WORKSHEET 2.3

Class: CSE BD1(A)   *Group No.:05*

Group Members Details

S. No.	Name	UID
1.	RAJDEEP JAISWAL	20BCS2761
2.	ADARSH SHARMA	20BCS2762
3.	VISHAL CHOUDHARY	20BCS2848
4.	SOUMYA SHUBHAM NAYAK	20BCS2781

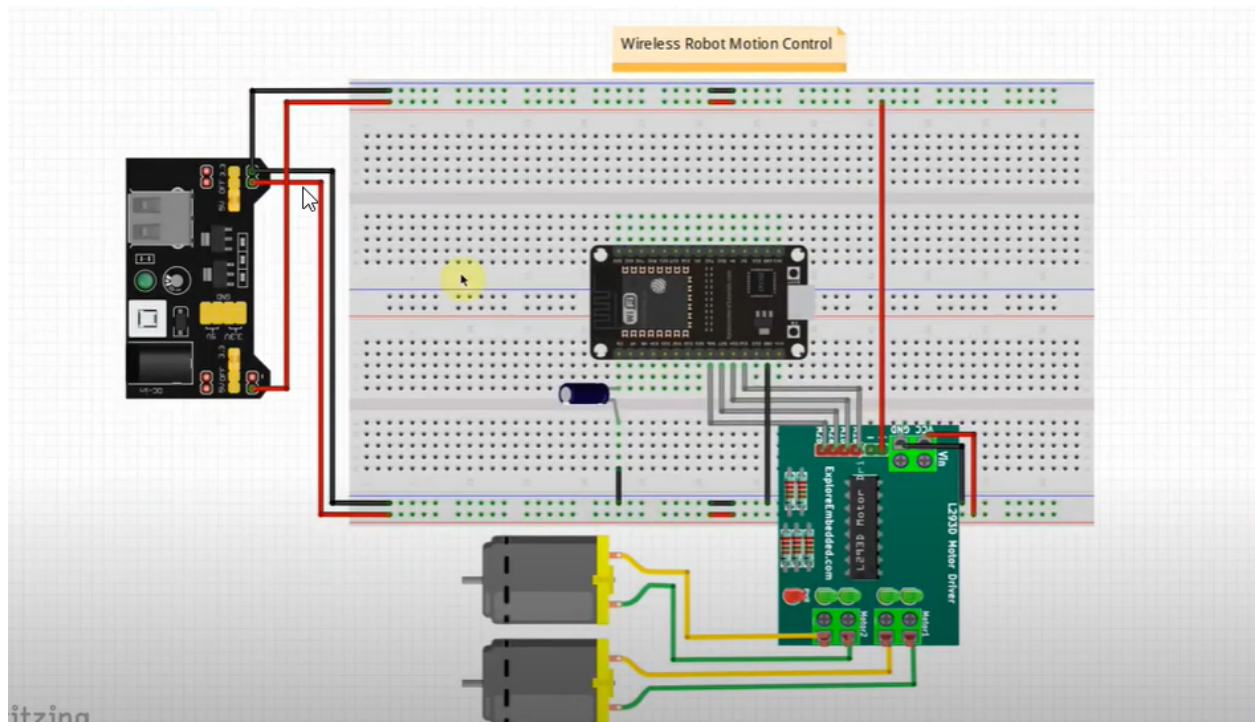*Task:*

Develop a smart phone application for smart home voice-assistant.

Requirements:

- *Ubidots*
- *MIT App inventor*
- *Bulb*
- *Breadboard*
- *Relay*
- *BMP280*

Circuit Diagram:
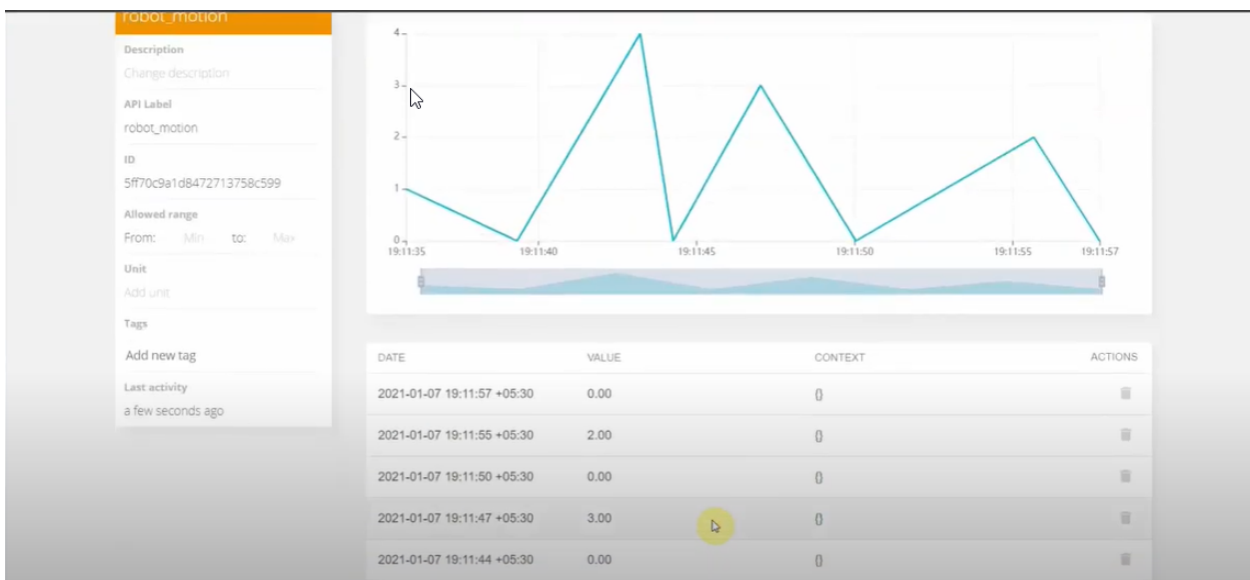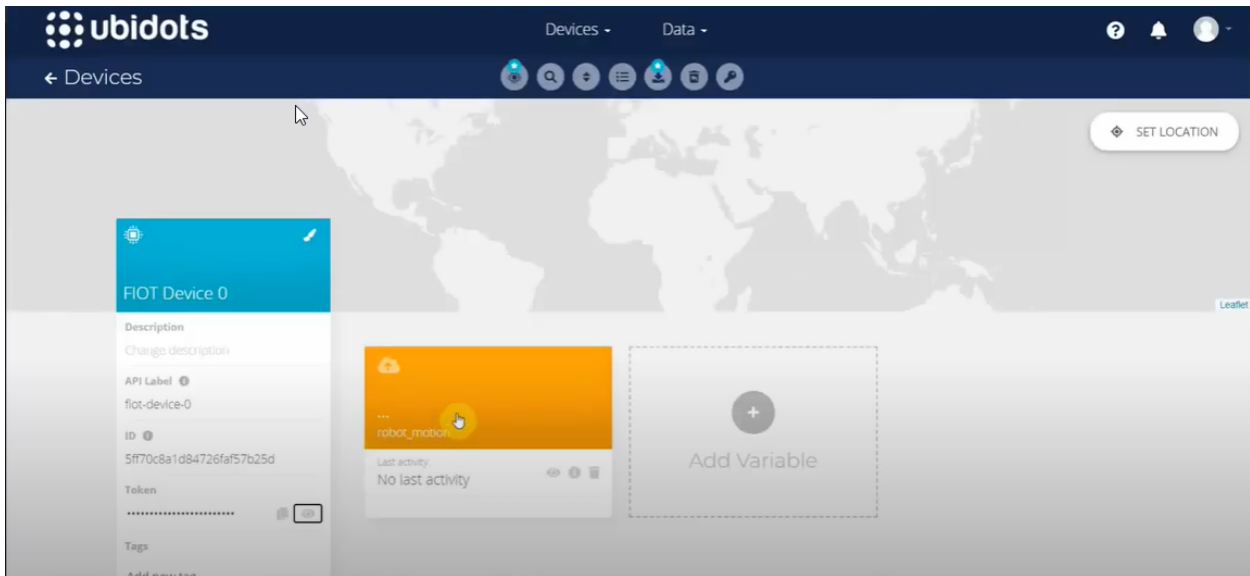
Code:

```
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T5_Robot_Motion
124    Serial.println(WIFIPASS);
125    client.wifiConnection(WIFISSID, WIFIPASS);
126    Serial.println("Done");
127
128    Serial.println("Initializing Ubidots Connection...");
129    client.ubidotsSetBroker("industrial.api.ubidots.com");  // Sets the broker properly for the business account
130    client.setDebug(true);                          // Pass a true or false bool value to activate debug messages
131    client.begin(callback);
132    client.ubidotsSubscribe("device","variable"); //Insert the Device and Variable's Labels
133    Serial.println("Done");
134
135    Serial.println("DONE");
136 }
137 void loop() {
138
139    // Establising connection with Ubidots
140    if (!client.connected()) {
141      client.reconnect();
142      client.ubidotsSubscribe("device","variable"); //Insert the Device and Variable's Labels
143    }
144    client.loop();
145    delay(1000);
```

Dashboard Snippet (if any):
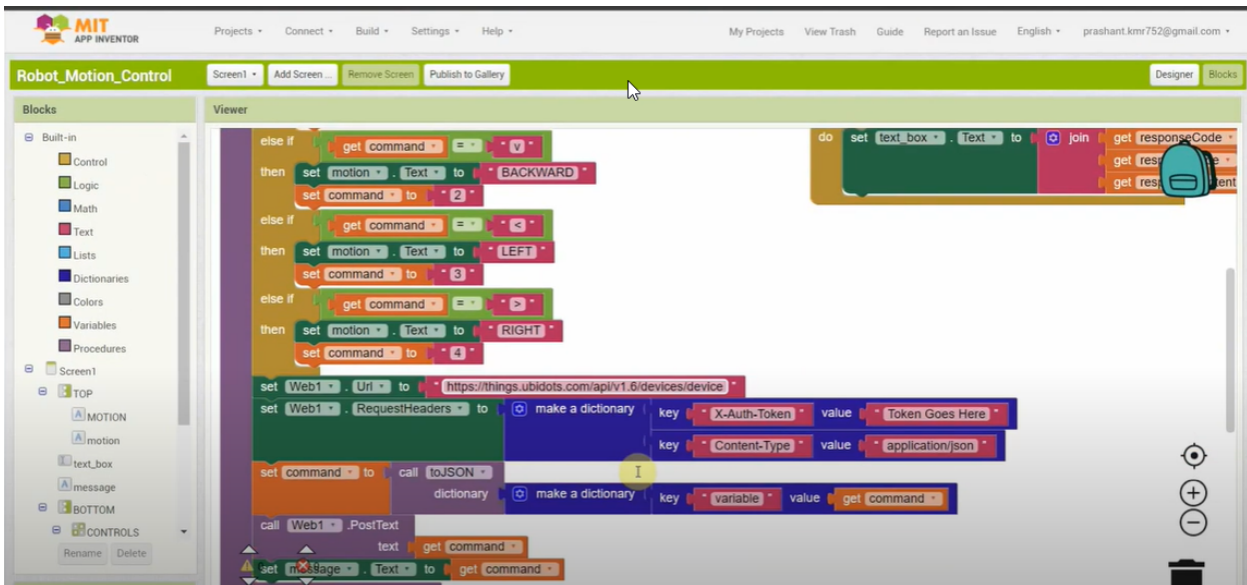
```
T5_Robot_Motion
19 #define RIGHT 4
20
21 #define RMOTORC 26 // Right Motor Clockwise
22 #define RMOTORA 27 // Right Motor Anti-Clockwise
23 #define LMOTORC 14 // Left Motor Clockwise
24 #define LMOTORA 12 // Left Motor Anti-Clockwise
25
26 #define TOKEN "BBFF-onT8uqf2rGdmVmqgqckee6HyxFlE2d"    // Your Ubidots TOKEN
27 #define WIFISSID "Joker"  // Your SSID
28 #define WIFIPASS "Joker@tenda"  // Your Wifi Pass
29
30 Ubidots client(TOKEN);
31
32 void callback(char* topic, byte* payload, unsigned int length) {
33   Serial.print("Message arrived [");
34   Serial.print(topic);
35   Serial.print("] ");
36   for (int i = 0; i < length; i++) {
37     Serial.print((char)payload[i]);
38   }
39   Serial.println();
40   Serial.print("Command: ");
41   int command = (int)*payload - 48;
Done uploading
```

Outcome:

- *After scanning the QR code app got successfully installed on the phone.*
- *The switch turned on upon giving the voice command.*
- *The colour changed to blue after it received the signal successfully.*