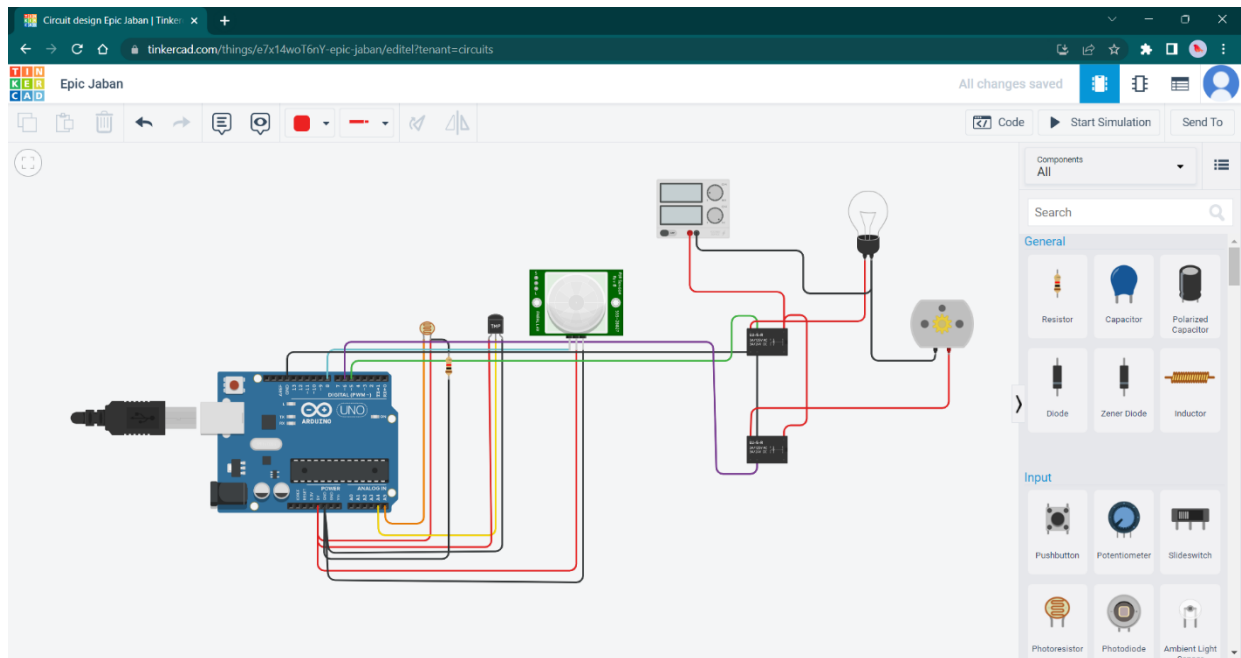


ASSIGNMENT 1

SMART HOME USING TINKERCAD



Arduino code for simulation in Tinkercad

```
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);
}
}
```