



Project Status report

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Community (UN SD goal):	Individual participation/Serving a context community: Members of residences in Canada who wish to track and manage their household energy consumption to adopt sustainable practices. Goal(s) 7 and 11
MVP #	1, 2 and 3
Sprint cycle dates:	October 31, 2023 – November 14, 2023

Project Name	EconergyCalc – Home Energy Calculator Application
Blurb	<p>This project aims to build an interactive web application where users can add or log the electrical appliances they use regularly in their household and receive their total energy consumption. The application will also provide users with weekly/yearly energy consumption predictions and give actionable recommendations, such as providing more sustainable or eco-friendly alternatives for appliances that use more energy than they should.</p> <p>In line with UN Sustainable Development Goals 7 (Affordable and Sustainable Energy) and 11 (Sustainable Cities and Communities), this project addresses the pressing global challenge of household energy consumption.</p>
For Week Ending	November 14, 2023
Project Status	Green
Status Description	<ul style="list-style-type: none">- MVP (Minimum Viable Product) #1 and #2 have been completed.- On track for the completion of MVP #3 before the next sprint cycle.- Plans to potentially enhance the user experience with additional features beyond MVP.
Activities—During the past sprint cycle	

- **Front-end Development** – Completed implementation of Dashboard, Recommendations, and Forum pages:
 - o **Dashboard:**
 - Implemented weekly/monthly energy consumption graphs.
 - Users can add new appliances and its details.
 - Displays list of user's previously added appliances which users can edit or delete.
 - Users can log their appliance usage either by using a stopwatch or entering the time in seconds.
 - o **Recommendations:** Provides generic energy-saving tips based on user appliance data.
 - o **Forum:** Allows community interaction through posts and discussions.
- **Back-end Development** – Implement API to fetch/store the following data:
 - o **Accounts:** Users can create accounts as well as securely login using their credentials and authentication-token
 - o **Appliances:** Users can add, edit, or delete appliances from their account
 - o **Usage:** Users can log their appliance usage
 - o **Recommendations:** Users will receive recommendations based on the type of appliances they add
 - o **Posts:** Users can add and view posts on the Forum



Project Issues

- APIs to advertise products such as Amazon Storefront are paid or require unattainable prerequisite necessitating alternative solutions.
 - o Potentially use an API to generate fake advertisements for the purposes of the project which theoretically will be replaced by legitimate advertisements in production

Project Changes

- None

Activities—Planned for Next Week

- **Completion of MVP #3:**
 - o Improve on the recommendations to be more personalized and implement backend APIs to provide more energy efficient alternatives to users.
 - o Add ability for users to like or dislike posts and reply to other posts on the forum.
 - o Include gamification features by implementing a leaderboard to show the most active/helpful contributors on the leaderboard.
- **Implementation of Additional Features:**
 - o Explore and possibly implement additional mechanisms for users to easily add their appliances either by taking a picture or using the appliance's model number.

Reflection

Do you feel "on track"?

- Yes, I feel on track to complete MVP #3 and potentially have time to implement the additional features during the next sprint cycle.

What progress do you particularly feel good (great) about?

- I am satisfied with the implementation of the graphical user interface in the dashboard using the Chart.js library, which made the task much simpler compared to developing the graph from scratch.

What barriers (if any) do you feel is/are a current impediment to success?

- Working on the recommendations seems a bit challenging as generating personalized recommendations can be challenging. Additionally, most APIs for advertising sustainable products from e-commerce sites are paid necessitating the need to look for alternative solutions.

What help (if any) do you require to move positively forward?

- None

What questions or concerns do you have (if any)?

- None