

Team/Instructor scrum #3

Team member & project (re)introductions

A tool that utilizes building energy consumption metrics and solar intensity data to calculate accurate ROIs on solar power generation. This tool will allow customers to see how different photovoltaic (PV) systems match up to their requirements, so they can make informed decisions. This tool could also utilize this data, once installed, to ensure that the solar power generation is meeting standards, and if not, alert the customer of an issue such as snow blockages, cracks, etc. There could also be an extension into other Greenwave business domains, such as power storage sizing for cloudy days and the night time.

Roles/Responsibilities

Tristan - data representation, meeting coordinator, server/web management, back-end design

Karlee - documentation, GitHub/wiki management, front-end design, meeting minutes

Kaden - data processing/management, vlog editor, back-end design

Scrum dates

Oct. 15, 2021 - Oct. 29, 2021

Status description

Project Status - Green

We feel like we have a good base and understanding of what is needed for the project at this point. We would have liked to have dived into some of the front-end and back-end development already, but we still feel like we are “on track” and plan to start on that during the next sprint.

Team Member Contributions

Tristan - Explored data visualization (ApexCharts.js, d3.js, Chart.js), Explored solar data APIs, Initial class diagram

Karlee - Lo-fi UI prototypes, Explored front-end technologies (React.js, Angular, Vue.js), Researched solar generation equation, Meeting minutes

Kaden - Data sources and equations, Back-end (PHP - Laravel)

Group - Met with Dr. Yow, Met with Greenwave Innovations, Vlog #2, Signed Greenwave capstone agreements

Project issues/changes

- No major issues or changes with our project

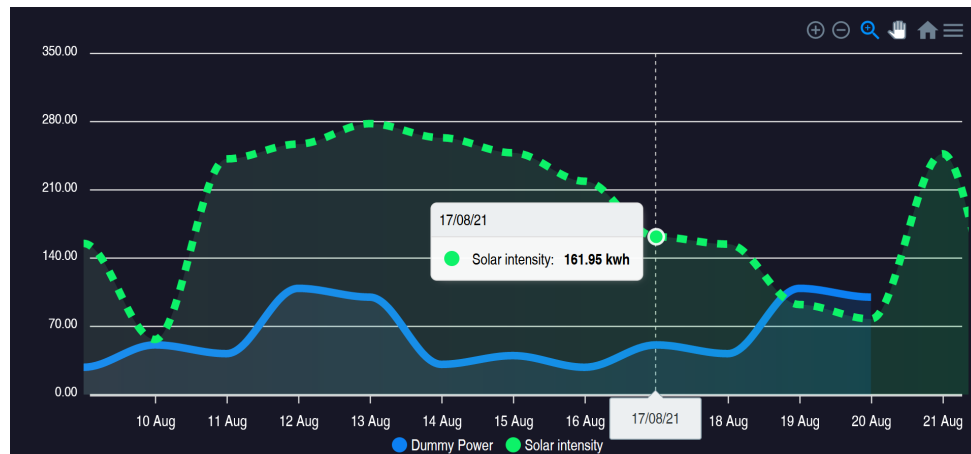
Documentation overview and/or project demo

- Graphing Decision Matrix

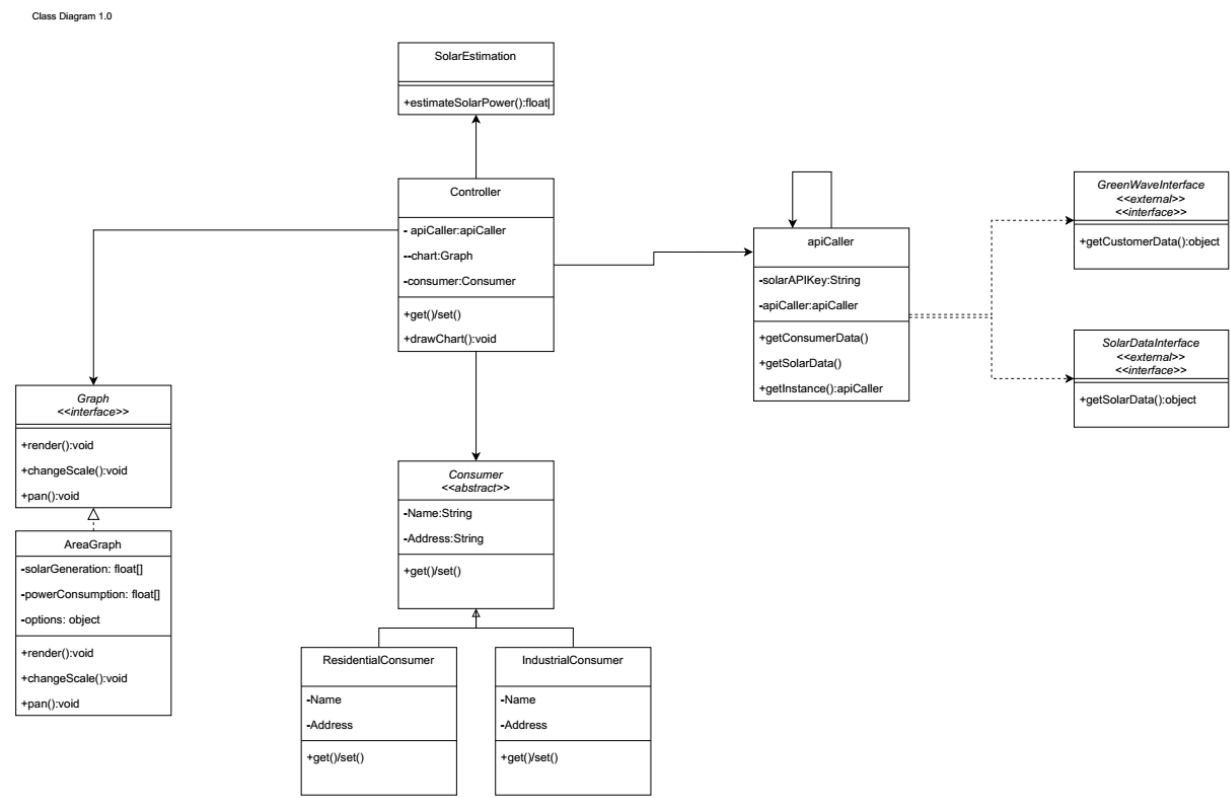
Graphing Solution

	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	
CRITERIA DESCRIPTION	LEARNING CURVE	CUSTOMIZABILITY	RESPONSIVENESS	VISUAL APPEAL	DOCUMENTATION	
	Criteria 1	Criteria 2	Criteria 3	Criteria 4	Criteria 5	WEIGHTED SCORE
WEIGHT	3	2	3	4	5	17
	18%	12%	18%	24%	29%	100%
OPTIONS	Criteria 1 SCORES	Criteria 2 SCORES	Criteria 3 SCORES	Criteria 4 SCORES	Criteria 5 SCORES	
d3.js	1	3	1	3	1	2
Chart.js	2	2	4	3	4	3
Apexchart.js	3	3	5	4	3	4

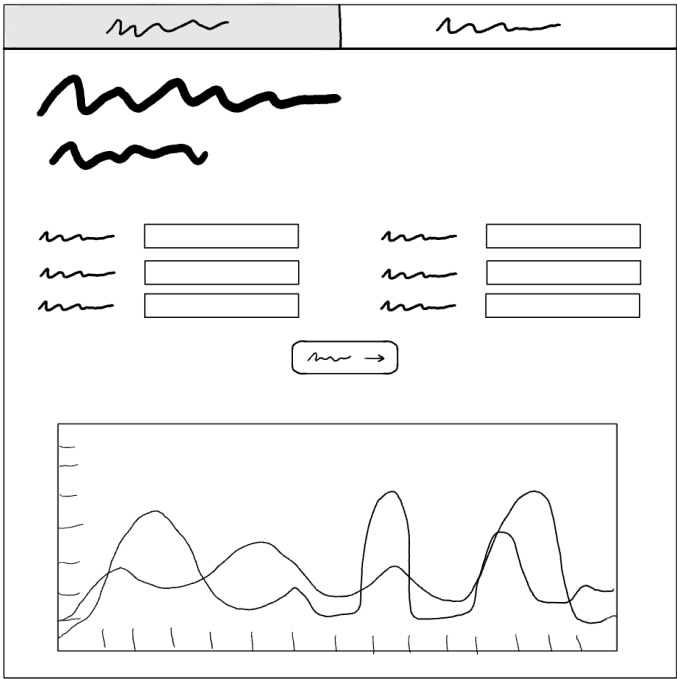
- Area Chart Testing



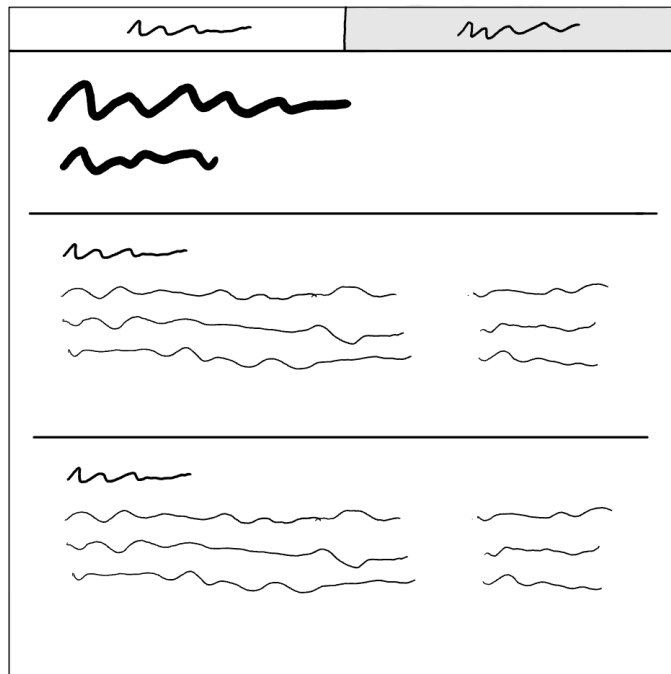
Initial Class Diagram



Lo-fi Prototypes



Generation
Overlay



Summary

Details

Next up

Overview of next several weeks: high fidelity prototypes, back-end development, front-end development, data visualization, and MVP 1

Tristan - Begin building data visualization (with ApexCharts.js), Connect visualization with APIs, Integration with front-end user inputs

Karlee - Gantt Chart, Hi-fi UI prototypes, Pick front-end technology and start experimenting with it, Start front-end development

Kaden - Create backend (PHP - Laravel and SQL), Test out data

Group - Meet with Dr. Yow, Meet with Greenwave Innovations, Finalize solar production calculations, Finalize solar data source decisions, Get power consumption data from Greenwave

Team reflection

Discuss:

- Does the team feel "on track"? (reiterate the above colour status)
 - Green status
 - Yes, we have a good base so we feel like we are “on track”

- What progress does the team particularly feel good (great) about?
 - Lots of new things to learn, we feel we've done well trying to figure out solar/PV's
- What barriers (if any) does the team feel are a current impediment to success?
 - No barriers at this time
- What help (if any) does the team require to move positively forward?
 - None
- What questions or concerns does the team have (if any)?
 - No questions at this time