Power ON

Buzzer

Wi-Fi Configuration

Timer

Wait for Config. I/P signal

Completed

Timeout

Turning ON Wi-Fi

Connecting to Wi-Fi Network

Checking Internet

Connecting to Firebase

Initializing Sensor Communication

Initializing time

Initializing Outputs

Creating two tasks

NO

YES

**Booting**

Task 1 and Task 2 working on two different cores simultaneously

**Task 2**

Input button sensing

Changing Outputs

Checking power status

**Task 1**

YES

Checking Wi-Fi, internet and

trying to connect again

NO

Timeout

NO

Checking Communication failure

Master reset timer

Checking battery status

Timeout

NO

Sending Feedback to Firebase

Sending Local button Status to Firebase

Reading From Firebase

Sending Sensor Data to Firebase

Timer

Reading Sensors

Reading Time