

IT 309 SOFTWARE ENGINEERING

PROJECT DOCUMENTATION

Forum App

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1. Introduction

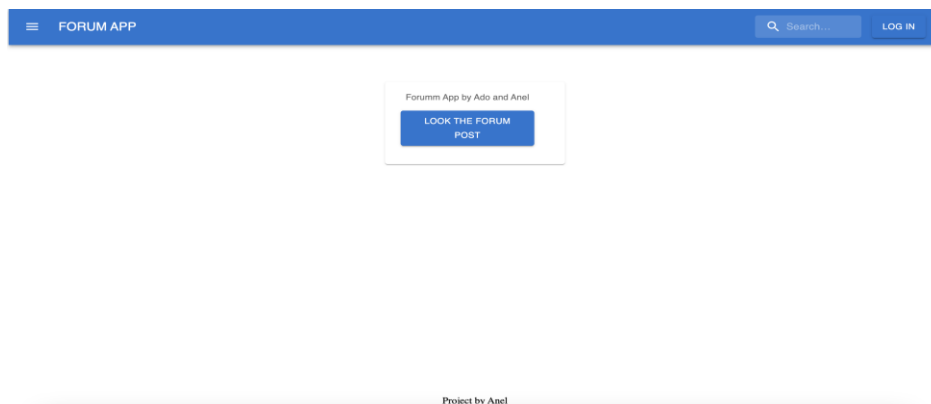
We take great pleasure in introducing our project, a user-friendly forum application designed to foster dynamic and inclusive online conversations. This forum app is a testament to our commitment to provide a virtual space where users can post discussions, comment on other posts, and collaborate on ideas, thereby fostering an environment of knowledge exchange.

1.1. About the Project

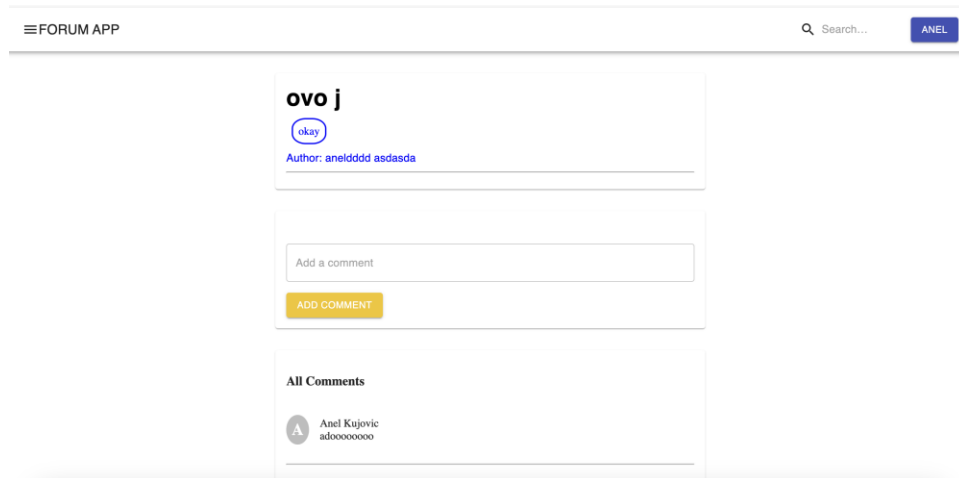
We worked on an interactive forum application, developed using React.js for the front-end and Node.js for the back-end. The application is geared towards facilitating discussions, allowing users to add posts and make comments, thus creating a vibrant platform for discourse. MongoDB was employed as the database to manage and store user data and their interactions effectively.

1.2. Project Functionalities and Screenshots

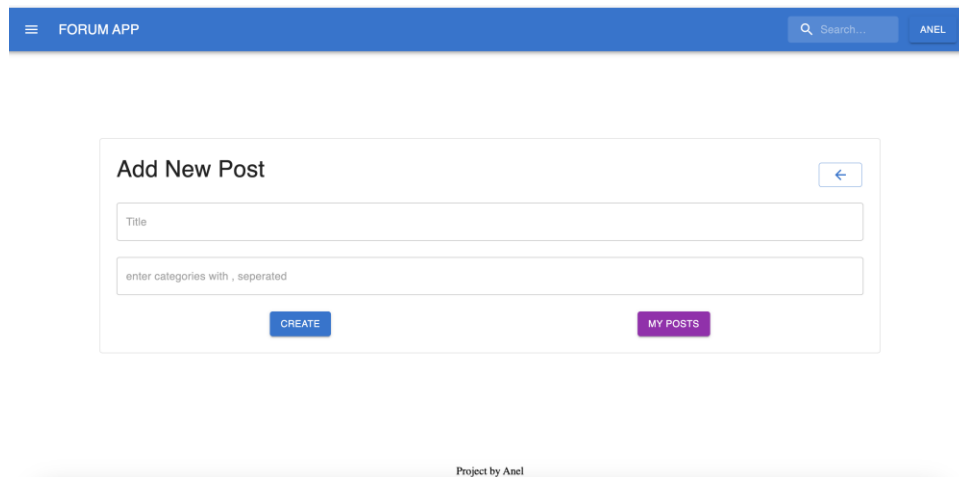
We have here Welcome Page:



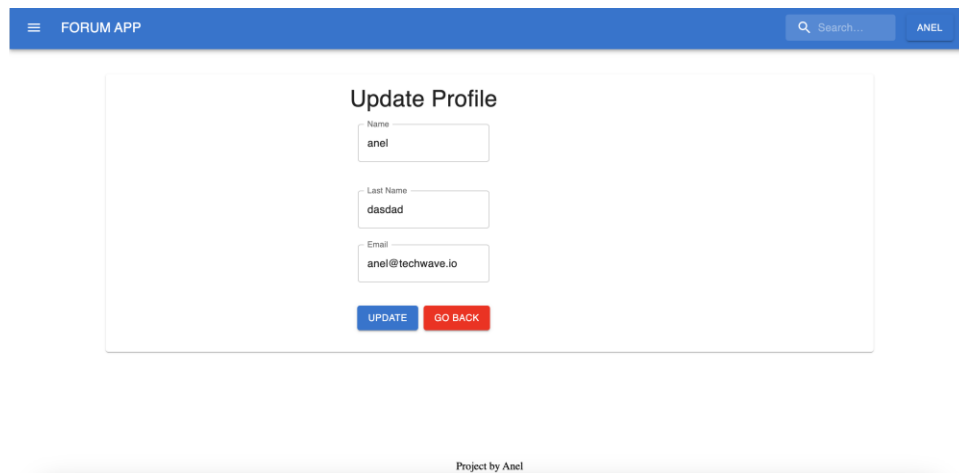
We have here page where we can add our comment:



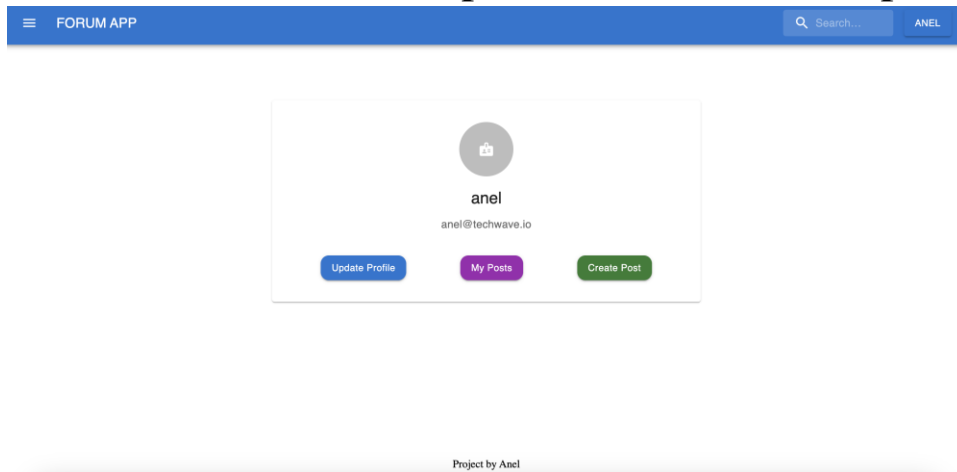
If User wants to create a new Post:



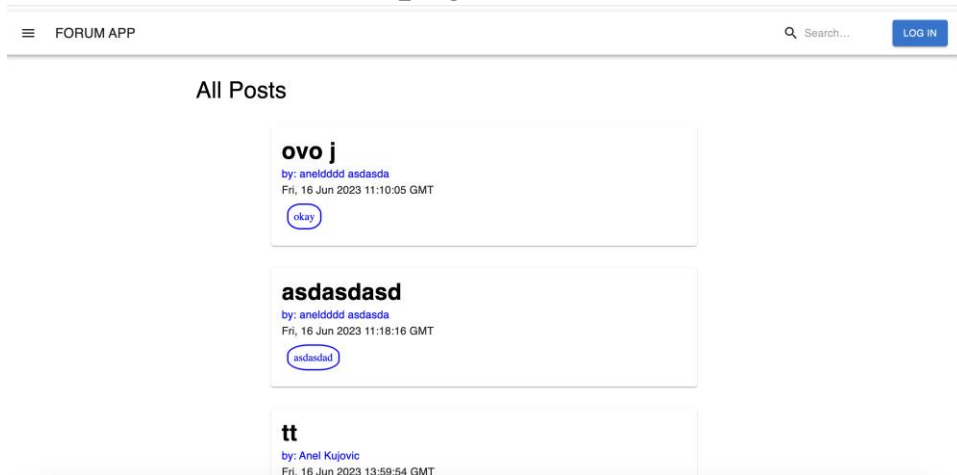
If User wants to update a current Profile:



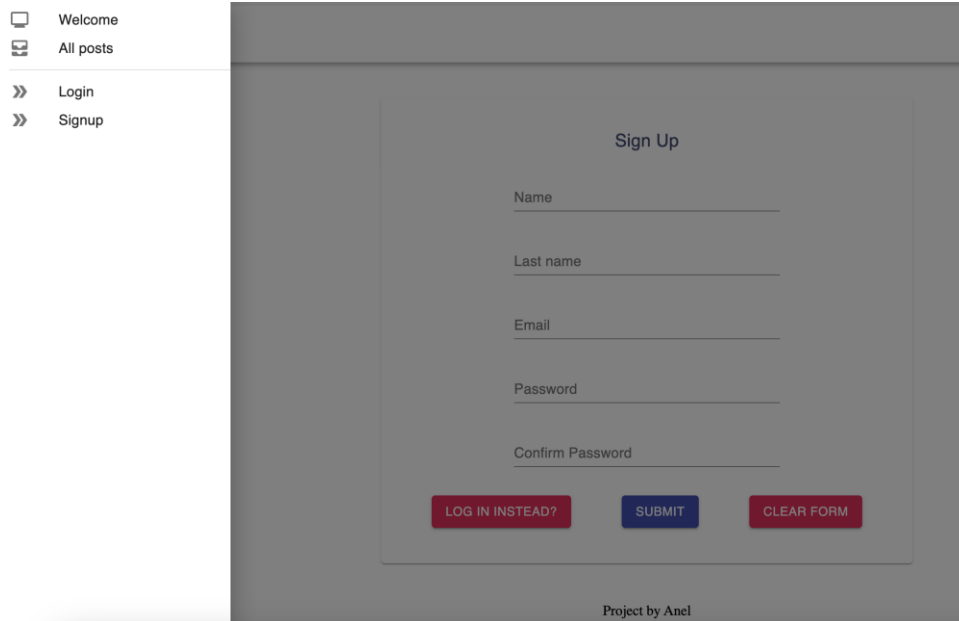
We have here page of our settings for creating new post and to see current posts or update profile:



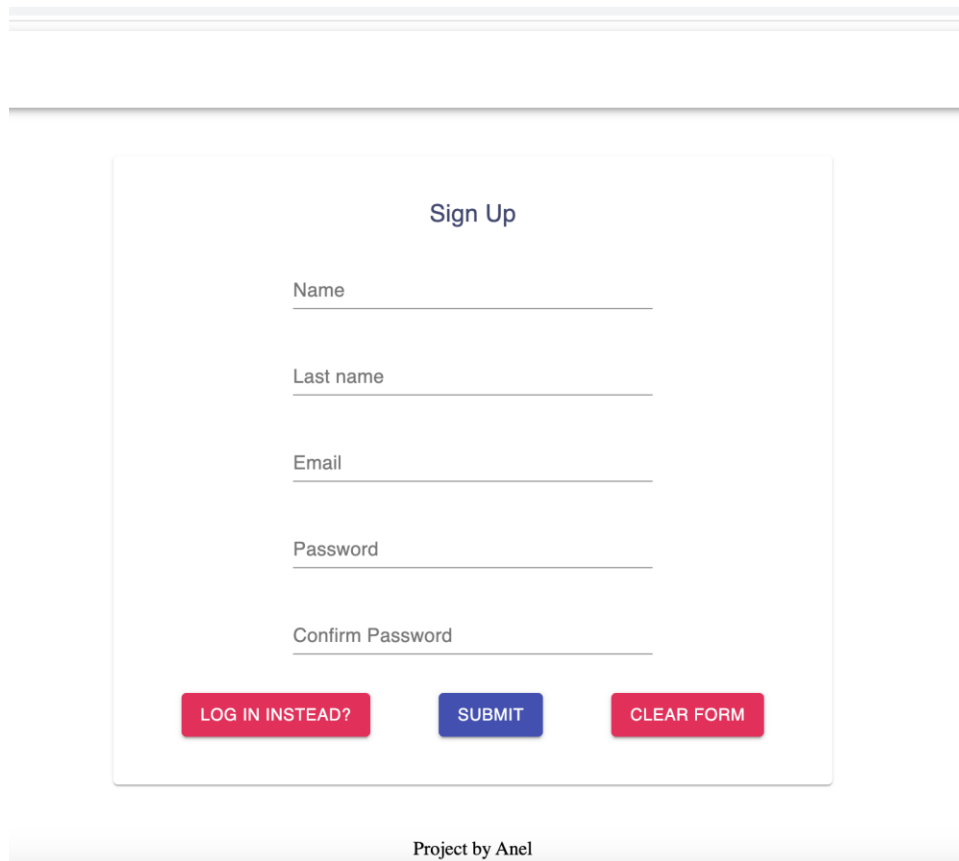
We have here page where we can see all posts:



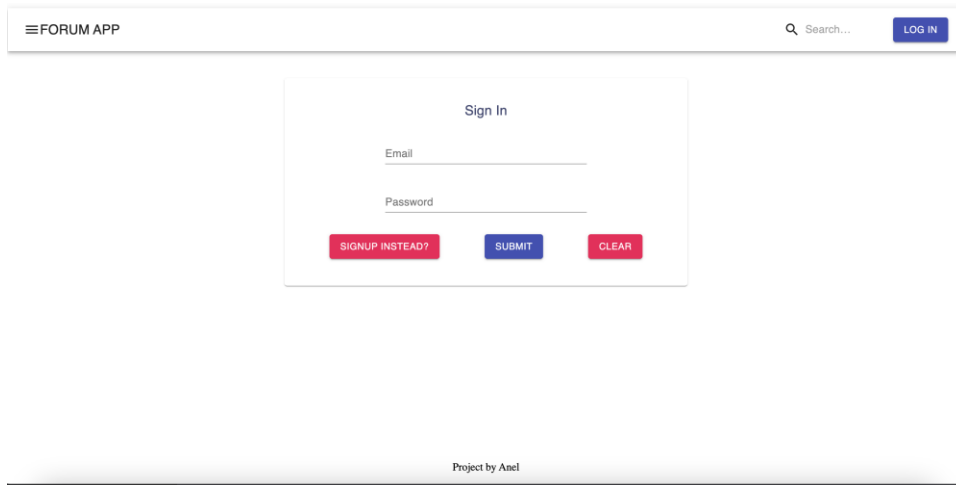
Also our application have a sidebar menu, where you can choose which page you want:



Sign Up Page:



Sign In Page:



The image shows a mockup of a 'Sign In' page for a 'FORUM APP'. At the top, there is a header bar with a hamburger menu icon, the text 'FORUM APP', a search bar with a magnifying glass icon and the placeholder text 'Search...', and a blue 'LOG IN' button. Below the header, the main content area features a white box with the title 'Sign In'. Inside this box, there are two input fields: 'Email' and 'Password'. Below the 'Password' field, there are three buttons: a red 'SIGNUP INSTEAD?' button, a blue 'SUBMIT' button, and a red 'CLEAR' button. At the bottom of the page, there is a footer bar with the text 'Project by Anel'.

2. Project Structure

Front-end (React.js)

src/: This is the root directory containing all the source files for the React application.

components/: This directory consists of all the reusable components that make up the application's user interface, such as buttons, input fields, post containers, comment sections, and more.

api/: This directory contains all the files that manage the API calls to the back-end server. Each function in these files corresponds to a different endpoint of the back-end API.

auth/: This directory is responsible for user authentication. It contains files related to user registration, login, logout, and user data management. store/: This directory manages the state of the application using a state management library (such as Redux). It includes the necessary actions and reducers that manage the state of the app, providing a centralized data store.

index.js: This file serves as the entry point of the React application and renders the main App component to the DOM.

Back-end (Node.js(express))

src/: This directory contains all the server-side code. config/: This directory contains configuration files, which can include setup for database connection, server setup, etc.

controllers/: This directory contains files that manage the logic for handling different routes. These files define what happens when a certain route is hit, for instance, creating a post or adding a comment.

helpers/: This directory contains helper functions or utilities that are used in multiple places throughout the application, promoting code reusability.

models/: This directory defines the schema for different collections in the MongoDB database, like users, posts, and comments. routes/: This directory contains the files managing the API endpoints, which are then linked to the corresponding controllers.

2.1. Technologies

Describe or list *what technologies* (programming languages/frameworks) you used in your project for backend, frontend and the database. If you also used some other technologies or third-party tools, you could list them, as well.

Afterwards, specify which *coding standard* you used and in which part of your project (was it on the backend, frontend, both, etc.). If you are unclear about coding standards, refer to Week 2 and Week 3 on LMS.

2.2. Database Entities

- users
- posts

2.3. Design Patterns

In developing our forum application, we primarily focused on maintaining clean, readable, and reusable code across the entire codebase. We didn't stick to any traditional or formal design patterns, but our approach was largely influenced by principles of good software design, which can be considered a pattern in and of itself.

2.4. Tests

We did just manual testing for our applications, because we think its not necessary to use unit testing for small application like this.

3. Conclusion

The overall implementation of the application is something we take great pride in. The intuitive interface, robust functionality, and the seamless integration of the front-end with the back-end. However, like any software project, there is always room for improvement.