

React Basic Assignment

Assignment: Build a Simple "Task Manager" App

Task 1: Function vs. Class Components

1. Create a functional component ``Greeting`` that accepts a ``name`` prop and displays:
 - "Hello, [name]!" if a name is provided
 - "Hello, Guest!" if no name is given
2. Create the same ``Greeting`` component using a class component.

Task 2: Props and Prop Drilling

1. Create a parent component ``App`` that has an array of ``tasks``.
2. Pass this ``tasks`` array down to a ``TaskList`` component using props.
3. ``TaskList`` should render each task using a ``Task`` component.
4. In the ``Task`` component, display the task name.

Bonus: Instead of passing ``tasks`` directly to ``Task``, pass them through an intermediate component (``TaskList``) to experience prop drilling.

Task 3: Default & Required Props

1. Modify the ``Greeting`` component to have:
 - A default prop for ``name`` ("Guest")
 - A required prop validation for ``name``

Task 4: useState Hook & Handling Events

1. Create a ``Counter`` component with a button to increase the count.
2. Use the ``useState`` hook to manage the ``count`` state.
3. Display the count on the screen.

Task 5: Conditional Rendering

1. Modify the ``Counter`` component to display:
 - "Count is even" when the count is even
 - "Count is odd" when the count is odd

Extra Challenge: Task Manager with State

1. Create a Task Manager app where users can:
 - Add a new task (input + button)

- Mark a task as completed
 - Delete a task
2. Use `useState` to manage the tasks array and their status (completed/not completed).

Submission Instructions:

- Push your code to GitHub or a CodeSandbox link.
- Let me know if you need any help!