Problem: Debounced Search with Auto-Suggestions

💻 **Difficulty:** Medium-High
🔍 **Category:** React, State Management, API Fetching, Performance Optimization, Auto-Suggestions

Problem Statement:

You need to implement a **search bar with auto-suggestions** where users can search for recipes from https://dummyjson.com/recipes. The search should **debounce API calls (500ms delay)** and also display **real-time suggestions** as the user types.

Requirements:

1. Fetch recipe data dynamically from:
   - https://dummyjson.com/recipes/search?q={query}
2. Implement a **search input field** where users can type.
3. Use **debouncing** (API request should trigger **only after 500ms of no typing**).
4. Display **real-time recipe name suggestions** in a dropdown as the user types.
5. Allow users to **click on a suggestion** to select it and show full details.
6. If no recipes match the search, show "No recipes found."
7. Ensure the search is **case-insensitive**.

Example API Endpoint:

```
Example API Endpoint:

GET https://dummyjson.com/recipes/search?q=pasta
```

Example API Response:

```json
{
  "recipes": [
    {
      "id": 1,
      "name": "Creamy Garlic Pasta",
      "cuisine": "Italian",
      "ingredients": ["Pasta", "Garlic", "Cream", "Parmesan"],
      "image": "https://cdn.example.com/garlic-pasta.jpg"
    },
    {
      "id": 2,
      "name": "Tomato Basil Pasta",
      "cuisine": "Italian",
      "ingredients": ["Pasta", "Tomato", "Basil", "Olive Oil"],
      "image": "https://cdn.example.com/tomato-pasta.jpg"
    }
  ]
}
```

Constraints:

- Use React functional components.
- Use useState to store:
  - Search query
  - Recipe suggestions
  - Selected recipe details
- Use useEffect for API fetching and debouncing.
- Use setTimeout for debouncing and ensure proper cleanup.

Hints:

- Store the recipe suggestions in a state variable.
- Use setTimeout inside useEffect for debouncing API calls.
- Use onClick on suggestions to fill the search input and show details.
- Ensure the previous timer is cleared using clearTimeout before setting a new one.