
  double c=analogRead(A1);
  double t=(((c/1024)*5)-0.5)*100;
  Serial.print("TEMP VALUE: ");
  Serial.println(t);
  digitalWrite(12,0);
  if (t>124){
    digitalWrite(12,1);
  }
  delay(1000);


}
```

CIRCUIT DIAGRAM FOR SMART HOME:-

Tinker cad link: https://www.tinkercad.com/things/cPVWxyLgyAq-smart-home

SNAPS OF SMART HOME:-



The above circuit diagram shows the smart home application where the potentiometer (pin: 0-Analog Input) is connected in a particular room to adjust the intensity of the light. In potentiometer,the intensity of the light can be increased or decreased . So the brightness level can be adjust as we wish and save power consumption.

As well as the Temperature Sensor (Pin : 1- Analog Input) in a room detects the room temperature.If the temperature in the room is above 124°C ,then the buzzer (Pin :12-Digital Output) which is connected to the temperature sensor will start to make sound which will alert people in the room to leave.