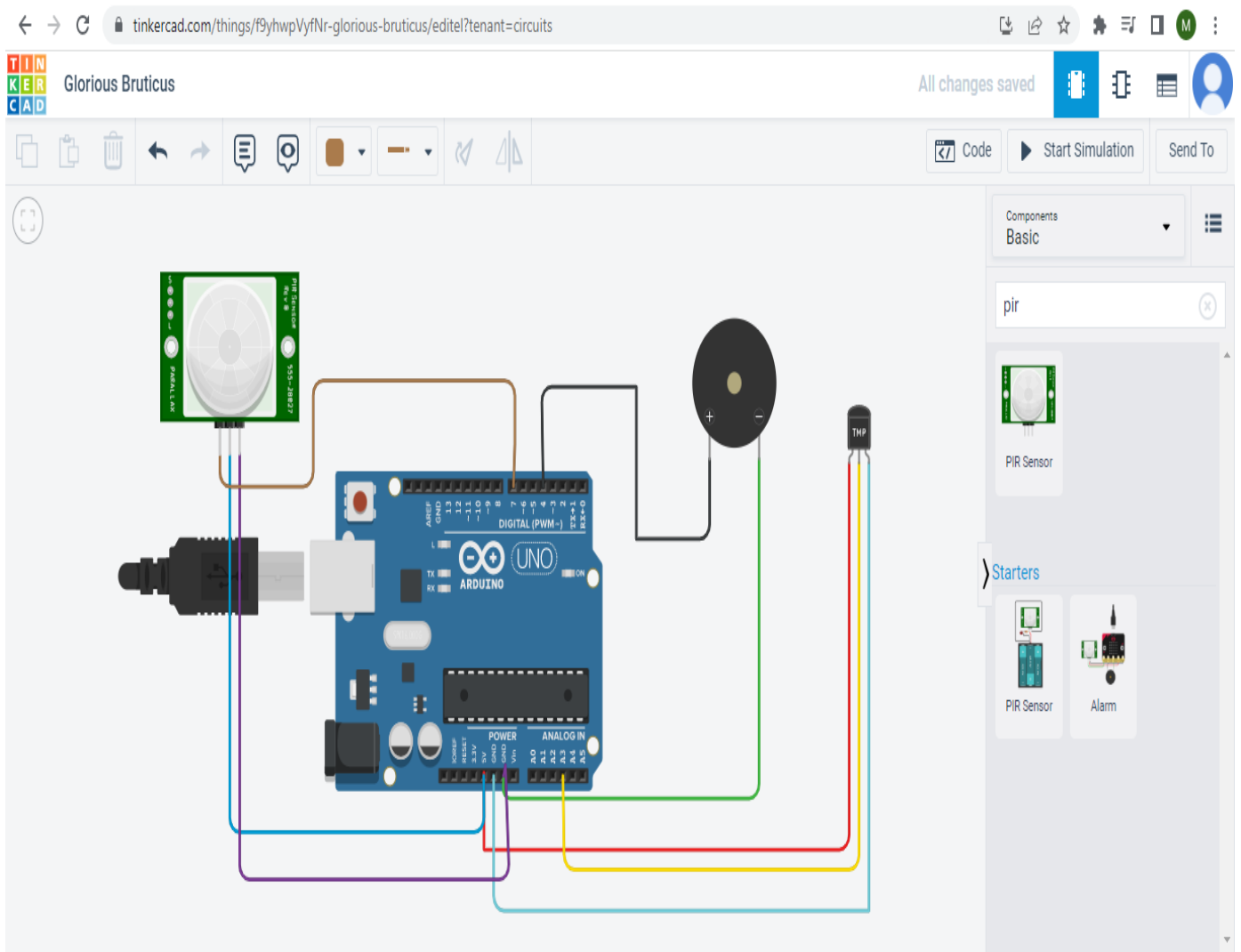


**Assignment -1**  
Smart Solution for Railways

Assignment Date	25 September 2022
Student Name	K.Manikandan
Student Roll Number	721219106025
Maximum Marks	2 Marks

## Circuit:



## Code:

```
void setup()
{
  Serial.begin(9600);
```

```
pinMode(4,OUTPUT);
pinMode(7,INPUT);
}
void loop()
{
intmov=digitalRead(7);
double dt=analogRead(A3);
double n=dt/1024;
double volt=n*5;
double offset=volt-0.5;
double temp=offset*100;
Serial.print("Temperature Detected: ");
Serial.println(temp);
if(mov==0){
Serial.println("No Motion Detected");
}
if(mov==1){
Serial.println("Motion Detected");
tone(4,100,1000);
}
if(temp>60){
tone(4,400,1000);
}
}
```

# Output:

tinkercad.com/things/f9yhwpyfNl-glorious-bruticus/edit?tenant=circuits

TINKERCAD Glorious Bruticus All changes saved

Code Start Simulation Send To

PIR Sensor  
Name 1

```
15 double volt=n*5;
16 double offset=volt-0.5;
17 double temp=offset*100;
18 Serial.print("Temperature Detected: ");
19 Serial.println(temp);
20 if(mov==0){
```

Serial Monitor

No Motion Detected  
Temperature Detected: 96.00  
No Motion Detected  
Temperature Detected: 96.00  
No Motion Detected  
Temperature Detected: 96.00  
No Motion Detected  
Temperature Detected: 96.00  
No Motion Detected  
Temperature Detected: 96.00  
Motion Detected  
Temperature Detected: 96.00  
Motion Detected  
Temperature Detected: 96.00  
Motion Detected  
Temperature Detected: 96.00  
Motion Detected  
Temperature Detected: 96.00  
Motion Detected  
Temperature Detected: 96.00  
Motion Detected

Send Clear

