Task: Responsive Dashboard Development

Objective:

Develop a fully responsive web and mobile dashboard application using ReactJS. The dashboard should dynamically display data, include interactive components, and provide a seamless user experience across various devices.

Requirements

1. Responsive Design

- Ensure the dashboard is fully responsive and provides an optimal user experience on desktops, tablets, and mobile devices.
- Use CSS Grid/Flexbox for layout and ensure cross-browser compatibility.

2. Web Dashboard

- Create a web dashboard with the following sections:
 - **Header**: Contains navigation links, user profile, and notification icons.
 - **Sidebar**: Includes links to different dashboard pages (e.g., Overview, Analytics, Settings).
 - **Main Content Area**: Displays a grid of widgets showing various metrics and charts.
 - **Footer**: Contains brief information about the application.

3. Mobile Dashboard

- Adapt the web dashboard layout to a mobile-friendly design.
 - **Header**: Same as web but optimized for mobile view.
 - Collapsible Sidebar: Should be hidden by default and accessible via a hamburger menu.
 - **Main Content Area**: Optimized for vertical scrolling, with widgets stacked.

4. Widgets

- o Implement interactive widgets for the dashboard, including:
 - Line chart showing user activity over time.
 - Bar chart displaying sales data.
 - Pie chart depicting user demographics.
 - Recent activity feed.

5. Data Integration

- Fetch data from a mock API and dynamically populate the widgets.
- Ensure real-time data updates and error handling.

6. State Management

- Use Redux for state management to handle global states and ensure consistency across components.
- o Properly structure and modularize Redux code (actions, reducers, store).

7. Form Handling

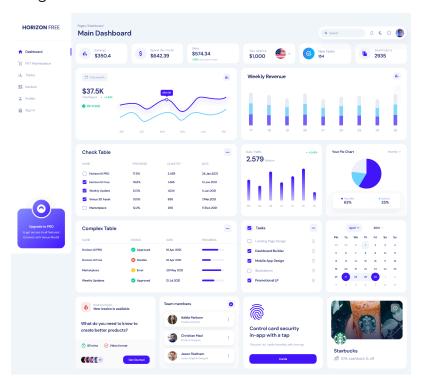
- o Implement a settings page with forms for updating user preferences.
- Use form validation and ensure a smooth user experience.

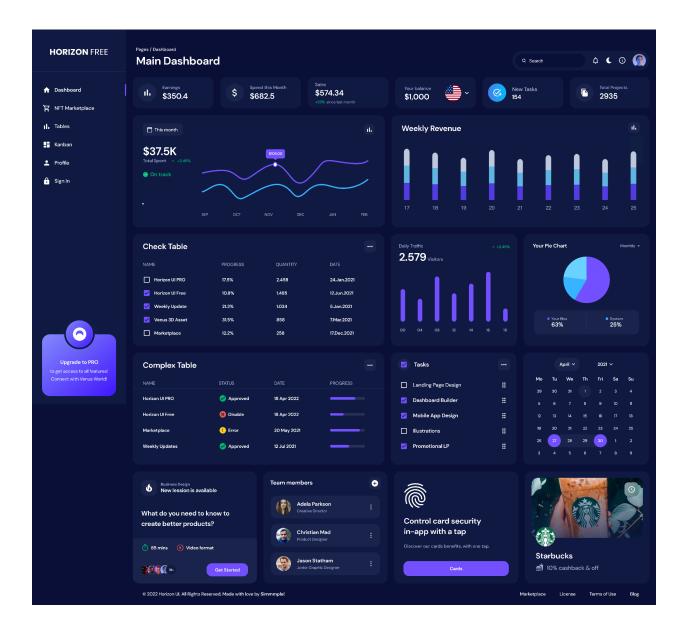
8. Code Quality

- Follow best practices for React component development.
- Ensure the code is clean, modular, and well-documented.
- 9. **Dark Mode**: Implement a toggle feature to switch between light and dark themes.
- 10. **Performance Optimization**: Optimize the application for performance, including lazy loading of components and code splitting.

Evaluation Criteria

- **Responsiveness**: The application should work flawlessly on different screen sizes.
- **Interactivity**: Widgets should be interactive and update dynamically based on data changes.
- **Code Quality**: Clean, well-structured, and documented code following ReactJS best practices.
- **Data Integration**: Proper handling of data fetching, state management, and error handling.
- **UI/UX**: The overall design and user experience should be intuitive and visually appealing.





Additional Considerations

- Use of TypeScript is a plus.
- Implement unit tests for critical components.
- Ensure accessibility standards are met.

Submission

- Provide the complete source code in a GitHub repository.
- Include a README file with instructions on how to run the application.

