

Dashboard Critical Design Review





Presentation Overview

- Project Overview
- Overall Block Diagram
- Encountered Problems/Issues
- Team's Progress
- Future Tasks
- Timeline/Gantt Chart
- Questions

Project Overview





Project Overview

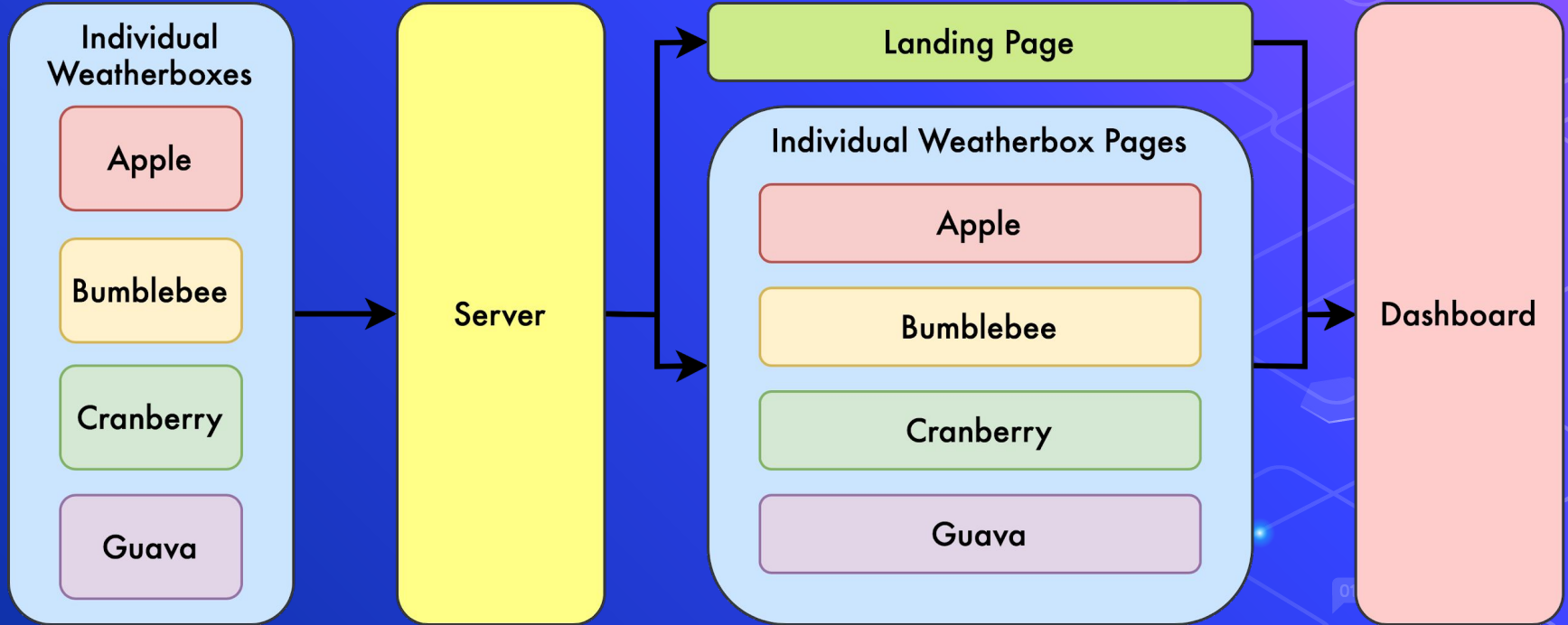
- Create Dashboard using ReactJS framework
- Develop back-end code to link to front-end code
- Present data from gateway correctly onto dashboard
- Deploy dashboard website to a server

Overall Block Diagram



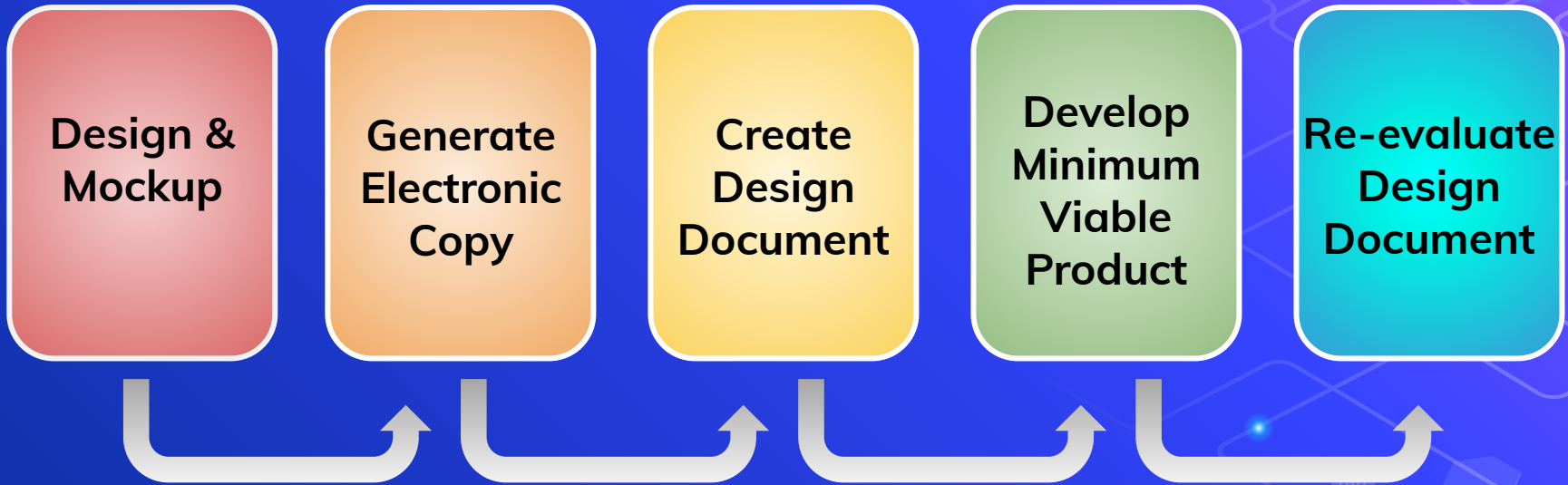


Overall Block Diagram

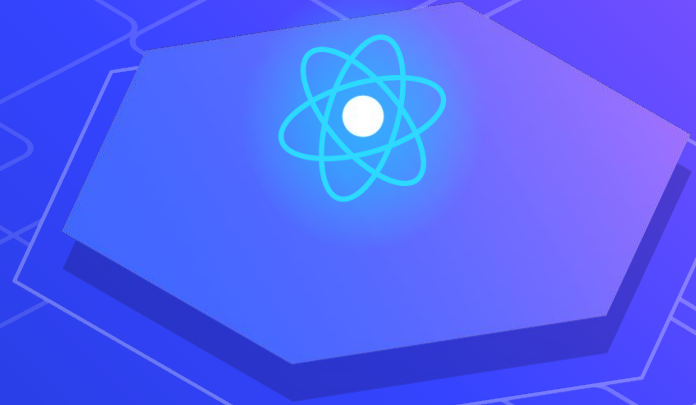




Design Procedure



Encountered Problems

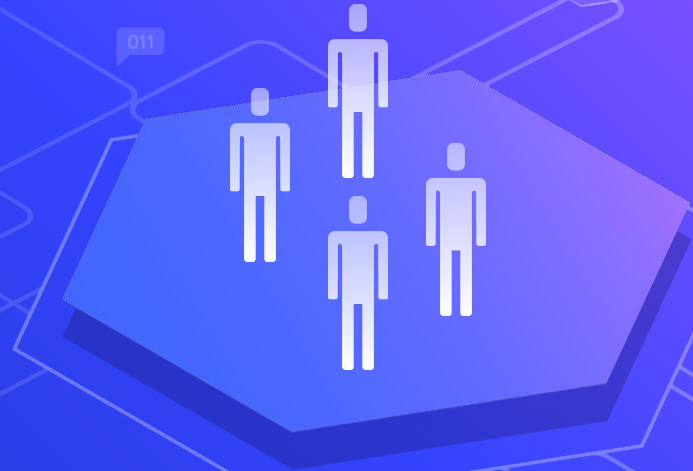




Encountered Problems since PDR

- ⬡ Learning how gateway works
 - Took time to understand how to configure the database
 -
- ⬡ Figure out how to connect everything
 - Front-end → back-end → server
 - Creating our own API for the dashboard
 - Learning PostgreSQL
- ⬡ Time Delays: ...COVID-19

Team's Progress





Team's Progress

- ◊ Successfully accessed SCEL servers and database
 - Help with Kenny Luong (previous Dashboard member)
 - Firmware
- ◊ Researched how to create Backend
 - RESTful API to use with Dashboard
 - Found similar tutorials to assist with progress
- ◊ Finished creating API `index.js` and `queries.js`
 - `index.js`: connects API with dashboard app
 - `queries.js`: functions to query database to get node data



SCEL DASHBOARD

Home

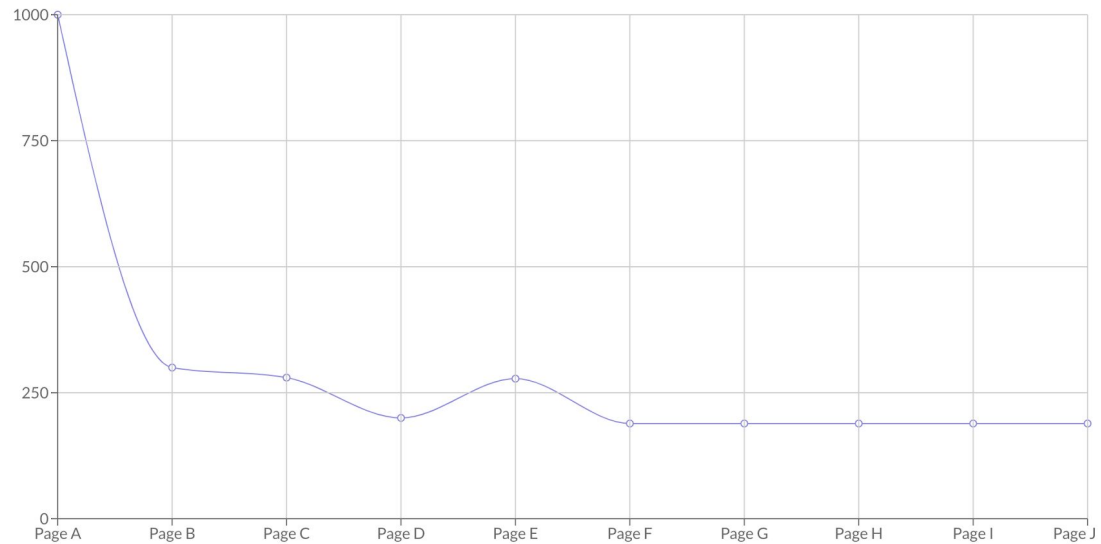
Apple

Bumblebee

Cranberry

Guava

SCEL Dashboard - Overview



1368
W/M²

AVERAGE SOLAR IRRADIANCE

78°F /
26°C

AVERAGE TEMPERATURE

1068 MB

AVERAGE PRESSURE

67%

AVERAGE HUMIDITY

001



SCEC DASHBOARD

Home

Apple

Bumblebee

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Guava

1368 W/M²

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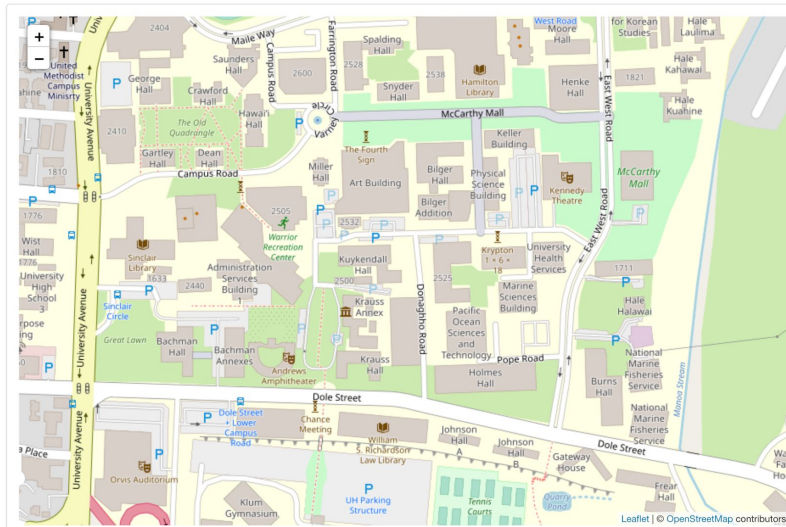
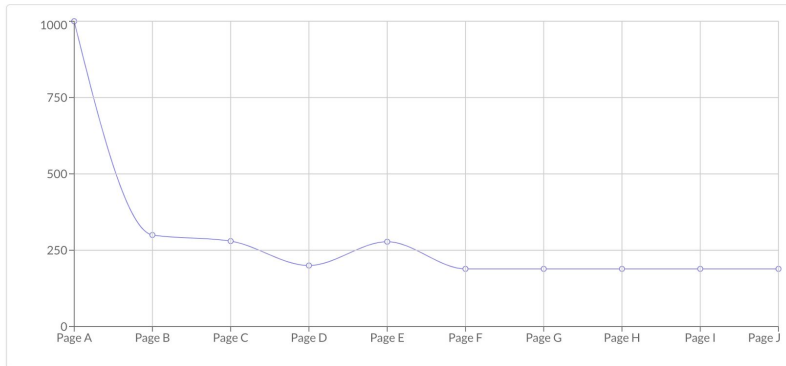
AVERAGE PRESSURE

67%

AVERAGE HUMIDITY

Apple Data

Last Updated: February 24, 2020 - 16:04

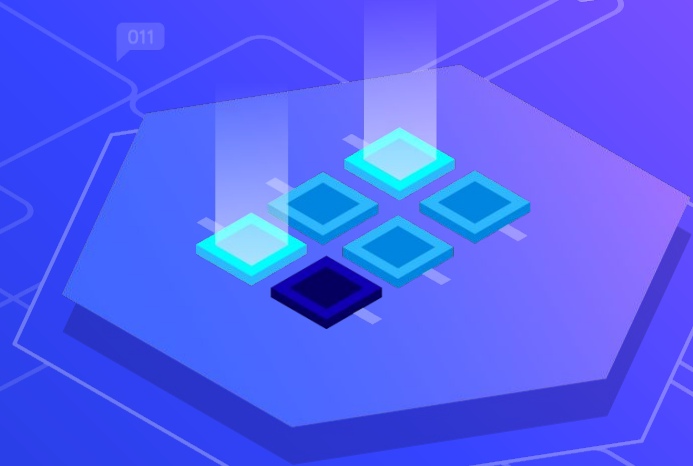


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Future Tasks





Future Tasks

- ⬡ Get back on track -- adjusting to online academia
- ⬡ Work more with Kenny
- ⬡ Troubleshoot any problems with API data results
- ⬡ Update dashboard to be dynamic website
 - Use data results to populate components
 - Fix any CSS/aesthetic issues
- ⬡ Documentation for next Dashboard team
 - Include ways to deploy Dashboard



Gantt Chart (revised)

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Questions?

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