PROJECT NAME:

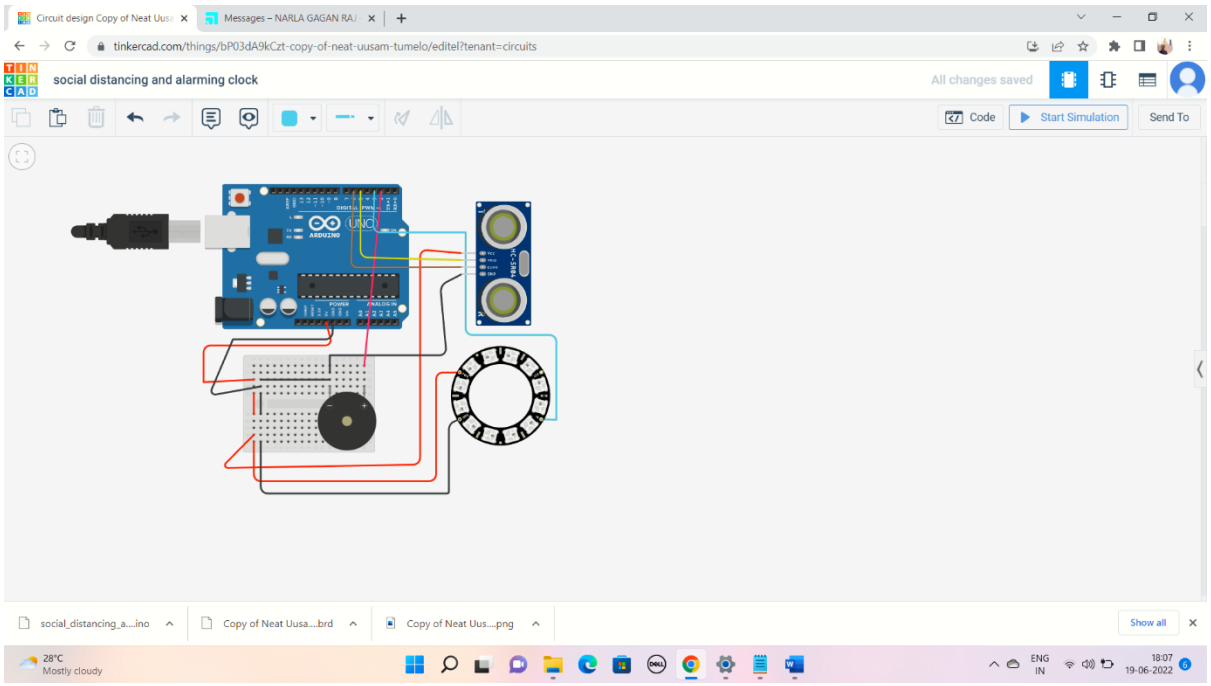
SOCIAL DISTANCING AND ALARMING CLOCK

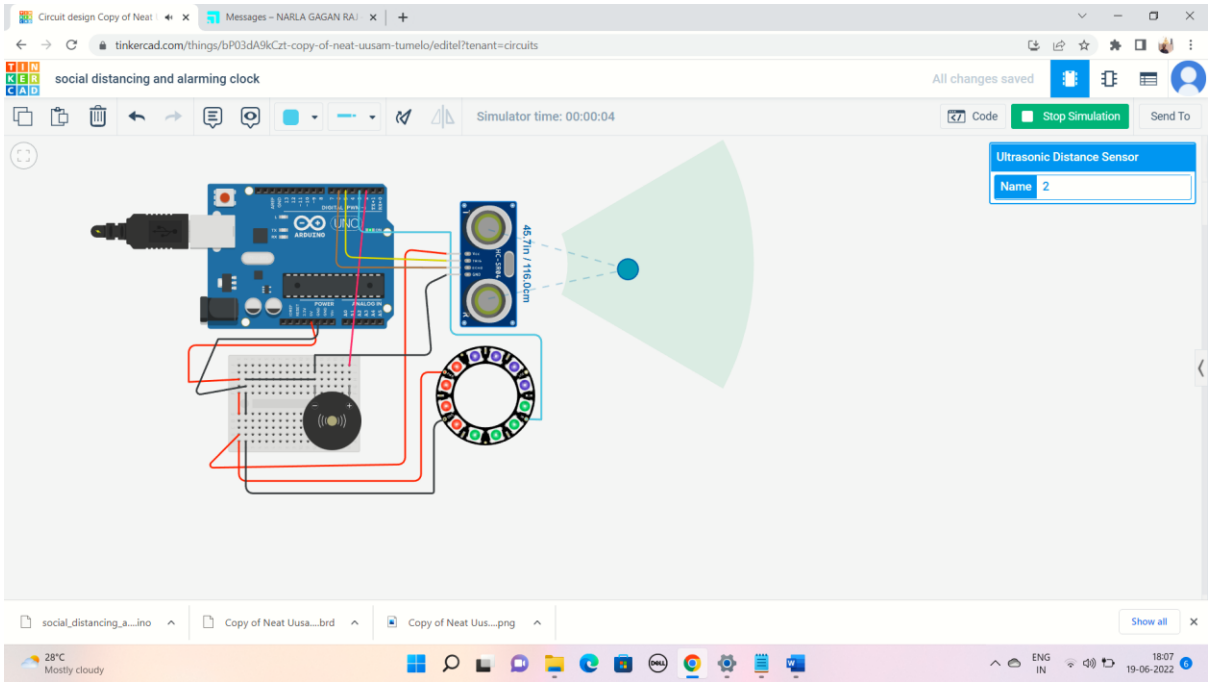
PROJECT CODE:

```
#include<Adafruit_NeoPixel.h>
int ledPin=3;
int ledNo=12;
Adafruit_NeoPixel strip=Adafruit_NeoPixel(ledNo,ledPin,NEO_RGB+NEO_KHZ800);

int buzzerPin=2;
int echoPin=6;
int trigPin=5;
int minDistance=100;
int maxDistance=300;

void setup()
{
 pinMode(buzzerPin,OUTPUT);
 pinMode(trigPin,OUTPUT);
 pinMode(echoPin,INPUT);
 Serial.begin(9600);
 strip.begin();
 for(int i =0;i<ledNo;i++)
 {
   strip.setPixelColor(i,strip.Color(0,0,0));
 }
 strip.show();
}
void loop()
{
 int distance=calcDistance();
 Serial.println(distance);
 int leds = map(distance,minDistance,maxDistance,ledNo,1);
```

```
 Serial.println(leds);
 if(leds== 12)
 {
  digitalWrite(buzzerPin,HIGH);
 }
 else
 {
  digitalWrite(buzzerPin,LOW);
 }
 for(int i=0;i<leds;i++)
 {
  if(i<4)
  {
   strip.setPixelColor(i,strip.Color(50,0,0));//green,red,blue
  }
  else if(i>=4&&i<8)
  {
   strip.setPixelColor(i,strip.Color(0,50,0));//green,red,blue
  }
  else if(i>=8&&i<12)
  {
   strip.setPixelColor(i,strip.Color(0,0,50));//green,red,blue
  }
 }
 for(int i=leds;i<ledNo;i++)
 {
  strip.setPixelColor(i,strip.Color(0,0,0));//green,red,blue
 }
 strip.show();
 delay(50);
}
int calcDistance()
```

```
{
 long distance,duration;
 digitalWrite(trigPin,LOW);
 delayMicroseconds(2);
 digitalWrite(trigPin,HIGH);
 delayMicroseconds(10);
 digitalWrite(trigPin,LOW);
 duration=pulseIn(echoPin,HIGH);
 distance=duration/29/2;
 if(distance>=maxDistance)
 {
  distance=maxDistance;
 }
 if(distance<=minDistance)
 {
  distance=minDistance;
 }
 return distance;
}
```

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