

## CMPS 350 - Assignment # 4

### Due Date by 1:00 PM Sunday 30/4/2023

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In this assignment, you will utilize Next.js to build the backend Web API of the **Recipe App**, which is a recipe management app you previously created in Assignment 3.

[Click here for Demo](#)

#### **Preparation**

- Sync the cmps350-lab repo to get the assignment files.
- Copy **Assignment 4** to your private repository then open **Recipe App** in VS Code.

##### **Note:**

- **public** folder, containing the implementation of the client-side app that you implemented in assignment 3. You will need to extend it to use the back-end Web API.
- **data** folder contains **recipes.json** files to be used in this assignment.
- Run **npm install** to install all the necessary packages used for the project.
- Run **npm run dev** to start the dev server. Test that the base solution works properly.

#### **Part A - Recipe Web API**

Use the given **data/recipes.json** file for reading and writing the recipes data.

1. Create a **api/recipes/recipe-repo.js** file and implement the following methods.

Method	Description
getRecipes()	Return all recipes in <b>recipes.json</b>
getRecipe(id)	Return a recipe by id
addRecipe(recipe)	Adds new recipe to <b>recipes.json</b>
updateRecipe(recipe)	Updates existing recipe in <b>recipes.json</b>
deleteRecipe(id)	Deletes a recipe from the <b>recipes.json</b> using the recipe id

It is important to test **recipe-repo** functions before moving to the next step to make sure everything works. You can use mocha and chai or simply write your testing code in a simple **recipe-repo-test.js** file.

2. Implement recipes Web API route handlers for the routes listed in the table using **recipe-repo** methods.

HTTP Verb	URL	Functionality
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GET	/api/recipes?region={property}	Return all recipes , if <b>region</b> query is provided then filter by region before returning the data
GET	/api/recipes/:id	Return a recipe by id
POST	/api/recipes	Adds a new recipe
PUT	/api/recipes/:id	Updates an existing recipe
DELETE	/api/recipes/:id	Deletes a recipe by id

3. Test the recipes Web API using Postman. Include screenshots of the working API in the testing document.

### **Part B - Recipe Web UI**

Update the client app to use the recipes Web API instead of **localStorage**. The app should work the same way as assignment 3 one with additional function **showRecipeDetail**. You simply need to re-write the **recipe-service.js** (under public/js/service/) on the client-side to use recipes Web API instead of localStorage.

After completing the assignment, fill in the **Testing-Grading-Doc.docx** and save it inside the **Assignment4** folder. Then, push your work to your GitHub repository.