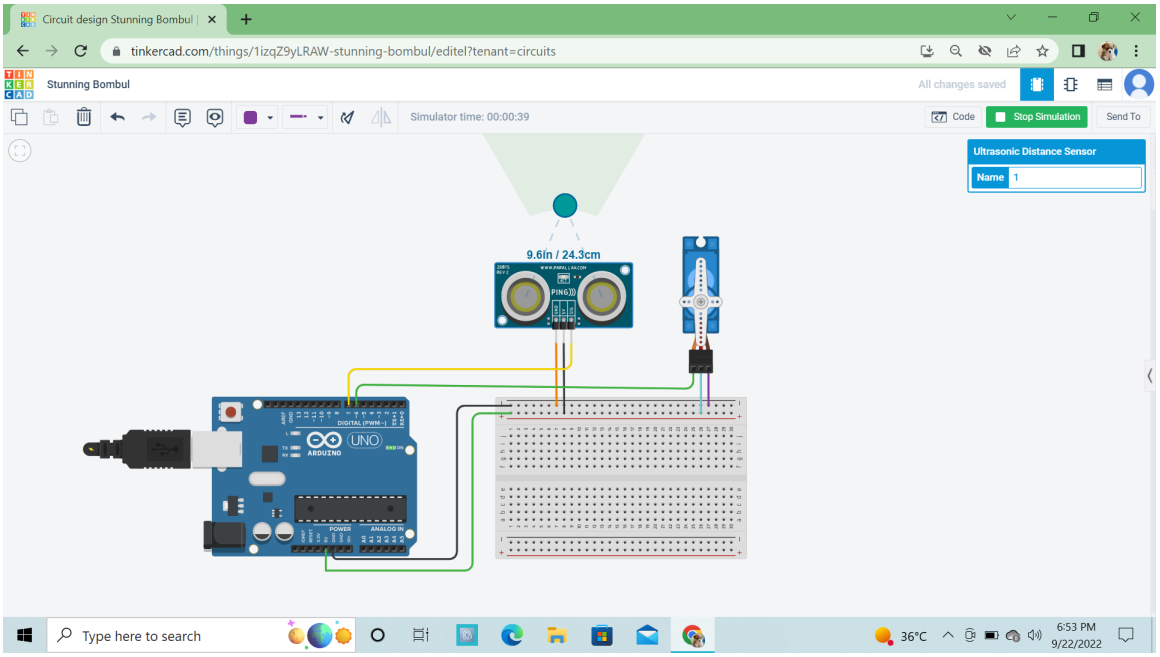
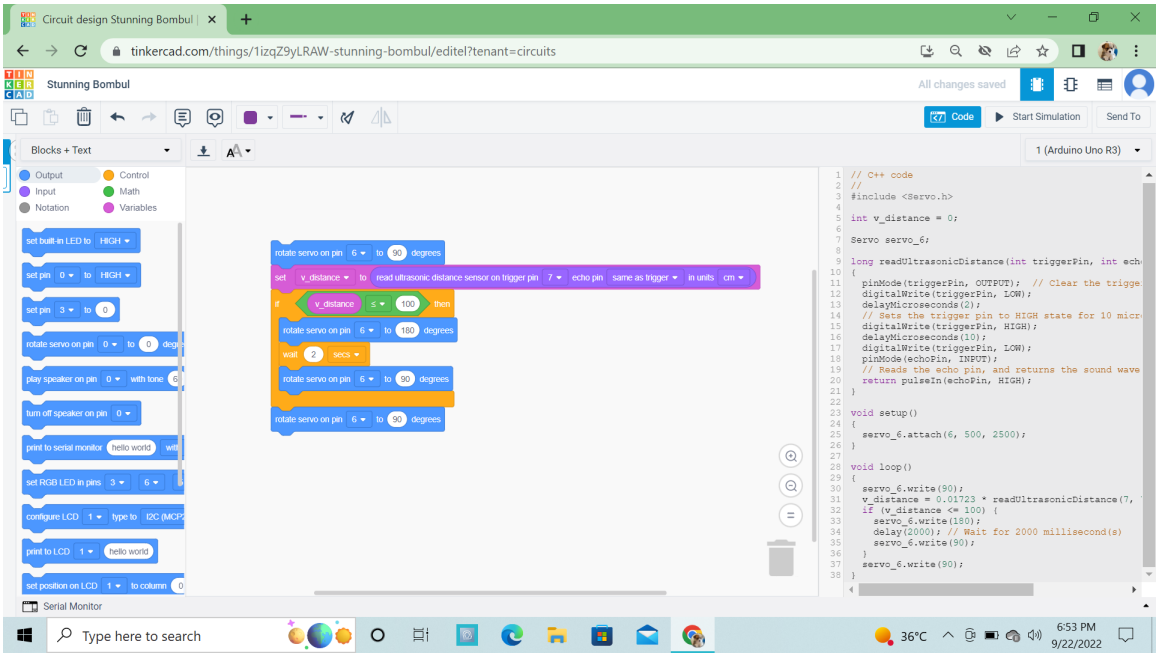
IoT SMART GATE DESIGN FOR SMART HOME



COMPONENTS:-

- Arduino Uno R3
- Ultrasonic Distance Sensor
- Breadboard
- Micro Servo



CODING:-

```
#include <Servo.h>

int v_distance = 0;

Servo servo_6;

long readUltrasonicDistance(int triggerPin, int echoPin)
{
  pinMode(triggerPin, OUTPUT);  // Clear the trigger
  digitalWrite(triggerPin, LOW);
  delayMicroseconds(2);
  // Sets the trigger pin to HIGH state for 10 microseconds
  digitalWrite(triggerPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(triggerPin, LOW);
  pinMode(echoPin, INPUT);
  // Reads the echo pin, and returns the sound wave travel time in microseconds
  return pulseIn(echoPin, HIGH);
}

void setup()
{
  servo_6.attach(6, 500, 2500);
}
```

```
void loop()
{
  servo_6.write(90);
  v_distance = 0.01723 * readUltrasonicDistance(7, 7);
  if (v_distance <= 100) {
  }
  servo_6.write(90);

  servo_6.write(180);
  delay(2000); // Wait for 2000 millisecond(s)
  servo_6.write(90);
}
```