CSIS 4495-002 (Applied Research Project)

Progress Report 1

Project name: **EcoTots**

Submitted To:

Prof. Padmapriya Arasanipalai Kandhadai

Submitted By:

Gurkanwal Singh

ID: 300375339

Work Log Table

Date	Number of Hours	Description of Work done
Jan 17, 2025	2	Searched current real-world problems.
Jan 20, 2025	2	Identified possible solutions and selected project topics.
Jan 23, 2025	1	Discussed selected topics with professor and finalized the topic.
Jan 25, 2025	1	Discussed proposal structure, contributions, and web app setup with team members.
Jan 26, 2025	2	Worked on project proposal and outline of whole project.
Jan 27, 2025	1	Developed project functionalities and user stories for a comprehensive approach.
Feb 1, 2025	1	Studied the Sign-in functionality implemented by a team member.
Feb 2, 2025	3.5	Completed Sign-in functionality started by a team member. Integrated Redux persist for authentication session management.
Feb 3, 2025	3.5	Implemented Google Sign-up and Sign-in using Firebase Authentication.
Feb 4, 2025	1	Designed and developed the Profile Page UI, ensuring responsiveness and styling.
Feb 7, 2025	2	Studied profile picture upload, image handling, and listing page functionalities.
Feb 8, 2025	3	Implemented user input handling, error validation, and form submission functionality for listing creation.
Feb 9, 2025	2.5	Began working on the API route for user listings (not yet uploaded to GitHub).

Description of work done:

Last week, I focused on the Sign-in functionality and setting up Redux with persist to maintain active user sessions, even after an app crash or refresh. This ensured a seamless user experience without requiring frequent logins.

Next, I implemented Google Sign-in/Sign-up using Firebase Authentication, allowing users to log in effortlessly with their Google accounts.

Finally, I worked on the Listing page, integrating an upload functionality that enables users to add new items seamlessly. This involved handling form submissions, managing file uploads efficiently, and ensuring a smooth user interface.

Currently, I am working on developing an API route for user listings, which is still in progress.

I faced few problems while doing my tasks, they are as follows:

Maintaining active sessions when the app crashes or stops was a key challenge, and learning to implement Redux effectively played a vital role in solving it.

I aimed to enhance the login/sign-up page but was overwhelmed by the abundance of available technologies. After a research, I learned, and implemented Google Firebase for authentication, which simplified the process.

Later, I faced an issue where I couldn't retrieve form values, particularly from a dropdown menu, while submitting a new listing. Debugging this took hours, but after extensive searching on Google, I found a similar solution through both GeeksforGeeks and ChatGPT that I implemented inside my project.

Repo Check-in

The files/folders I have checked into the repo are as follows:

- Authentication & State Management:

    o Implementation/ecoTots/client/src/pages/SignIn.jsx (Completed sign-in functionality)

    o Implementation/ecoTots/client/src/main.jsx (Redux persist setup)

    o Implementation/ecoTots/client/src/redux/store.js (Redux store configuration)

    o Implementation/ecoTots/client/src/pages/SignIn.jsx

    o Implementation/ecoTots/client/src/redux/user/userSlice.js (User authentication state management)

- Google Authentication:

    o Implementation/ecoTots/client/src/components/OAuth.jsx (Google Sign-up/Sign-in integration)

    o Implementation/ecoTots/client/src/firebase.js (Firebase configuration for authentication)

    o Implementation/ecoTots/api/controllers/auth.controller.js

- Profile Page UI:

    o Implementation/ecoTots/client/src/pages/Profile.jsx (Designed Profile Page UI)

- Form Handling & Listing Page:

    o Implementation/ecoTots/client/src/pages/CreateListing.jsx (User input handling, validation, and submission functionality)