



# **ENSE 405**

## **Scrum 1:**

### **EconergyCalc - Home Energy Calculator Application**

By Archisha Bhattacharya

# Project Introduction

## Aim

Develop an interactive web application for users to log electrical appliances and calculate total energy consumption.

## Benefit

Provides weekly/yearly predictions and actionable eco-friendly alternatives.

## UN SDG(s)

Meets UN Sustainable Development Goals 7 & 11.



**UN SDG 7 – Affordable and Clean Energy**



**UN SDG 11 – Sustainable Cities and Communities**

Source: <https://sdgs.un.org/goals/goal7>, <https://sdgs.un.org/goals/goal11>

# Project Status

## Status: **Yellow**

- Adapting to MERN technology stack is time-intensive.
- The process of researching and identifying the most efficient APIs for actionable recommendations is still in the pipeline.

## Actions to Return to **Green**

- Dedicate more hours to MERN stack and consider guidance.
- Prioritize API research.

# Activities—During the past sprint cycle

## Front-end Development:

- Created pages for user Login/SignUp, which will allow secure and efficient user onboarding.
- Implemented 'Add New Appliance Form', tailored to capture appliance-specific details.
- Created a static Dashboard page to display energy metrics.

## Back-end Development:

- Completed initial MongoDB configuration, to add new users and appliances

# Project Issues and Changes

**Project Issues**    None

## Scope Refinement

- Due to time constraints and to maximize user engagement, the project's focus has been narrowed specifically to kitchen appliances.

## Usage Logging Feature

- Introduce a new feature allowing users to log appliance usage, fostering daily or weekly tracking.

## Appliance State Toggles

- Integrate a user-friendly system enabling users to "tag" their appliances as active or inactive, enhancing real-time energy consumption tracking.

# Activities—Planned for Next Week

## Integration


- Bridge the front-end and back-end systems, ensuring seamless data exchange and enhanced functionality where users will be able to create accounts and store appliances.

## MVP #1 Completion

- The primary objective is to complete the first Minimal Viable Product, encompassing secure user registration, appliance management, and comprehensive energy consumption analytics.

## MVP #2 Kick-off

- The next phase will embark on the journey to enhance dashboard analytics, encapsulating visual representations of daily, weekly, and monthly energy consumption trends.



**Thank you!**  
**Questions?**