# Alghorithms

## 1)Getting the error code

1. the algorithm loop through all connected devices
2. It checks if any device got a error
3. If found any error send it to database
4. If not found any error end the process
5. Wait for some time then repeat the steps above

## Sending the error code to user

1. Take the error code from the database
2. Format a message like: (“The error code 303 has been seen on device A ”)
3. Send the message to app via Wi-Fi

4)Confirm the message has been send

## Check the maintenance

1. There will be a variable to store the time before maintence
2. Every month this variable will be updated
3. If the variable be a 100 then its maintenance time
4. The system will notify user in the app

## 4)Showing device status

1. If the user want to status of the device there will be a button like show status
2. If button presses the app will send a signal to database that will send it to cloud
3. The cloud sen signal to the micro-controller that will see is the device status and send it back

## 5)Manual device reset from app

1)If user press device reset do the steps below

2)send reset command to device via cloud

3)confirm the device has been reset successfully

4)Notify the user via app

## 6)Water heater control

1. If the temperature is lower then the target temperature turn the temp higher
2. If its lower turn it up
3. Keep checking

## 7)Microwave control

1. User sets time
2. If the time and temperature has set it start the microwave
3. When the time finishes notify the user