“The 20 Degree Rule”

Project Community

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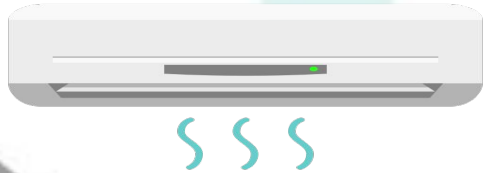
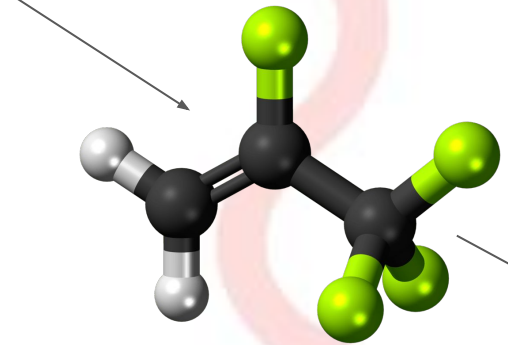
Why are we here ?

Air Conditioner Pollution

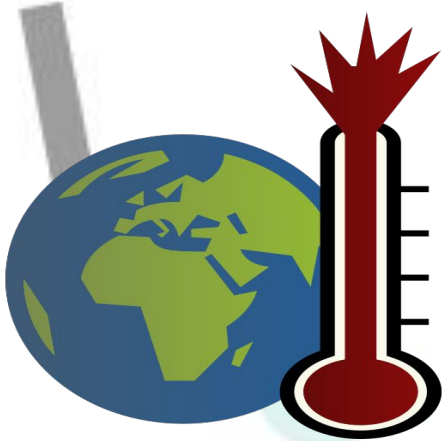




Hydrofluorocarbon (HFC)

&

CO_2



Our Core Objective

- Individual responsibility (Public Awareness)
    - 20-degree rule (Enforcing Rule)
- Optimum Temperature (Auto Implementation)

Technical Solution

Application Front End

<HTML>

Bootstrap

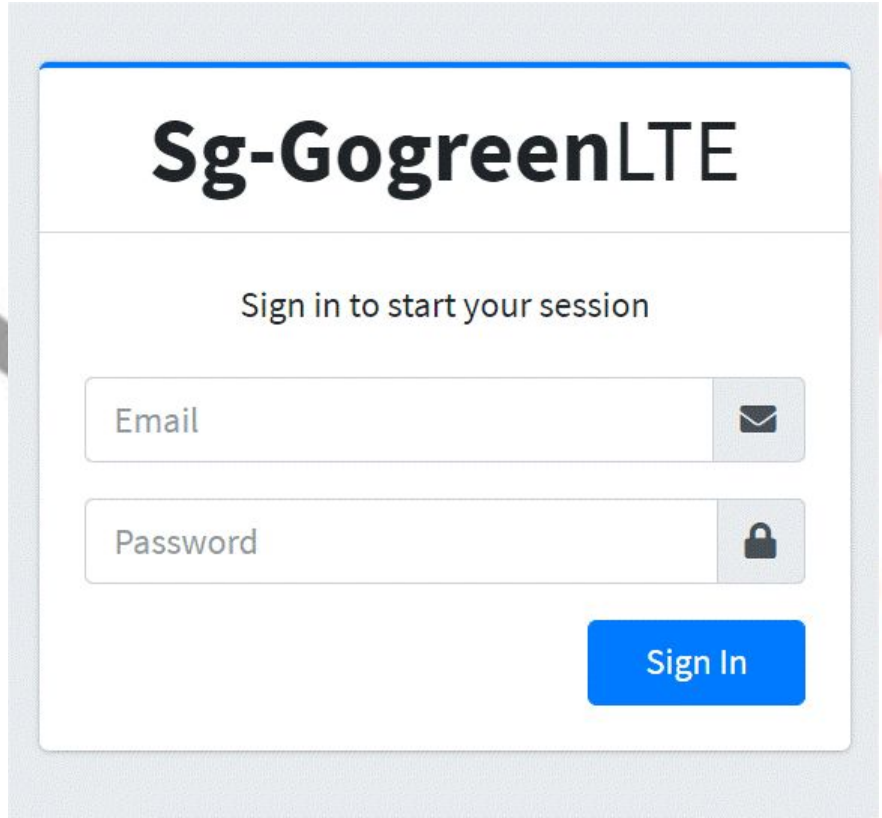
CSS:

JS

Client - Server

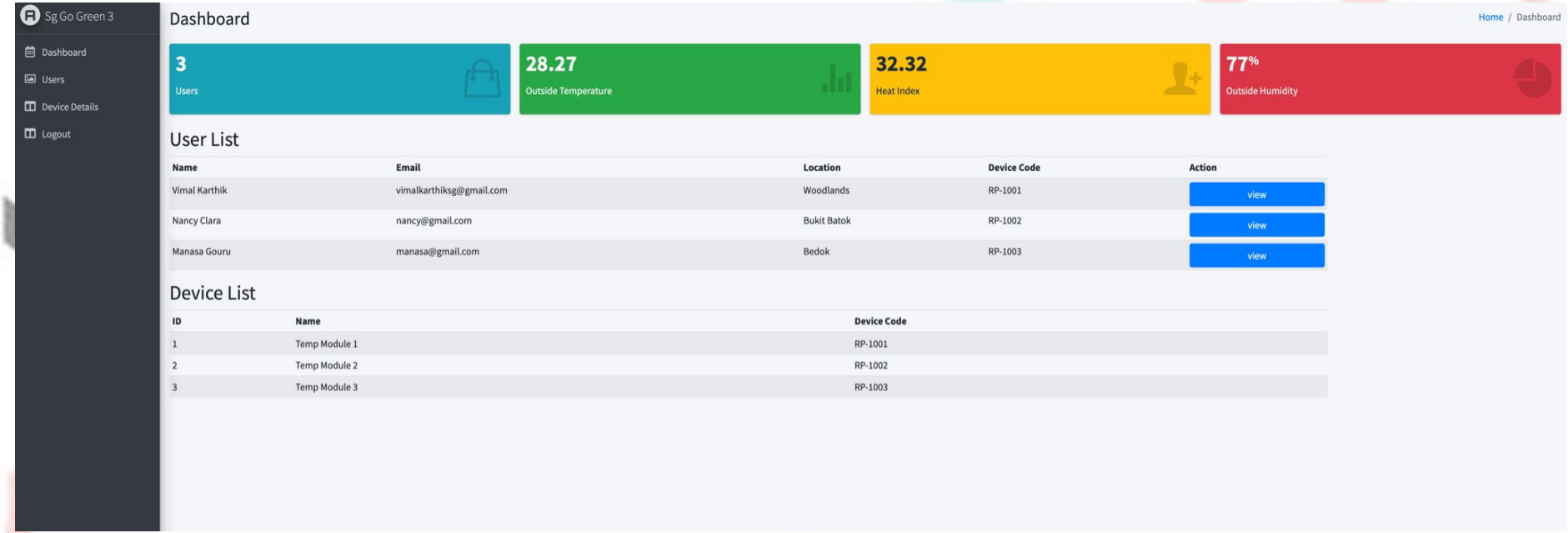
- Host: AWS (EC2)
- Backend : GoLang
- Database: MySQL (Docker Container)
- Temperature Module : DHT11 (Connected to Raspberry Pi)
- Location based Temperature (Open Weather Api)

Admin Login



Access Url : http://sggogreen.com:4000/
Email : admin@gmail.com
Password : password

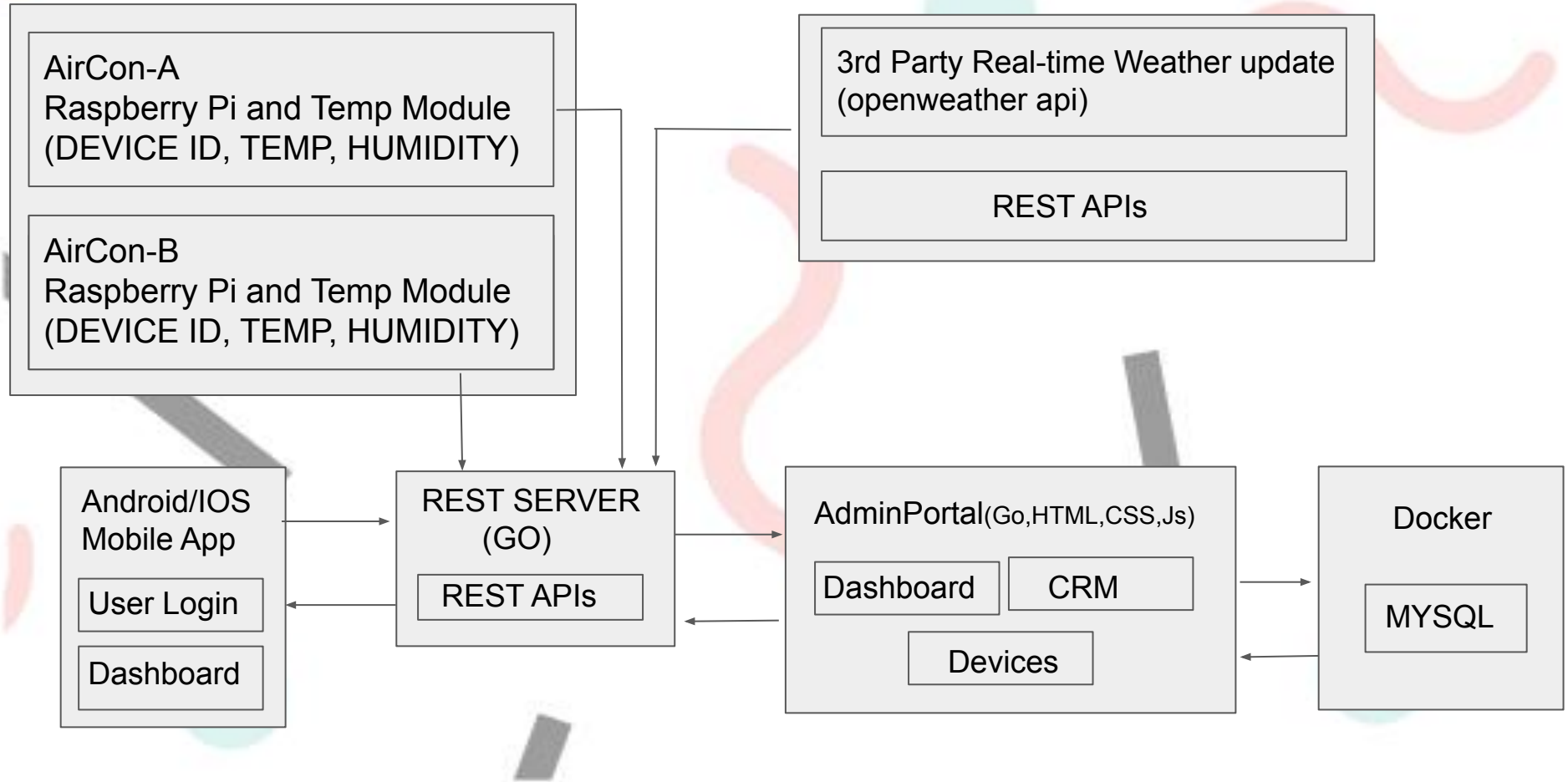
Admin Dashboard



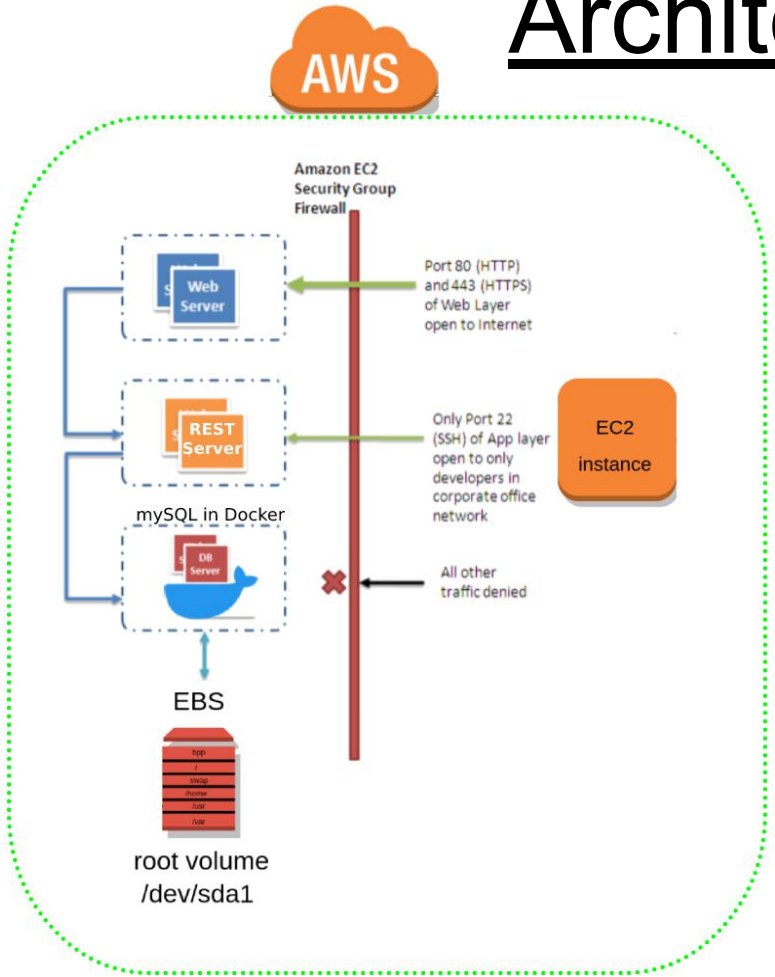
Admin Dashboard: A widget view (Current Temperature, Humidity, Heat Index etc)

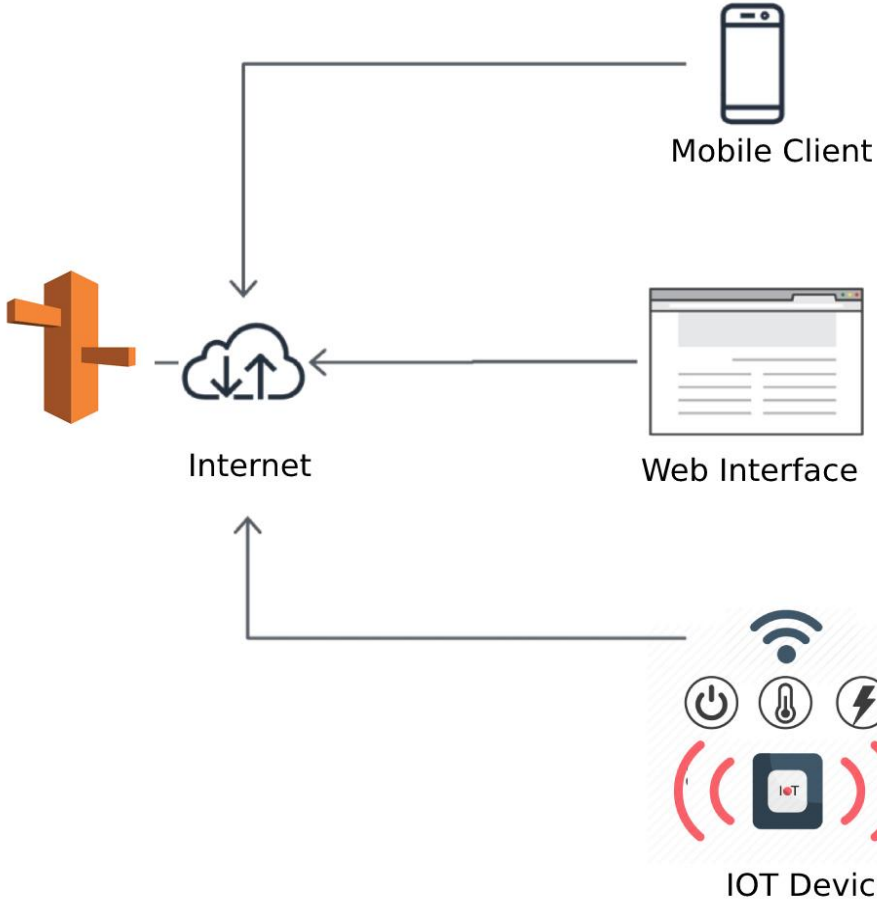
What we have done ?

System Design



Architecture





Web Application Features

Web Application

Access Url : http://sggogreen.com:4000/
Admin Login:
Email: admin@gmail.com
Password: password

Features

User Section: List of All Users Signed Up (CRUD Operations)
Devices Section: List all the Devices been added (CRUD Operations)

Application Advancements

- Implementation of GCM
- Data Security & Advance Data Analytics
- Device Packaging
- Device Integration with Application (QR-Code/Barcode)

Application Features (conti...)

Rest Server

Access Url : http://sggogreen.com:3000/

API Calls (Mobile Application)

GET : (Outside)
Open Weather Apis {{Temperature, Humidity, Heat Index}}

POST : (On premise)
User Sign Up {{First Name, Last Name, Email etc...}}
User Sign In {{Email, Password, Api Key}}
Active Readings {{Temperature, Humidity, Heat Index}}

- Outside readings based on User Location (*latitude n Longitude)

Application Limitations

- Establishment of communication to iOT device
- Advance Data analytics and wrangling


THANK YOU :)