CS628 Full-Stack Development Web App

PE05 - Recipe Finder

School of Technology & Computing (STC)

City University of Seattle (CityU)

Before You Start

- You already created a private GitHub repository for all your programming exercises, "cs628-pe-*your_first_name*."
- You allowed your instructor and the Teaching Assistant to access your GitHub repository for programming assignments.
- The GitHub Codespaces may bill your account according to your usage. Check the price at https://docs.github.com/en/billing/managing-billing-for-github-codespaces/about-billing-for-github-codespaces. Please pay attention to the storage and core hours of use free of charge for personal accounts.
- Some steps are not explained in the assignment**.** If you are not sure what to do:
  - Consult the resources listed in your course.
  - If you need help solving the problem after a few tries (~15 minutes), ask a TA for help.

Learning Outcomes:

Students will be able to:

- Create a React app with Navigation using React Router.
- Develop a full-stack application using Node, Express, and MongoDB Atlas.

Problem:

Your task is to create a React application called "Recipe Finder" that allows users to discover and manage recipes. The application should have the following features:

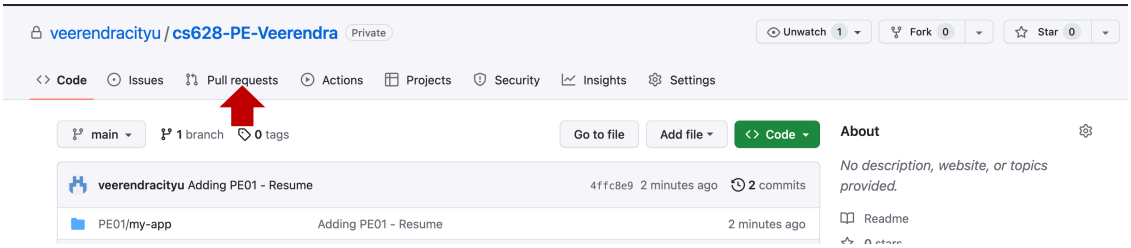
- **Recipe List**: Implement a route that displays a list of recipes. Each recipe in the list should be a clickable link that navigates to the individual recipe's details page.
- **Add Recipe**: Implement a route that allows users to add a new recipe along with its information. The user should be able to provide the recipe's name, ingredients, cooking instructions, and other details.
- **Recipe Details**: Implement a nested route under the "Recipe List" route that displays detailed information about a specific recipe. When a user clicks on a recipe name from the recipes list, they should be redirected to the recipe's details page, where all the information provided about the recipe is displayed. Utilize the useParams hook to fetch and display information based on the recipe's unique identifier. This recipe information should be displayed within the same page layout as the "Recipe List" page, maintaining a consistent overall design.
- **Update and Delete**: Implement functionality to update and delete recipes. Users should have the option to edit recipe details and delete recipes from the system.

Requirements:

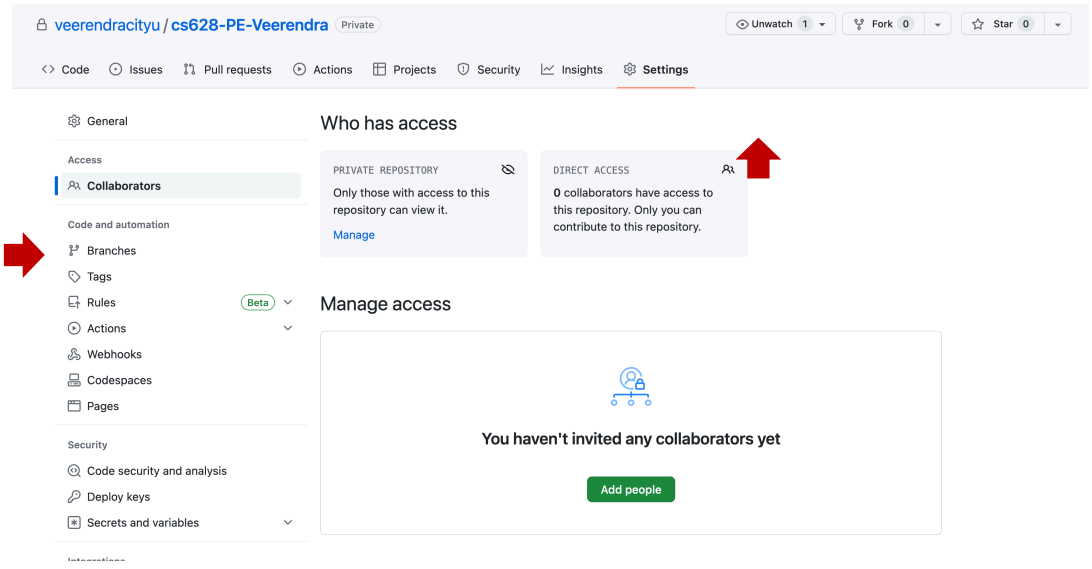
- Use React Router for implementing the different routes in your application.
- Set up a back end using Node.js, Express, and MongoDB Atlas to store and manage recipe data.
- Utilize the MongoDB Node.js driver to interact with the database for adding, updating, and deleting recipes.
- Apply your own styling to make the application visually appealing and user-friendly.
- Organize your components and files in a structured manner for clarity.

Submission

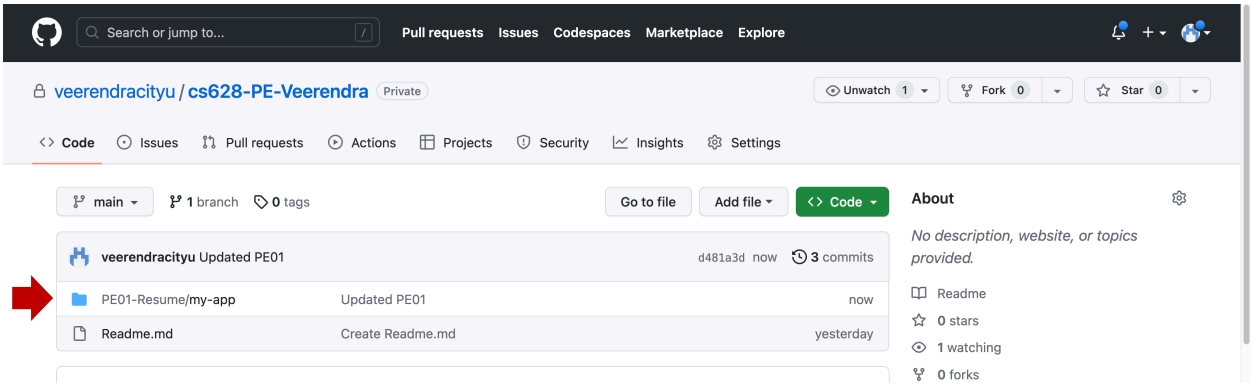
1. Create a GitHub repository for your programming exercises. The repository name will be "cs628-pe-*your_first_name*."



2. Click the Settings menu. Invite your instructor and TA to collaborators.



3. Under the repository, create a directory for the programming exercise 5, "PE05-Recipe Finder." For example, the screen below shows the directory created for programming exercise 01.



4. Finish your programming exercise under the PE05 directory.
5. Write a 150-word analysis report to explain how the program works in README.md in terms of the input-process-output model. The README.md has three level-1 headings – Input, Process, and Output.
6. Please upload the screenshots of your output to your GitHub repository to demonstrate that you have completed the requirements.
7. Submit the link of your GitHub repository to your course shell through your assignment submission.