

## Task Title: Responsive Dashboard with Dynamic Data Visualizations

**Deadline:** 2nd October 2024

### Task Description:

Create a fully responsive **admin dashboard** using **HTML, CSS, JavaScript**, and optionally **React.js**. The dashboard should include dynamic data visualizations based on mock API data.

### Key Requirements:

1. **Navigation:**
  - A collapsible sidebar with navigation links.
  - A top bar with a search field and user profile section.
2. **Dashboard Layout:**
  - Include 3 sections: **Overview, Analytics, and User Management**.
  - **Overview** should display key metrics such as:
    - Total users
    - Active users
    - Monthly traffic
  - These metrics should be fetched dynamically from a **mock API** using **fetch()**.
3. **Data Visualizations:**
  - Implement charts using **Chart.js** or **D3.js**.
  - Create at least **two types** of charts (e.g., line chart for user traffic, bar chart for product sales).
  - Ensure the charts update dynamically based on the mock data received from the API.
4. **User Management:**
  - Include a **user table** displaying:
    - User ID
    - Name
    - Email
    - Status (Active/Inactive)
  - Enable sorting by **Name** and **Status**.
  - Add functionality to toggle a user's status between Active and Inactive.
5. **Responsiveness:**
  - The dashboard must be **fully responsive** and should look good on all screen sizes (desktop, tablet, mobile).
  - The charts should adjust dynamically based on screen size.
6. **Form Validation:**
  - Include a form (under User Management) to add new users with fields for name, email, and status.
  - Implement **client-side form validation** to ensure proper inputs (e.g., valid email format).

### Bonus Challenges (Optional but encouraged):

- Use **React.js** for building components to make your code more modular.
- Implement **local storage** to save the user's dashboard preferences (like dark mode).
- Use **SASS** or **Tailwind CSS** for styling.

---

## Mock API for Data:

You can use a service like [jsonplaceholder.typicode.com](https://jsonplaceholder.typicode.com) or [mocky.io](https://mocky.io) to create mock data, or you can create your own JSON file to simulate an API response.

---

This task tests your skills in responsive design, JavaScript, and handling dynamic data. Feel free to reach out if you have any questions or need clarification.

Good luck, and I look forward to seeing your work!

