



Project requirements

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Community & UN SDG(s): 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

Date: October 20, 2023

Project Name

EconergyCalc

Functional Requirements

1. User authentication:

FR1.1: The system shall allow users to register, log in, and log out.

FR1.2: The system shall authenticate users using a secure method (e.g., password, OTP).

2. Dashboard:

FR2.1: The system shall display an intuitive dashboard featuring a list of added appliances and basic consumption statistics

FR2.2: Users shall be able to add, edit, or delete appliances.

3. Add appliance:

FR3.1: The system shall allow users to input and modify appliance details (name, power rating, usage duration, and quantity).

4. Notifications:

FR4.1: The system shall send notifications to users for various alerts and reminders.

5. Community forum:

FR5.1: Users should be able to share their achievements and post on the forum.

FR5.2: The system shall display a leaderboard based on energy-saving metrics.

Technical/Performance Requirements

1. User authentication:

TR1.1: The system should securely encrypt and store user credentials.

2. Dashboard:

TR2.2: Any action (add/edit/delete) shall reflect immediately on the dashboard.

3. Add appliance:

TR3.1: All entries shall be validated for format and data type.

TR3.2: Changes shall be updated in the database.

4. Energy Consumption Calculation:

TR4.1: Calculations of consumption and cost should be accurate.

TR4.2: Calculations should be completed and displayed immediately following data input/update.

5. Notifications:

TR5.1: Notifications shall be sent in real-time.

6. Community forum:

FR6.1: The leaderboard should be updated in real-time.