ASSIGNMENT-1

TECHNOLOGY: INTERNET OF THINGS

DOMAIN: SMART FORMING APPLICATION
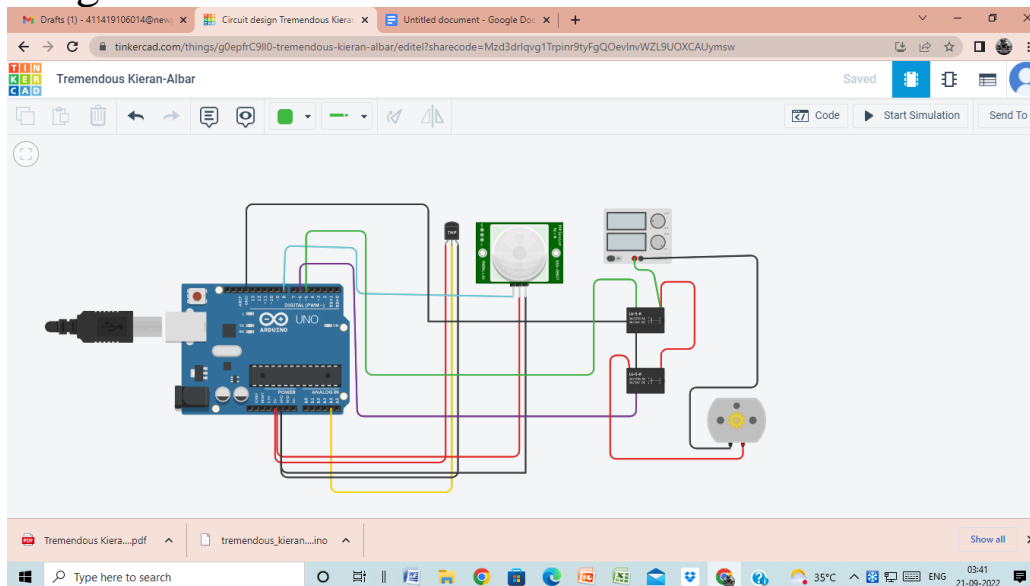
Description: the assignment is about smart home application, were the PSR sensor detect the surrounding heat if the heat is above 30 degree the Temperature sensor get heated up and the dc motor starts rotating .
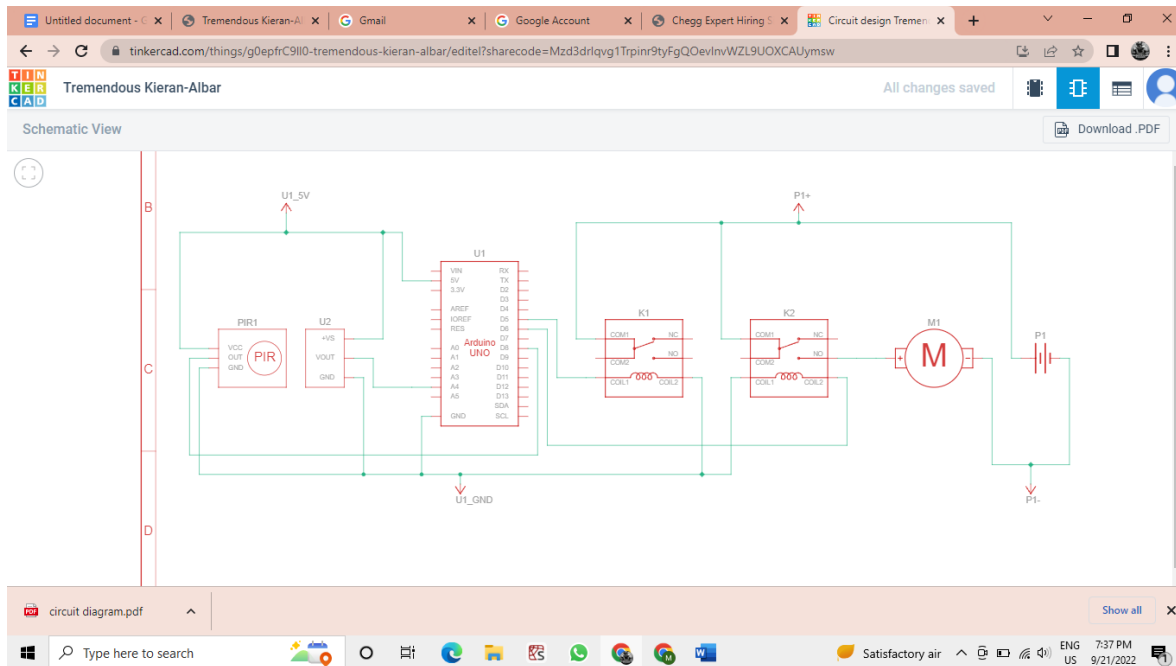
Materials used:
- PIR sensor
- Temperature sensor (TMB 36)
- DC Motor
- Power supply
- Arduino uno R3

Design sight: https://www.tinkercad.com/things/g0epfrC9ll0-tremendous-kieran-albar/editel?sharecode=Mzd3drIqvg1Trpinr9tyFgQOevlnvWZL9UOXCAUymsw
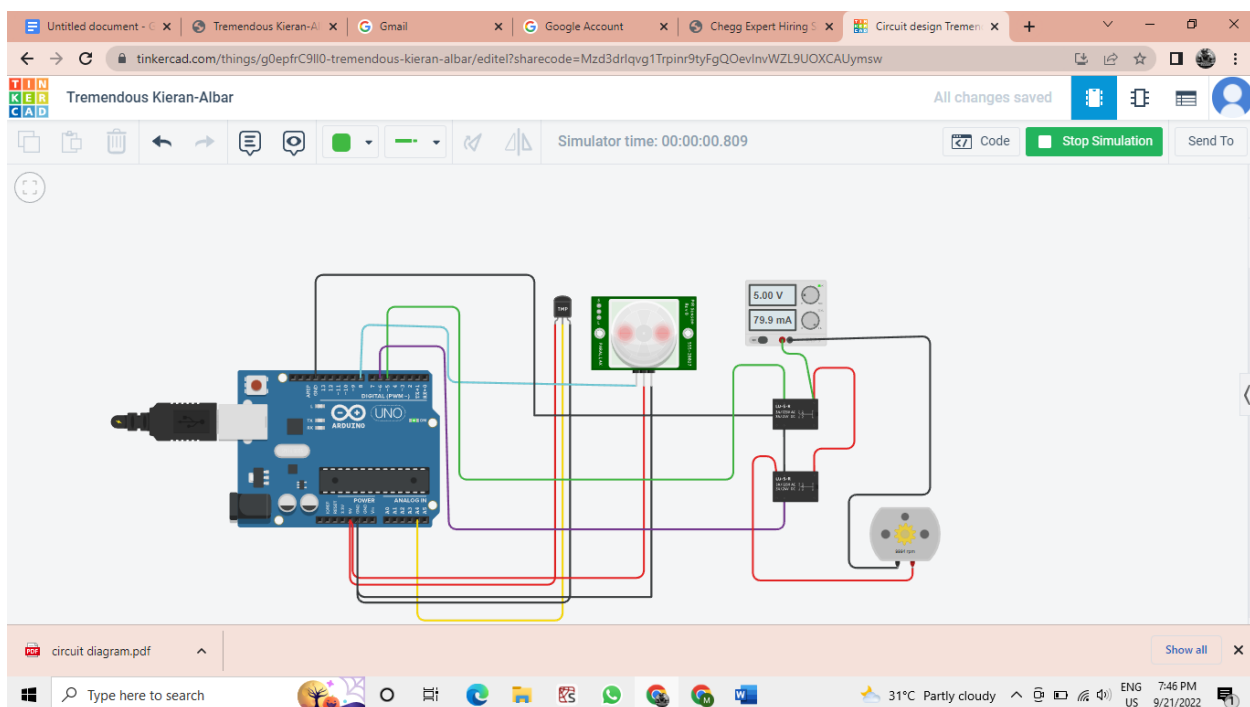
Diagram:

Circuit diagram:

OUTPUT:

Description: in this above we have shone the output of the circuit.

Code: float x,y,z,temp;

```
void setup()

{

  pinMode(8, INPUT);

  pinMode(5, OUTPUT);

  pinMode(6, OUTPUT);

  pinMode(A5, INPUT);

  pinMode(A4, INPUT);

Serial.begin(9600);

}

void loop()

{

  x= digitalRead(8);

  y= analogRead(A5);

  z= analogRead(A4);

  Serial.println(x);

  Serial.println(y);

  Serial.println(z);

  temp = (double)z / 1024;

  temp = temp * 5;

  temp = temp - 0.5;

  temp = temp * 100;

  if ( (x>0) )
```

```
{
  if ((y<550)&&(temp>30))
  {
    digitalWrite(5, HIGH);
    digitalWrite(6, HIGH);
  }
  else if((y<550)&&(temp<30))
  {
    digitalWrite(5, HIGH);
    digitalWrite(6, LOW);
  }
  else if((y>550)&&(temp>30))
  {
    digitalWrite(5, LOW);
    digitalWrite(6, HIGH);
  }
  else if((y>550)&&(temp<30))
  {
    digitalWrite(5, LOW);
    digitalWrite(6, LOW);
  }
}
else
{
```

```
    digitalWrite(5, LOW);

    digitalWrite(6, LOW);

  }

}
```

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