

Typescript Hands-On

Problem Statement:

You are tasked with creating a recipe search application using Typescript.

The application should fetch recipes from a mock JSON API and display them on the webpage. Users should be able to search for recipes by name, and the application should display relevant results.

Requirements:

1. Fetch recipes from the following mock JSON API: <https://dummyjson.com/recipes>
2. Implement a search functionality where users can enter a search query and fetch recipes matching the same from the API :
<https://dummyjson.com/recipes/search?q=search-query-string>
3. Utilize TypeScript's type annotations and interfaces to define the structure of the API response and ensure type safety throughout the application logic.
4. Each recipe must have following attributes:
 - Image (displayed as a thumbnail)
 - Name
 - Rating
 - Cuisine
 - Ingredients
 - Difficulty
 - Time taken = Preparation Time + Cooking Time
 - Calorie count
5. Expose the following methods-
 - a. `fetchRecipesFromAPI()`: Fetches recipes from the mock JSON API and returns a promise containing the raw JSON data and stored in-memory.
 - b. `searchRecipes(query: string)`: Fetches recipes matching the given search query from the API and returns a promise containing the raw JSON data. Log the same.
 - c. `printAllRecipes()`: Log all the recipes fetched from the API with their attributes .

BONUS Goal

If you wish to include UI

1. Design a user-friendly and visually appealing interface using HTML and CSS.
2. The home page must have a vertical scrollable container to display recipe cards. Title and search box must be fixed at the top.
3. Sample UI for your idea is attached below.

The image shows a sample user interface for a recipe application. It features a light blue header bar with the word "Title" centered. Below the header is a search bar with the placeholder text "Find a recipe..." and a "Search" button. The main content area contains two identical recipe cards. Each card has a rounded rectangular border and a "Rating" oval at the top right. The card layout includes a large rectangular image placeholder, a "Food item name" label, an "Ingredients" label, and four smaller labels: "Cuisine", "Difficulty", "Time taken", and "X Calories".

```
graph TD
    Title[Title]
    SearchBar[Find a recipe...]
    SearchButton[Search]
    Rating1((Rating))
    Image1[Image Placeholder]
    Name1[Food item name]
    Ingredients1[Ingredients]
    Cuisine1[Cuisine]
    Difficulty1[Difficulty]
    Time1[Time taken]
    Calories1[X Calories]
    Rating2((Rating))
    Image2[Image Placeholder]
    Name2[Food item name]
    Ingredients2[Ingredients]
    Cuisine2[Cuisine]
    Difficulty2[Difficulty]
    Time2[Time taken]
    Calories2[X Calories]
```