**Objective**Create an interactive recipe filter app for “CookIt,” a fictional recipe website that allows users to easily find recipes tailored to their dietary preferences. The app will showcase recipes in an engaging card format and enable users to filter results based on various dietary categories such as vegan, gluten-free, and more.

### **Key Design Requirements**

**1. Visual Design and Layout**

* **Background Color**: Light background (#FAFAFA) to create a clean and inviting interface that highlights the recipe cards.
* **Colorful Filter Buttons**: Use vibrant colors for dietary filter buttons to draw attention and make the filtering options visually appealing.
* **Recipe Card Design**: Each card will feature an image, title, and a brief description of the recipe, arranged in a visually cohesive manner.

**2. Filter Options**

* **Button Layout**: Display dietary preference buttons prominently at the top of the app, allowing users to easily filter recipes. Examples of filters include vegan, vegetarian, gluten-free, and dairy-free.
* **Active State**: Visually indicate the currently selected filter for clarity, using color changes or highlighting effects.

### **Functional Requirements**

**1. Recipe Display**

* **Card Format**: Each recipe card should include:
  + **Image**: Attractive, high-quality image representing the dish.
  + **Title**: Recipe title in Roboto Bold, size 20px for emphasis.
  + **Description**: A short, enticing description in Arial, size 16px providing key details about the recipe.
* **Grid Layout**: Use a responsive grid layout to ensure the cards adjust dynamically based on the screen size, maintaining a clean appearance on all devices.

**2. Filtering Functionality**

* **JavaScript Logic**: Implement filtering functionality that updates the displayed recipes in real-time as users select different dietary preference buttons.
* **Data Structure**: Store recipe data in an array or object, with properties for dietary preferences, images, titles, and descriptions for easy access during filtering.

### **Additional Notes**

* **User Experience**: Ensure that the filtering process is smooth and intuitive, with minimal loading time for recipe updates.
* **Accessibility**: Make sure buttons and card text are accessible, with sufficient contrast for readability and compliance with accessibility standards.
* **Feedback**: Consider providing feedback (e.g., loading indicators) when filtering recipes to enhance the user experience.