9512-JP COLLEGE OF ENGINEERING

SMART PARKING SYSTEM

Team Members:-

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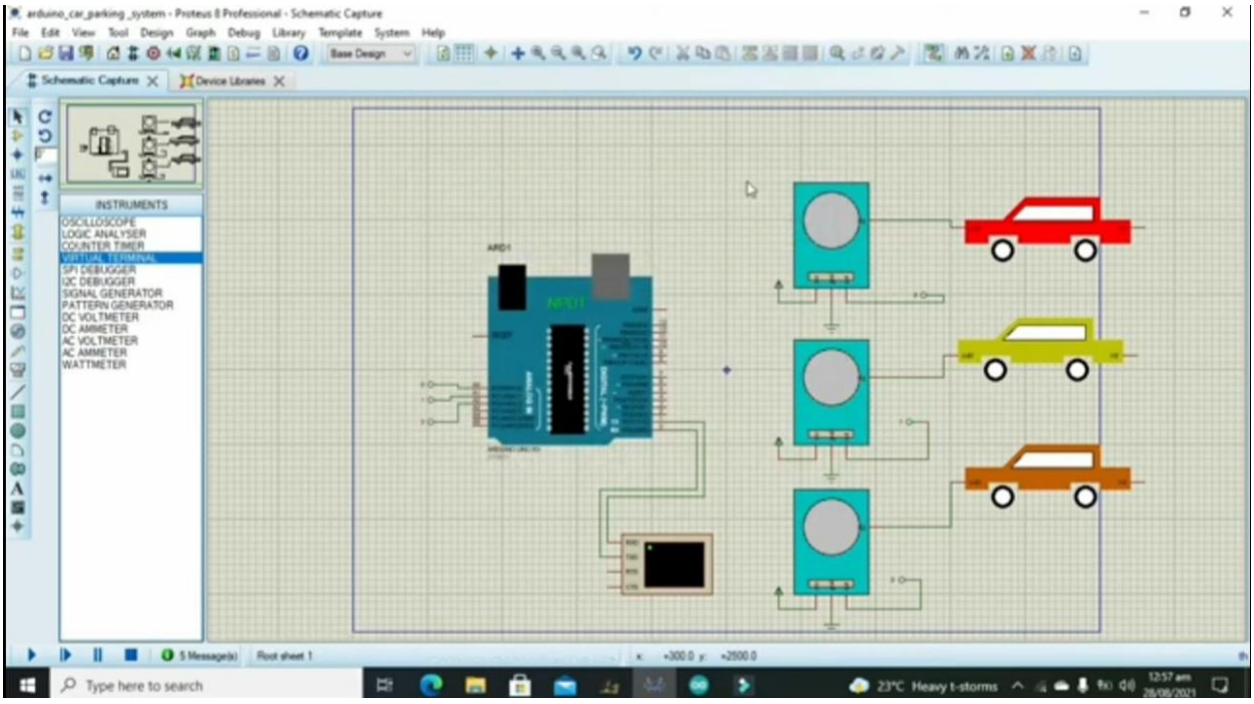
Phase-4:- Development Part-2:-

Simulation for based on IOT:-



SMART PARKING SYSTEM USING IOT CODE:-

```
//TECHATRONIC.COM

// BLYNK LIBRARY
```

```
// https://github.com/blynkkk/blynk-library
// ESP8266 LIBRARY
// https://github.com/ekstrand/ESP8266wifi
#define TRIGGER D0
#define ECHO  D2
// NodeMCU Pin D0 > TRIGGER | Pin D2 > ECHO
#define BLYNK_PRINT Serial  // Comment this out to disable prints and save space
#include <ESP8266WiFi.h>
#include <BlynkSimpleEsp8266.h>
// You should get Auth Token in the Blynk App.
// Go to the Project Settings (nut icon).
char auth[] = "Whobi6tSCicbj4W654WdBeo7O4D6Ajw4"; //Auth code sent via Email
// Your WiFi credentials.
// Set password to "" for open networks.
char ssid[] = "DESKTOP";  //Wifi name
char pass[] = "asdfghjkl"; //Wifi Password
void setup() {
 Serial.begin (9600);
 Blynk.begin(auth, ssid, pass);
 pinMode(TRIGGER, OUTPUT);
 pinMode(ECHO, INPUT);
 pinMode(BUILTIN_LED, OUTPUT);
}
void loop() {
 long duration, distance;
 digitalWrite(TRIGGER, LOW);
 delayMicroseconds(2);
```

```
digitalWrite(TRIGGER, HIGH);
delayMicroseconds(10);
digitalWrite(TRIGGER, LOW);
duration = pulseIn(ECHO, HIGH);
distance = (duration/2) / 29.1;
 if (distance <=200) {
 Blynk.virtualWrite(V0, 255);
}
 else {
 Blynk.virtualWrite(V0, 0);
 }
 if (distance <= 35) {
 Blynk.virtualWrite(V1, 255);
}
 else {
 Blynk.virtualWrite(V1, 0);
 }
 if (distance <= 30) {
 Blynk.virtualWrite(V2, 255);
}
 else {
 Blynk.virtualWrite(V2, 0);
 }
 if (distance <= 25) {
 Blynk.virtualWrite(V3, 255);
}
 else {
```

```
  Blynk.virtualWrite(V3, 0);
 }
  if (distance <= 20) {
  Blynk.virtualWrite(V4, 255);
}
  else {
  Blynk.virtualWrite(V4, 0);
  }
  Serial.print(distance);
  Serial.println("Centimeter:");
  Blynk.virtualWrite(V5, distance);
  delay(200);
  Blynk.run();
  Serial.print(distance);
  Serial.println("Centimeter:");
  Blynk.virtualWrite(V6, distance);
  delay(100);
  Blynk.run();
}
```

Simulation Output:-