# Alghorithms

## 1)Getting the error code

1. algorithm does error checking the moment the application is opened
2. Checks if any device has received an error
3. Send to the database if any error is found
4. If no errors are found, terminate the process

## 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)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