

# Assignment : List Rendering

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## Scenario:

You are tasked with building a simple To-Do List application where users can view their tasks, add new tasks, and mark tasks as completed.

This assignment will help you practice list rendering in React with TypeScript.

## Requirements:

### ➤ Project Setup:

- Create a new React project with TypeScript and name it TodoApp.

### ➤ Component Structure:

#### ❖ Create a TodoList Component:

- This component should receive a list of tasks as props and render them as a list.
- Each task should be displayed with a checkbox to mark it as completed.

#### ❖ Create a NewTodo Component:

- This component should contain an input field and a button to add a new task.
- When the user types a task and clicks the "Add Task" button, the task should be added to the list.

#### ❖ Create an App Component:

- This component should manage the state for the list of tasks.
- It should include the TodoList and NewTodo components.
- Pass the current list of tasks to the TodoList component and handle adding new tasks in the App component.

## Tasks:

### 1. List Rendering:

- Implement the TodoList component to render each task in the list.
- Display each task with a checkbox that users can click to mark it as completed.

### 2. Adding New Tasks:

- Implement the NewTodo component to allow users to add a new task.
- When the "Add Task" button is clicked, the task should be added to the list in the App component.

### 3. Marking Tasks as Completed:

- When a user clicks the checkbox next to a task, visually indicate that the task is completed (e.g., by striking through the text or changing the text color).

### 4. Expected Outcome:

- A simple To-Do List application where users can:
    - View a list of tasks.
    - Add new tasks to the list.
    - Mark tasks as completed.
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