

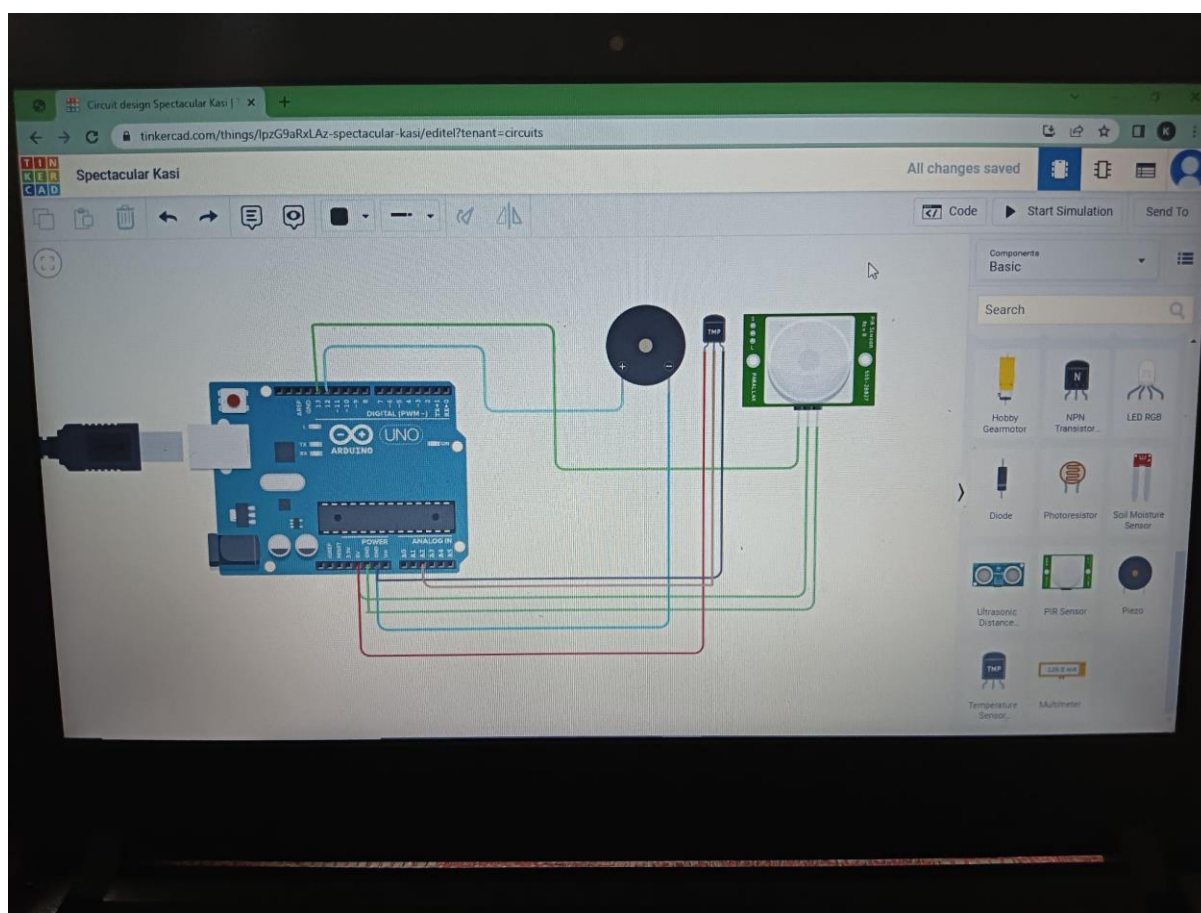
Name	S.Kamali
Date	15/09/2022
Team ID	PNT2022TMI25311
Project name	Smart Waste Management system for Metropolitan cities

## IBM ASSESMENT – 1

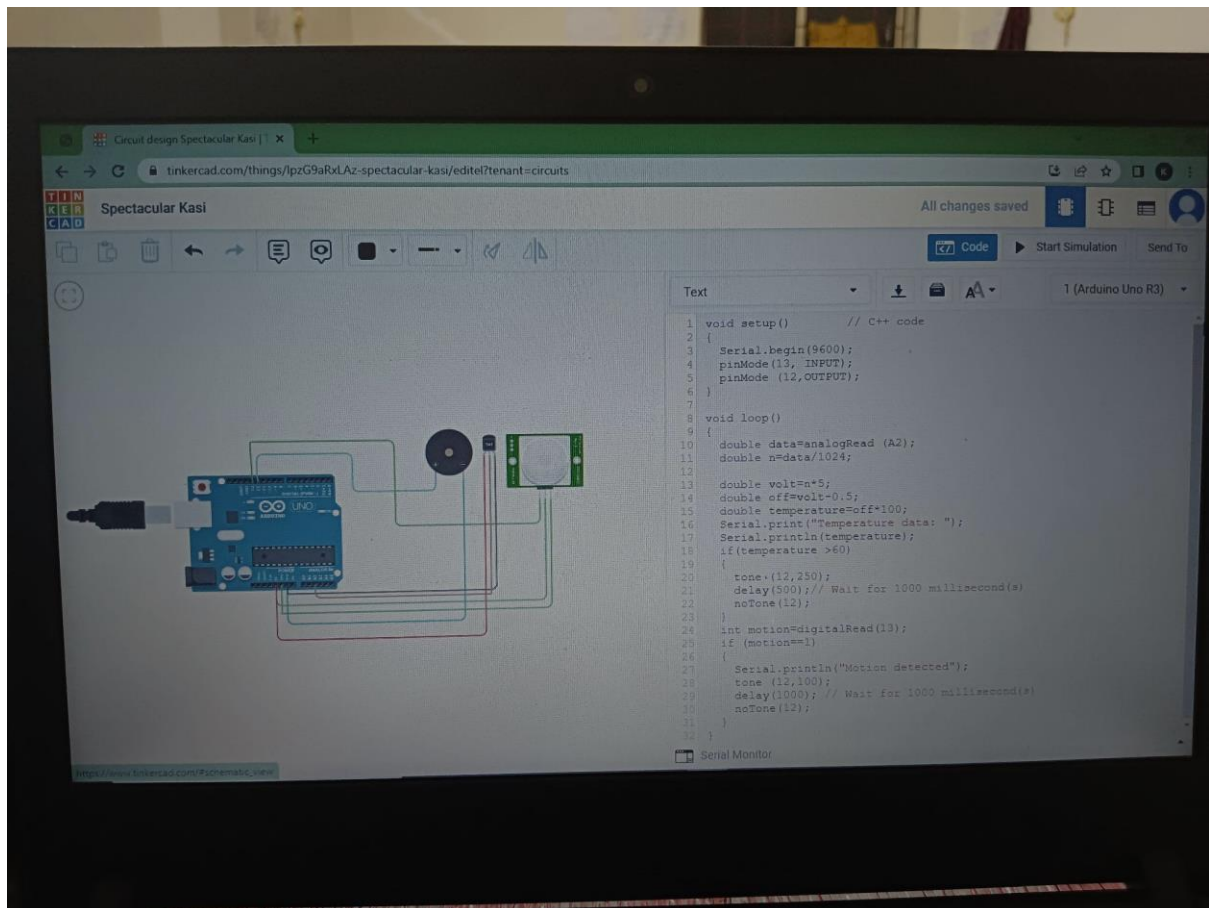
Create circuit with Piezo alarm,PIR sensor,tempSensor with below functionalities:

- 1.Alarm should sound in one manner if temp is above 60 c.
- 2.Alarm should sound with another frequency if motion is detected in PIR sensor.

**Input Circuit Connection Screenshoots:**



**Fig 1. Circuit connection with Piezo alarm, PIR sensor, temp Sensor**



**Fig 2. Circuit with an Code**

## Program

```

// C++ code
void setup()
{
  Serial.begin(9600);
  pinMode(13, INPUT);
  pinMode(12, OUTPUT);
}
void loop()
{
  double data=analogRead(A2);
  double n=data/1024;
  double volt=n*5;
  double off=volt-0.5;
  double temperature=off*100;
  Serial.print("Temperature data: ");
  Serial.println(temperature);
  if(temperature >60)
  {
    tone(12,250);
    delay(500); // Wait for 1000 millisecond(s)
    noTone(12);
  }
}

```

```
int motion=digitalRead(13);
if (motion==1)
{
  Serial.println("Motion detected");
  tone (12,100);
  delay(500); // Wait for 1000 millisecond(s)
  noTone(12);
}
}
```