THE HUNAR FOUNDATION
TECHNICAL INSTITUTES

2021

PROJECT REPORT

Control Arduino via Android Application

PROJECT # 03

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CONTROL ARDUINO via ANDROID APPLICATION

➢ COMPONENTS:

In this project I am implementing:

- Arduino UNO
- Servo motor
- Bluetooth Module HC-05
- Sensor DHT11
- Bread Board
- LED
- Jumper Wires

• IDE:

- Arduino IDE
- Android Studio

➢ INTRODUCTION:

In this project, we are controlling LED, servo motor through smart phone. Secondly, we are sending the messages from android app to Arduino. Also, we are checking the temperature and humidity by controlling the sensor through smart phone.

➢ WORKFLOW:

First of all we have to make Communication between Arduino and android app using Bluetooth. Otherwise you cannot open any options given below. After creating a successful Bluetooth connection with android, you can use the following options:

- LED
- Servo Motor
- Terminal
- Sensor

LED

- You have two options; you can turn off and on the LED.

Servo Motor:

- You can control the speed of servo motor using given slider.

Terminal

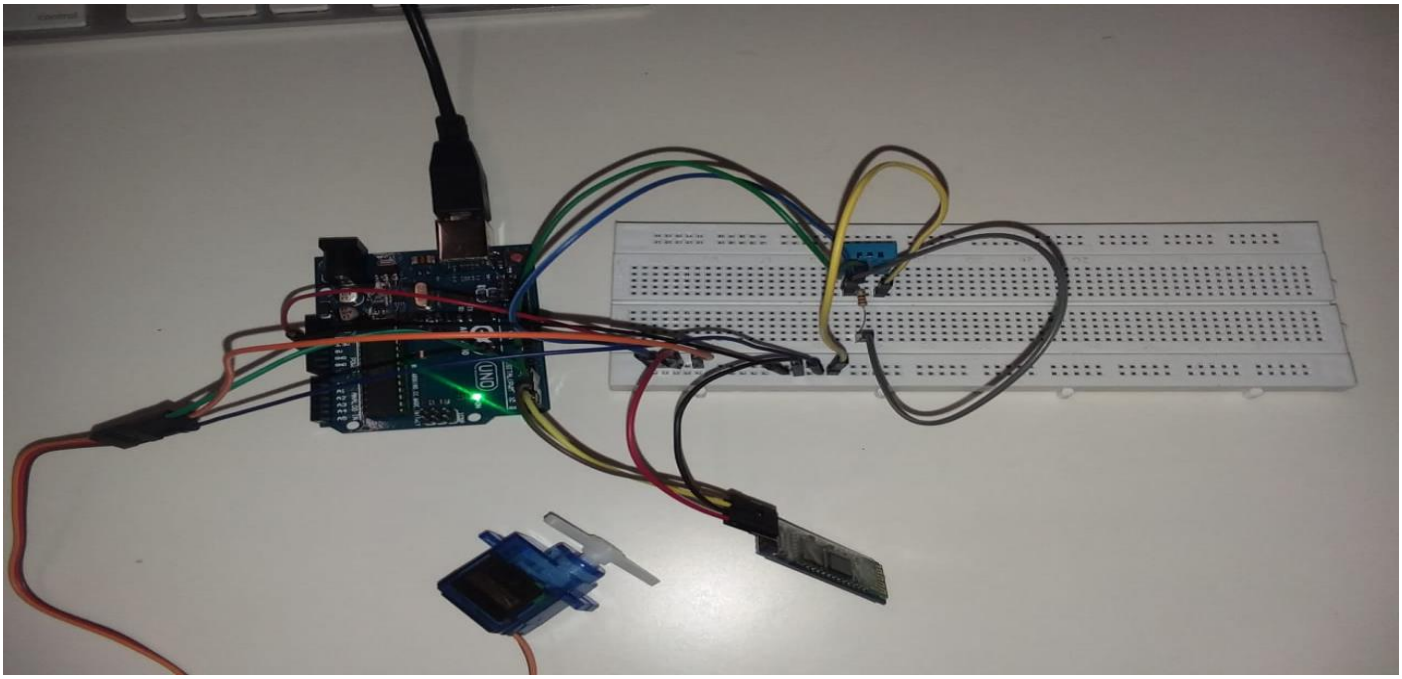
- You can send any message to your android.

Sensor

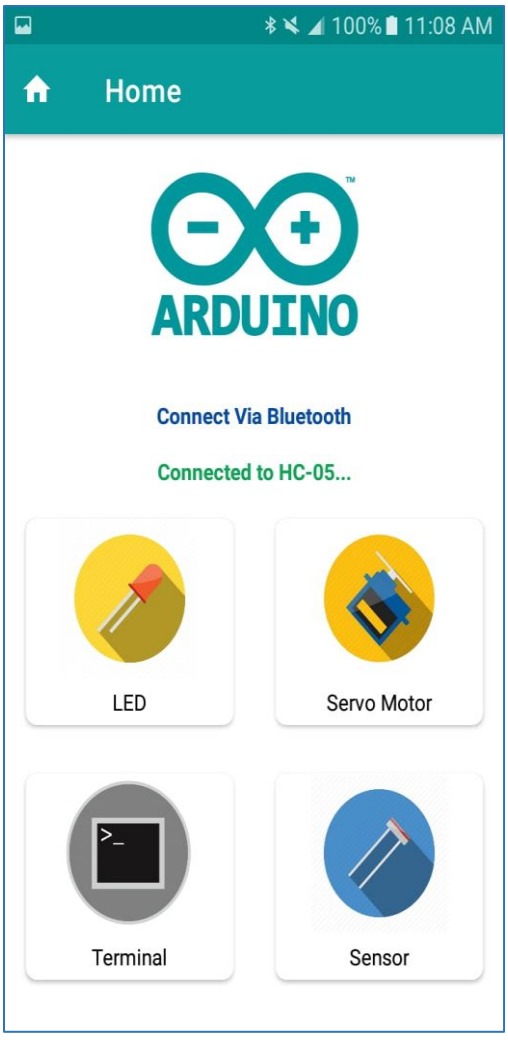
- You can start the sensor then it will display current humidity and temperature of your room.

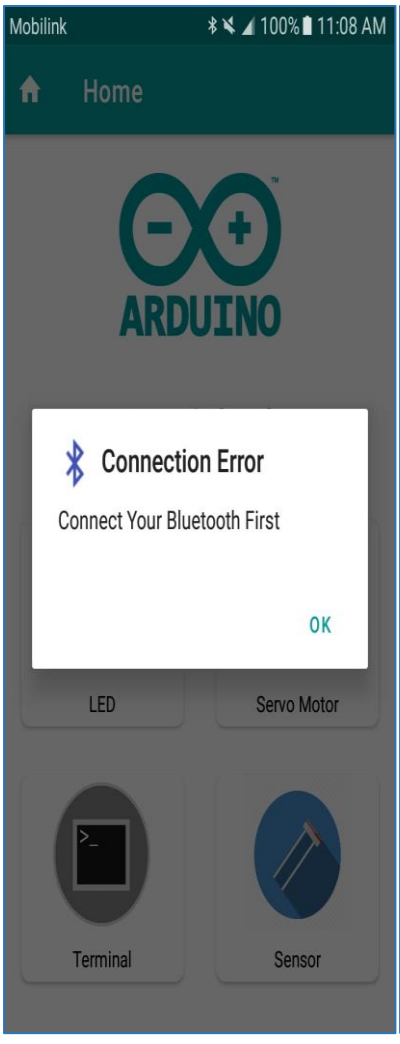
DIAGRAMS:

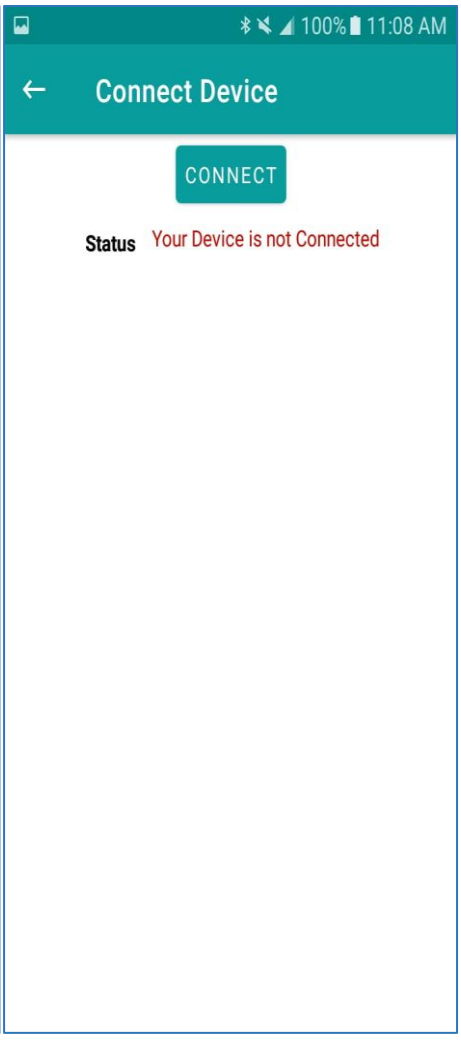
➢ CIRCUIT DIAGRAM:

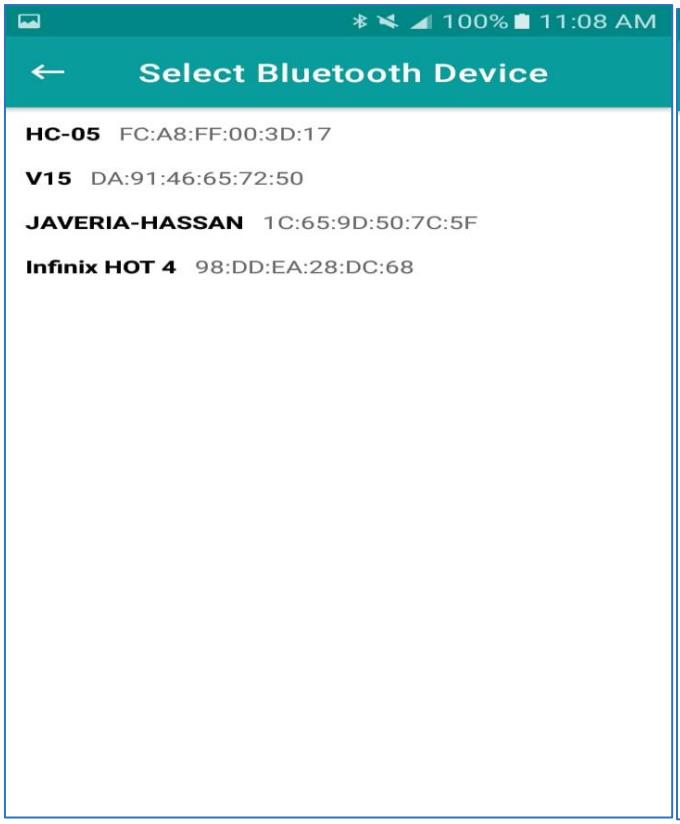


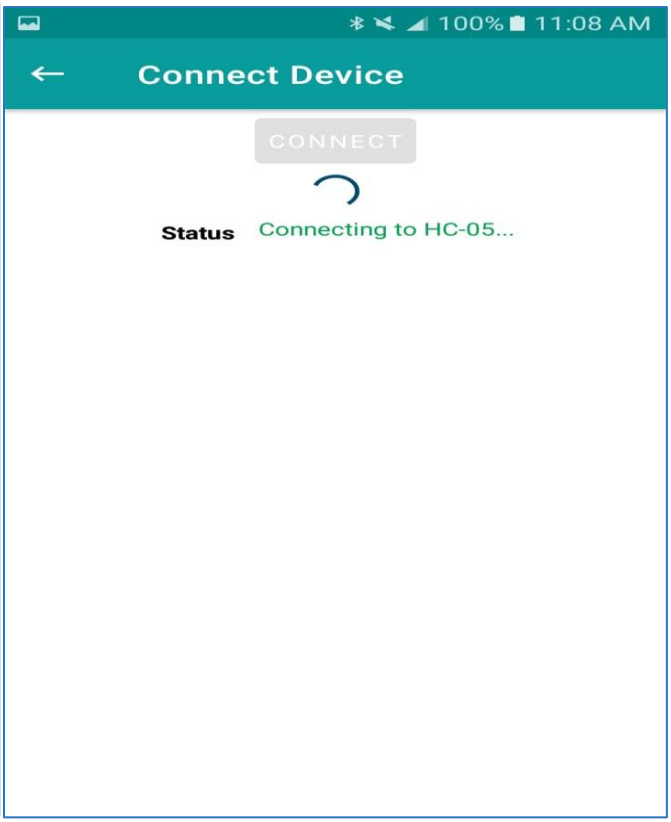
➢ INTERFACES:



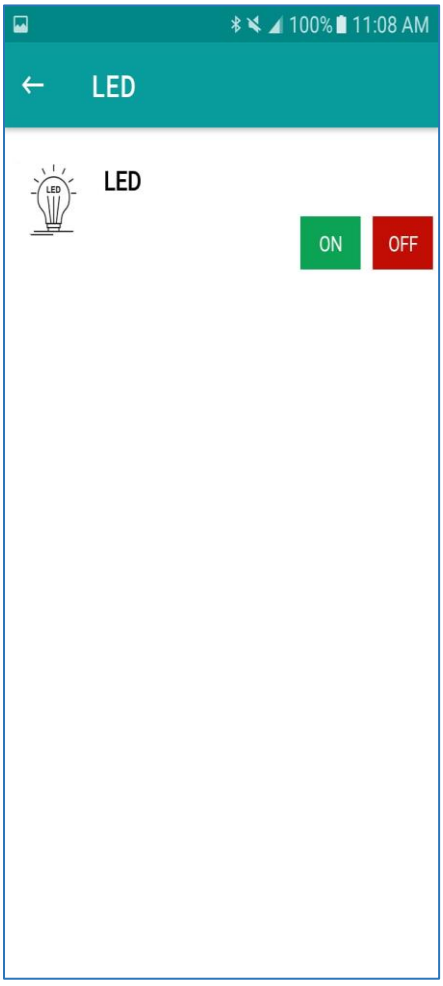


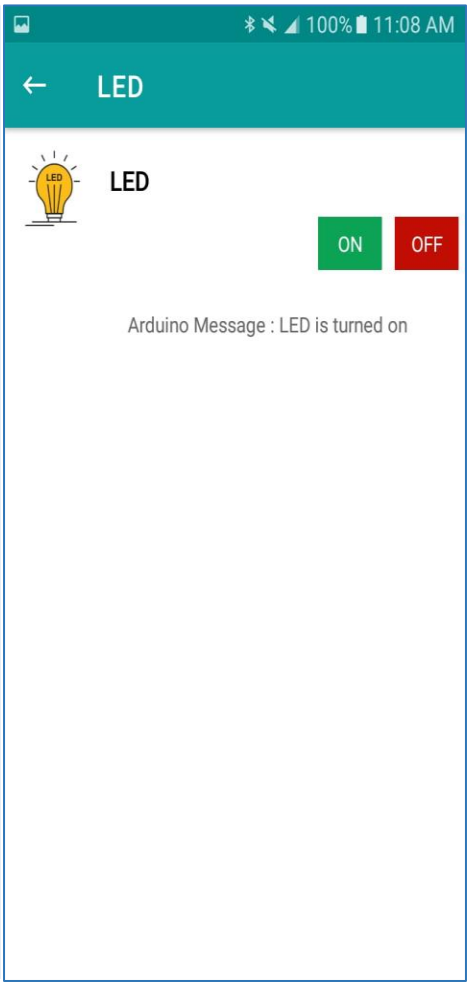


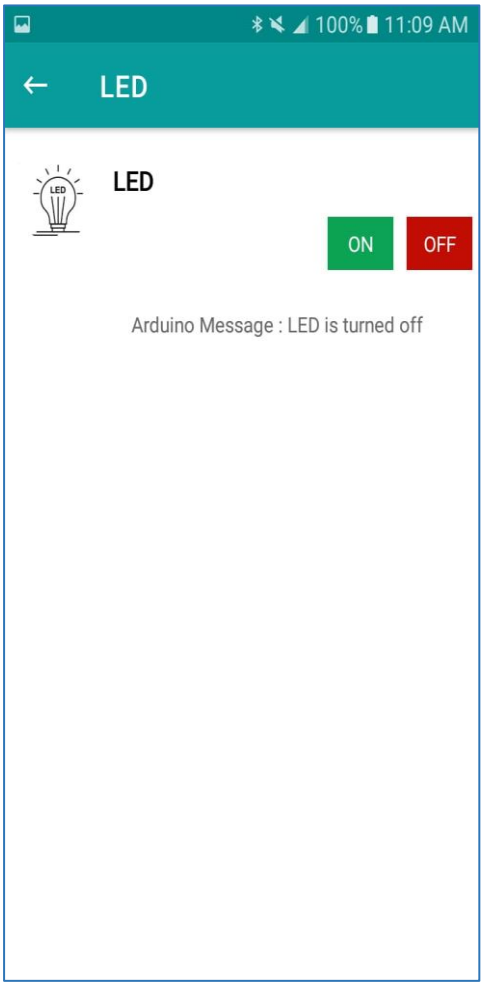




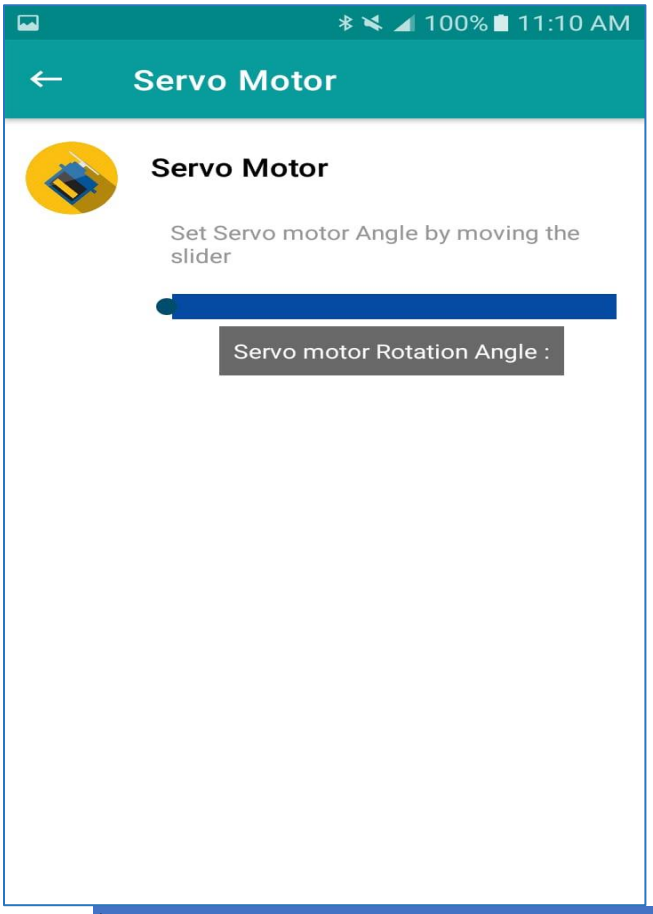
➢ LED INTERFACES:

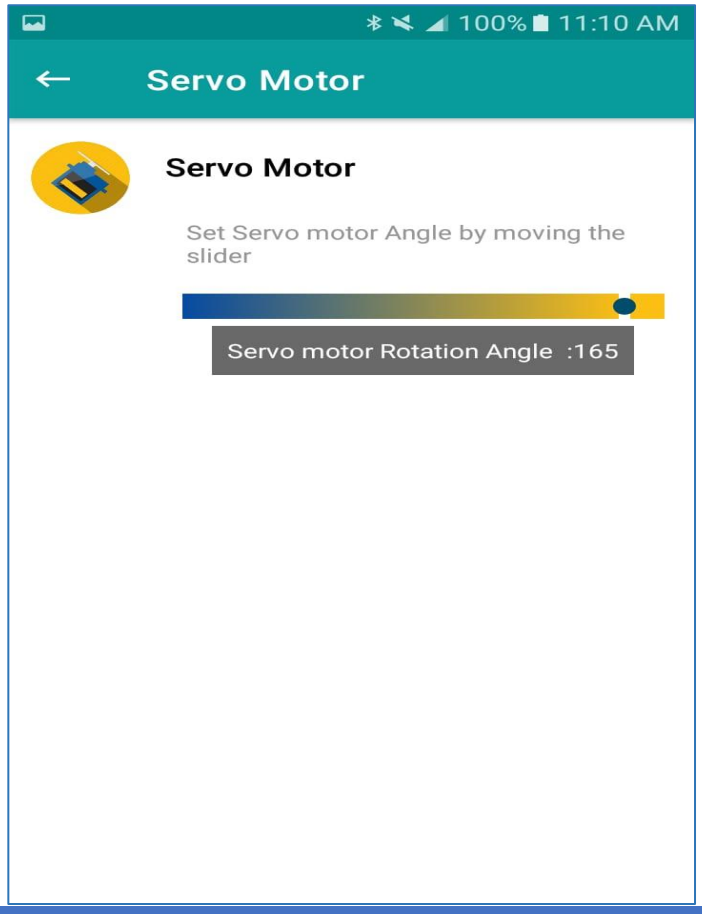




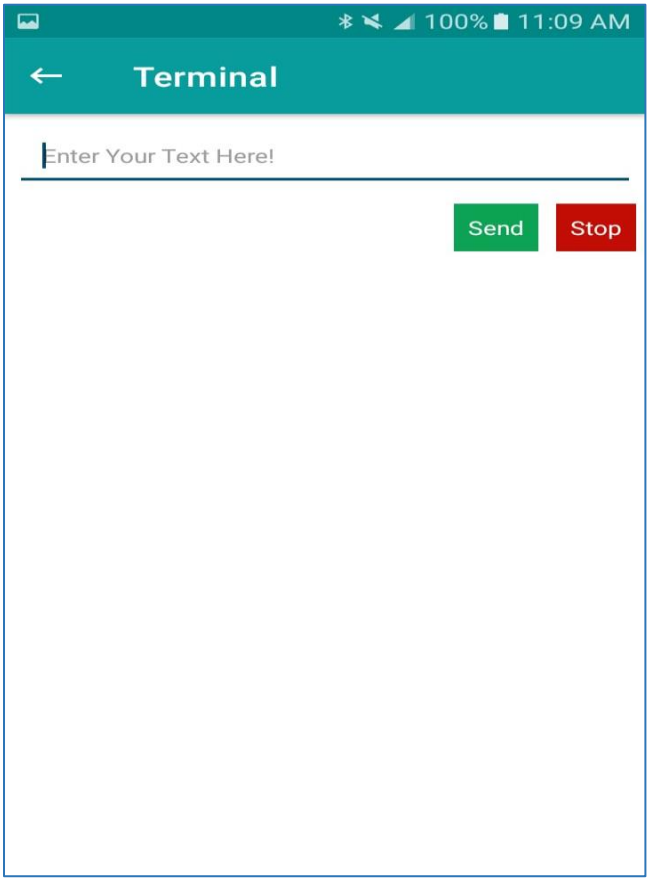


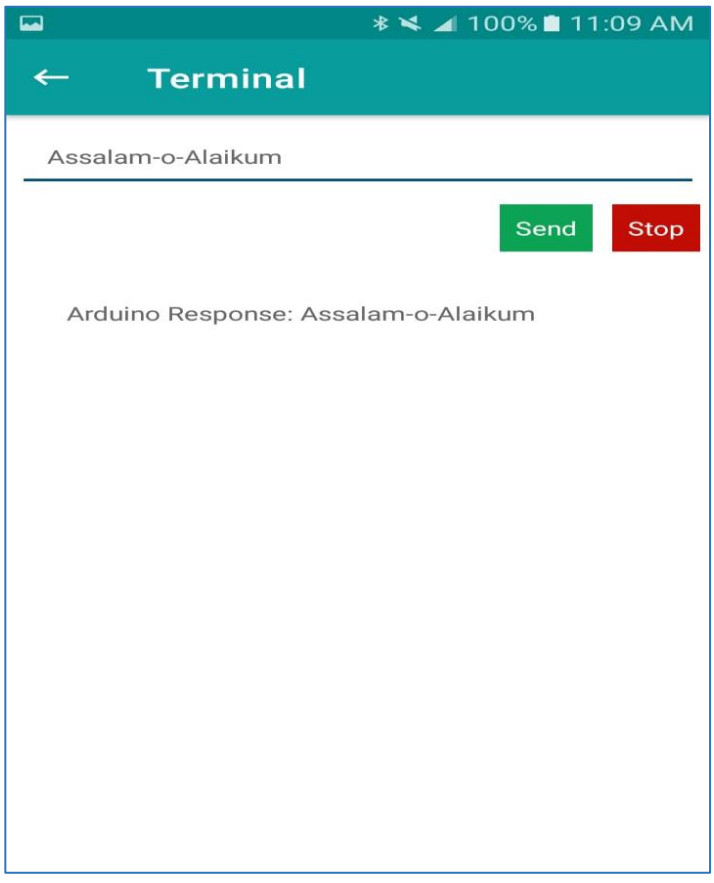
➢ SERVO MOTOR INTERFACES:





➢ TERMINAL INTERFACES:





➢ SENSOR INTERFACES: