

**Assignment Title: Simple Post Display with Pagination using React**

**Assignment Overview:** In this assignment, you will create a web application using React.js to display a list of posts fetched from an API with pagination functionality. The purpose of this application is to demonstrate fetching data from an API, implementing pagination, and rendering the posts in a user-friendly manner.

**Assignment Tasks:**

1. Set up a new React project using Create React App or any preferred React boilerplate.
2. Create a component named "App" responsible for fetching posts from the API and rendering them with pagination.
3. Utilize the useState hook to manage state variables such as posts, loading status, and current page number.
4. Implement useEffect hook to fetch posts from the API when the component mounts or when the page number changes.
5. Design a simple user interface with buttons for pagination and a section to display posts.
6. Use CSS or styled-components to style the user interface and improve visual appeal.
7. Fetch posts from the API endpoint "https://jsonplaceholder.typicode.com/posts" with pagination parameters (\_limit and \_page).
8. Render fetched posts in a list format, displaying the title and body of each post within a styled container.
9. Add pagination functionality with "Previous" and "Next" buttons to navigate between pages of posts.
10. Ensure that the "Previous" button is disabled when the current page is the first page, and the "Next" button is disabled when the current page is the last page.
11. Handle loading states to display a loading indicator while fetching posts from the API.
12. Test the application thoroughly to ensure proper functionality and user experience.
13. Provide comments and documentation to explain the code structure, component logic, and functionality.

**Deliverables:**

1. React project folder containing all the necessary components, CSS files, and other assets.
2. Documentation explaining the project structure, component hierarchy, and functionality implemented.
3. Submission of the project files through the designated platform or repository.

**Note:** You may customize the user interface and add additional features to enhance the application according to your creativity and preferences. This assignment aims to assess your proficiency in React development, state management, and API integration with pagination.