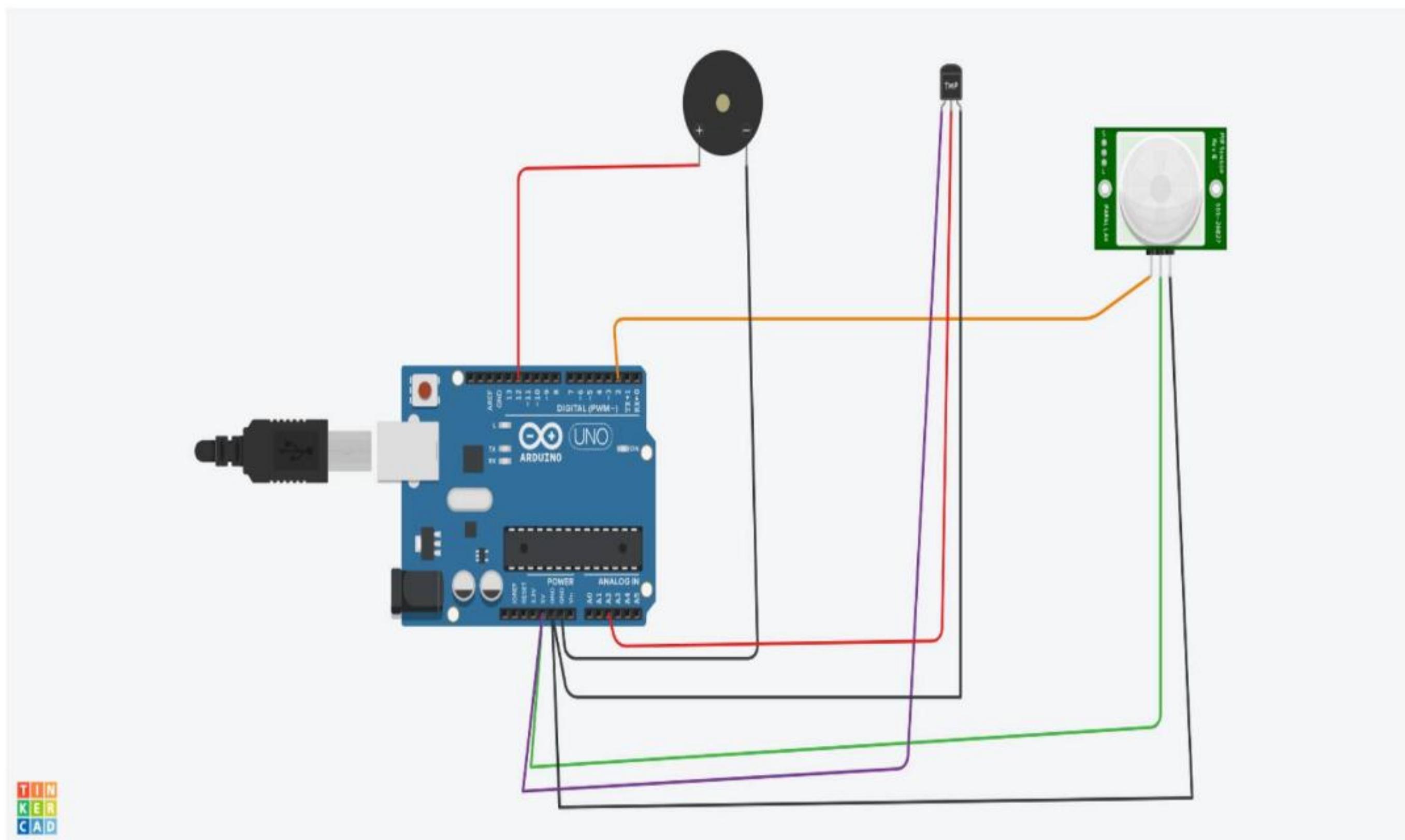


## **IBM ASSIGNMENT**

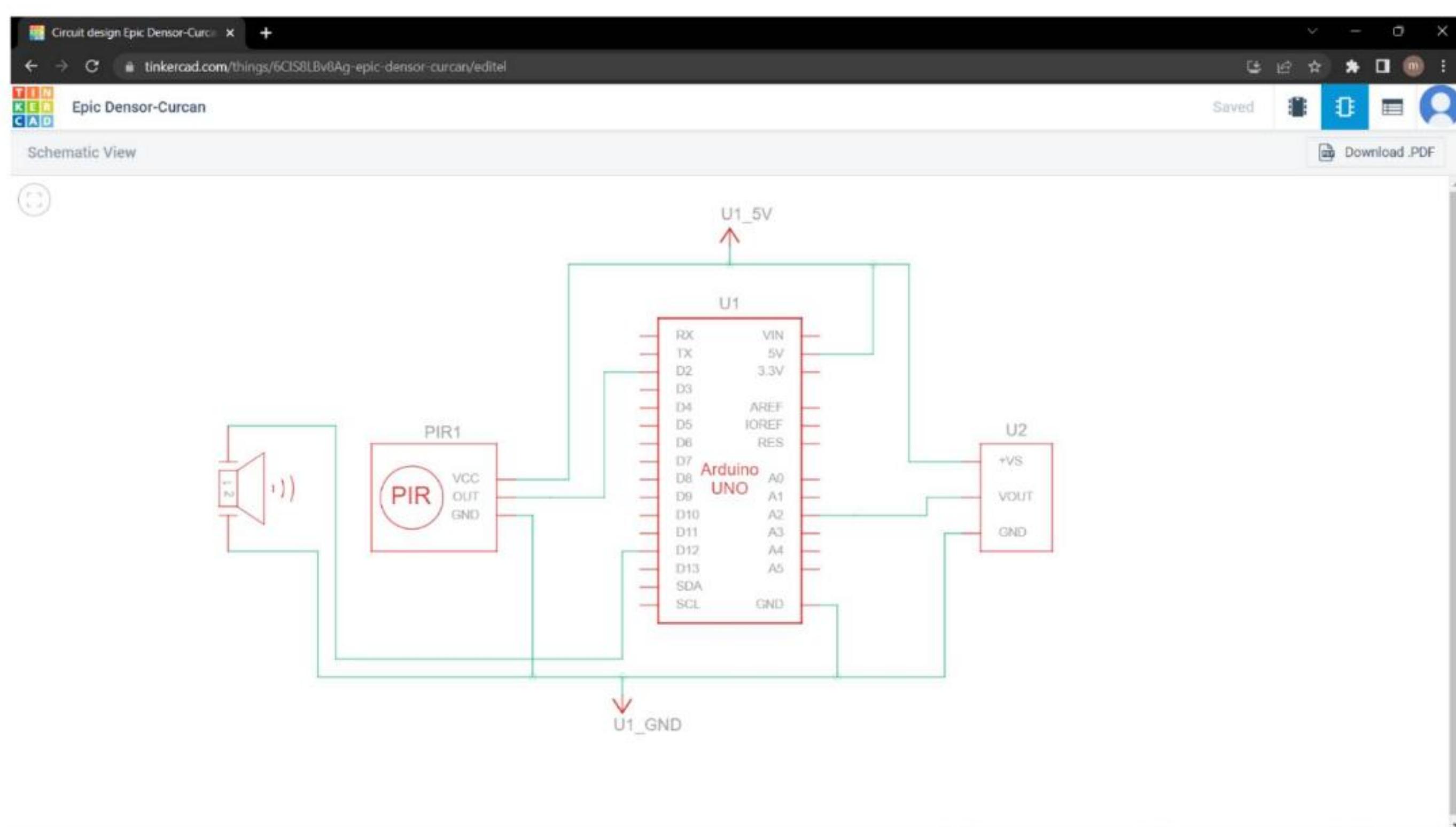
**CREATE CIRCUIT WITH PIEZO ALARM,PIR  
SENSOR,TEMPERATURE SENSOR:**

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## CIRCUIT DIAGRAM:



## SCHEMATIC DIAGRAM:



## SOURCE CODE:

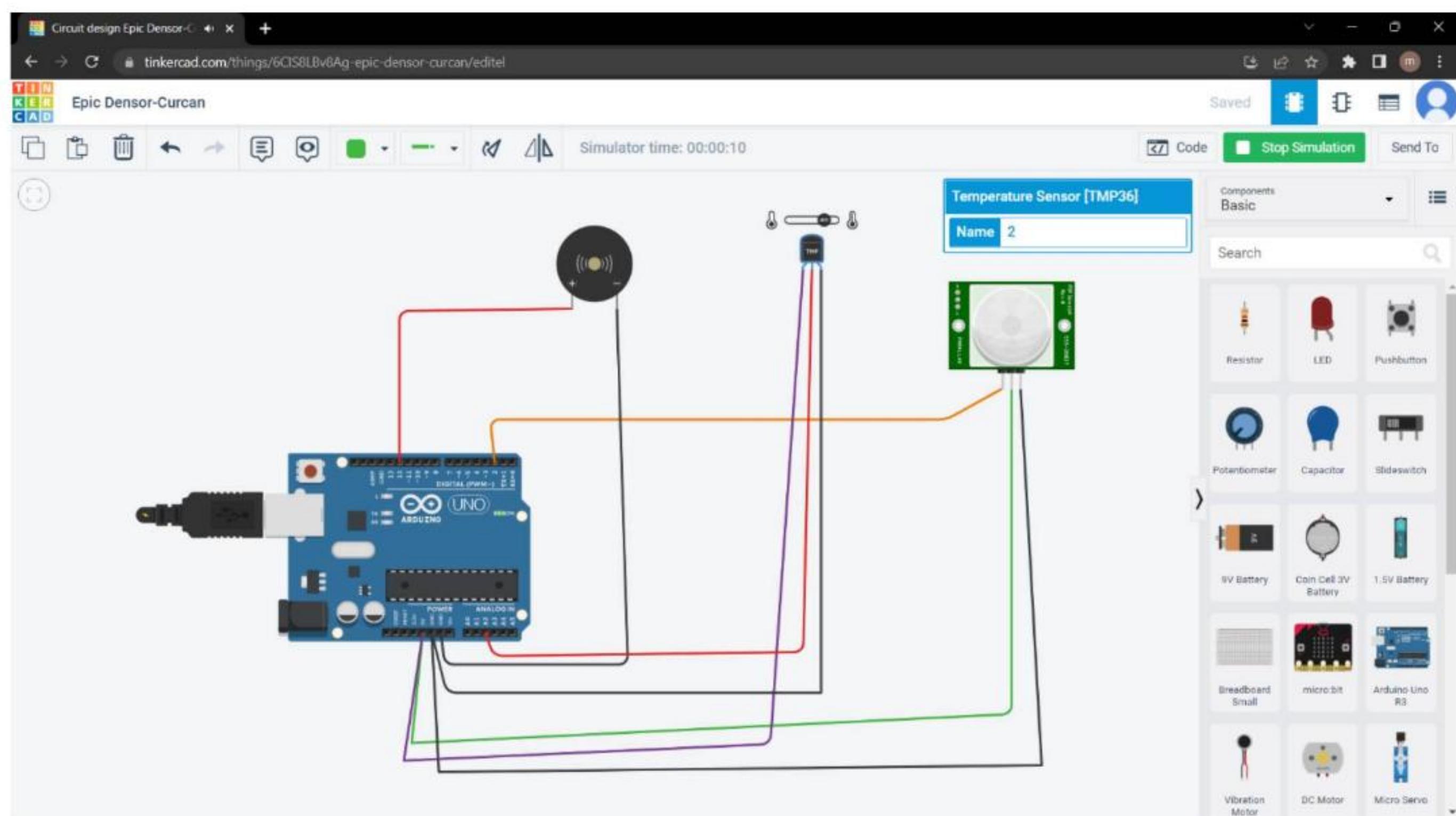
```
// C++ code  
//  
void setup()  
{  
    Serial.begin(9600);  
    pinMode(2, INPUT);  
    pinMode(12, OUTPUT);  
}  
  
void loop()  
{  
    int motion=digitalRead(2);  
    if(motion==1)  
    {  
        Serial.println("Motion is Detected!");  
        tone(12,10);  
        delay(1000);  
    }  
}
```

```
noTone(12);
delay(3000);
}
else
{
Serial.println("No Motion!!!");
delay(1000);
}

double data=analogRead(A2);
double n=data/1024;
double voltage=n*5;
double offsetvol=voltage-0.5;
double temp=offsetvol*100;
if(temp>60)
{
Serial.println("Temperature higher than 60 degrees !!");
Serial.println(temp);
tone(12,10);
delay(1000);
noTone(12);
```

```
delay(3000);  
}  
else  
{  
    Serial.println("Temperature lesser than 60 degrees !!");  
    Serial.println(temp);  
    delay(1000);  
}  
}
```

## TEMP SENSOR:



## PIR SENSOR:

