SolarSize - Vlog #3 Script

Team member (re)introductions

Tristan Brown-Hannibal

- Data representation
- Server/web management
- Back-End Design

Karlee Fidek

- Documentation
- GitHub/Wiki Management
- Front-End Design
- Meeting Minutes

Kaden Goski

- Data Processing/Management
- Back-End Design
- Vlog Editor

Brief project blurb

We will be working with a local company, Greenwave Innovations, to develop 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.

Business Need/Opportunity

The problem is that there is not a good way to quickly size the needs of a customer, with respect to their individual circumstances. Two organizations may use the same amount of power, but the PV solution may be completely different. This is because of aspects like the solar intensity of a location, or the physical makeup of an organization's space, where they would install these solar generators. Being able to profile, and give accurate information about a solar solution, would help customers make better choices, and maximize their ROI.

Project activity dates

October 15, 2021 - December 3, 2021

Project activity

October 15, 2021 - December 3, 2021

We participated in team/instructor scrums #3 and #4. We met with Greenwave Innovations for guidance and to get consumption data from their customer. We finished MVP 1 and will complete vlog #3.

Tristan Brown-Hannibal

- Set up EC2 server
- Configured Laravel on EC2
- Implemented basic routing and API calls
- Connected Front-end Vue to Back-end calls

Karlee Fidek

- Lo-fi and hi-fi UI prototypes
- Gantt chart
- Started front-end development in vue.js
- Meeting minutes

Kaden Goski

- Created a Solar Panel Power Estimation Model
- Connected to Nasa Power API

Group

- Met with Greenwave Innovations
- Received consumption data from Greenwave Innovations
- Team/instructor scrums
- Completed MVP 1

Status description

Project Status - Green (on track)

We were able to get our web server up and running. We ended up being able to finish our MVP 1 so we feel like we are on track for next semester.

Project issues

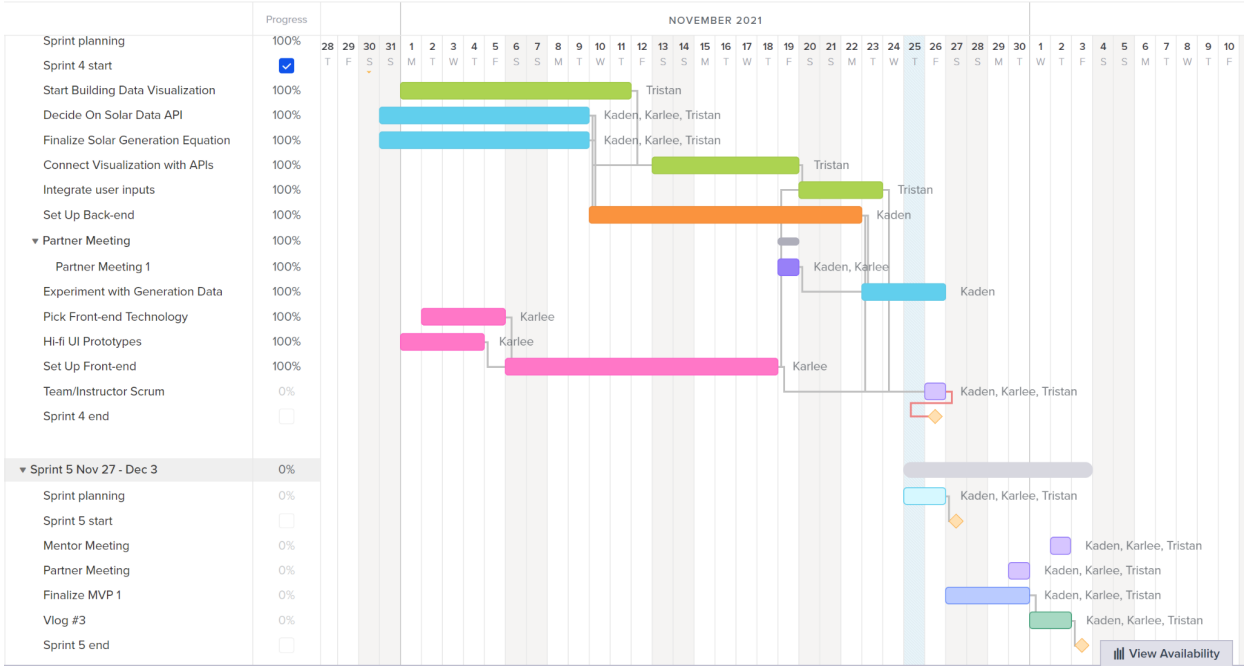
- We could potentially run into issues with retrieving real-time solar data

Project changes

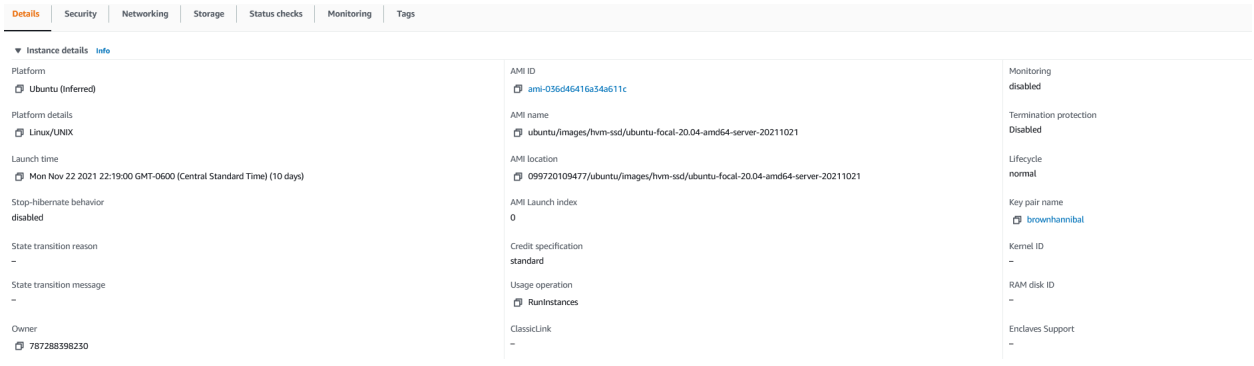
- No project changes

Documentation overview and/or project demo

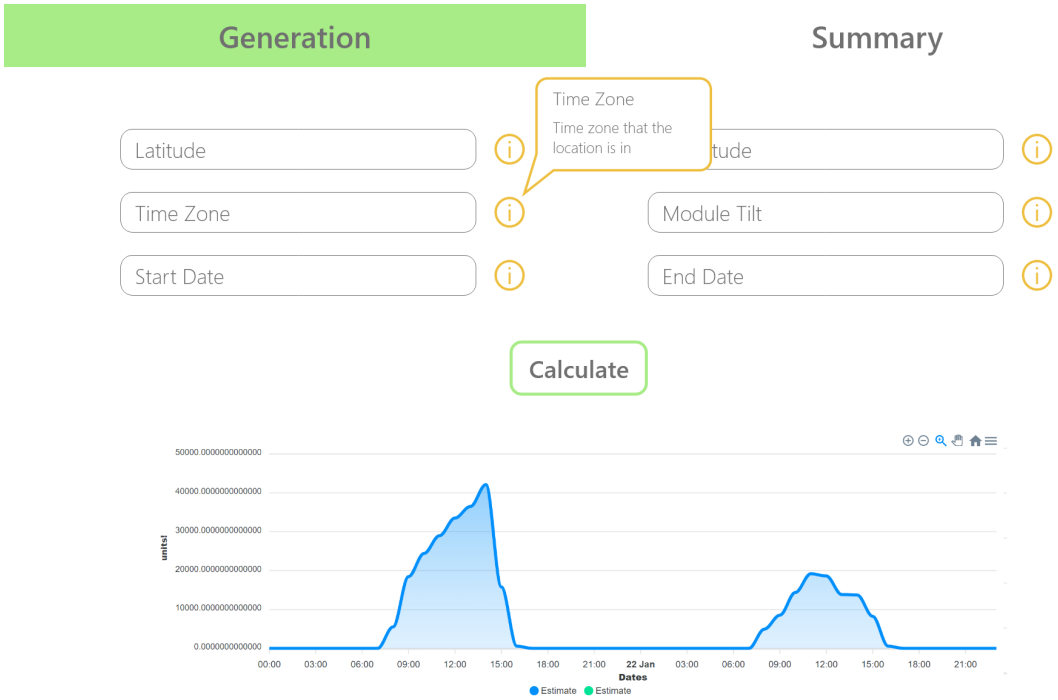
Gantt Chart:



EC2 Server:



Hi-fi Prototype:



Demo:

Next up

Overview of next several weeks: start project day documentation, add summary page to web application, work on real-time data overlay

Tristan Brown-Hannibal

- Improve User inputs
- Add map selection
- Add overlay of consumption
- Contribute to summary page

Karlee Fidek

- UI improvements
- Add learning information to UI
- Add summary page with details
- Potentially work on user/company login functionality
- Documentation
- Meeting minutes

Kaden Goski

- Tune the solar panel estimation model
- Find a real-time solar and weather data API

Group

- Meet with Greenwave Innovations
- Meet with Dr. Yow
- Get more data from Greenwave Innovations
- Complete project day requirements

Retrospective

Discuss and reflect on the team's choices and progress in ENSE 400:

- What went well?
    - It is and has been beneficial to have a company to communicate with
    - MVP 1 goals have been met
    - Learned new technologies (Laravel/Vue.js)

- What could be improved?
    - More often mentor and group meetings

- What will the team commit to continue or change in ENSE 477?
    - Shorter, more often meetings amongst group

Team reflection

Discuss:

- Does the team feel "on track"? (reiterate the above colour status)
    - Green Status
    - We feel like we are on track. We finished MVP 1

- What progress does the team particularly feel good (great) about?
    - We feel good about finishing MVP 1

- What barriers (if any) does the team feel are a current impediment to success?
    - Access Real Time API Data
    - Nasa data lags behind a couple months

- What help (if any) does the team require to move positively forward?
    - Greenwave Innovations input and expertise on solar panel

- What questions or concerns does the team have (if any)?
    - No questions or concerns at this time