Lesson-End Project
Create a React Application Using React Hooks

Objective: To create a Todo List application using hooks and styling

Tools Required: Node terminal, React app, and Visual Studio Code

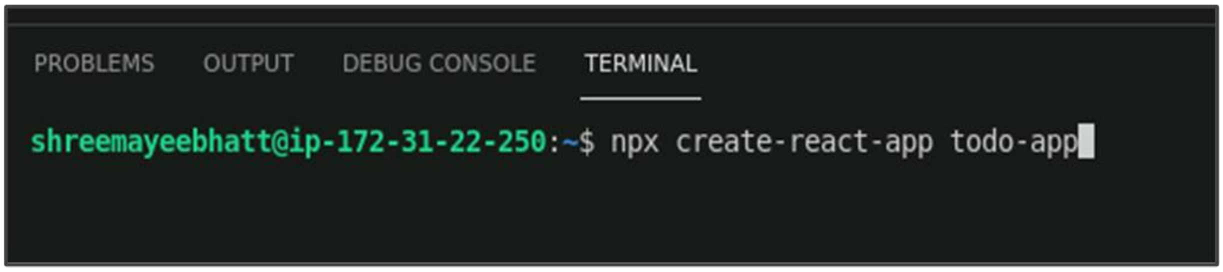
Prerequisites: Knowledge of creating a React app and understanding of the folder structure

Steps to be followed:

1. Create a new **React** app
2. Configure the files **src/App.js** and **src/App.css**
3. Run the app and verify the functionality

Step 1: Create a new React app

1.1. Create a new React project using the **create-react-app** command in your terminal: **npx create-react-app todo-app**



```
shreemayeebhatt@ip-172-31-22-250:~$ npx create-react-app todo-app
```

This will create a new React app in a directory named **todo-app**.

1.2. Navigate into the newly created directory by running the command: **cd todo-app**

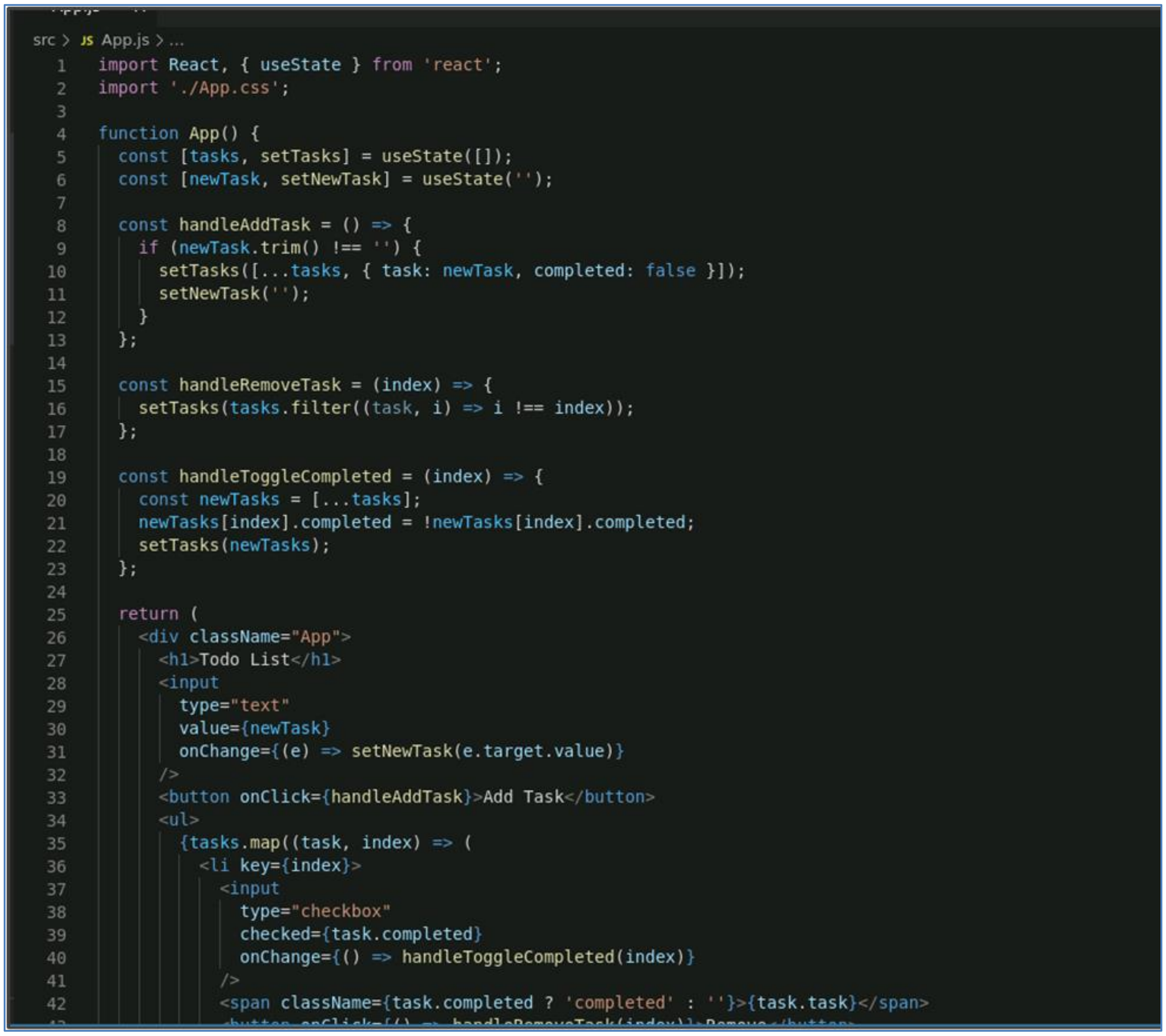
Step 2: Configure the files src/App.js and src/App.css

2.1 Open the React project in the Visual Studio code and navigate through the project directory of **todo-app** to open the **src/App.js** file. replace the existing code in **App.js** with the following code:

```
import React, { useState } from 'react';
import './App.css';
function App() {
  const [tasks, setTasks] = useState([]);
  const [newTask, setNewTask] = useState('');
  const handleAddTask = () => {
    if (newTask.trim() !== '') {
      setTasks([...tasks, { task: newTask, completed: false }]);
      setNewTask('');
    }
  };
  const handleRemoveTask = (index) => {
    setTasks(tasks.filter((task, i) => i !== index));
  };
  const handleToggleCompleted = (index) => {
    const newTasks = [...tasks];
    newTasks[index].completed = !newTasks[index].completed;
  setTasks(newTasks);
  };
  return (
    <div className="App">
      <h1>Todo List</h1>
      <input
        type="text"
        value={newTask}
        onChange={(e) => setNewTask(e.target.value)}
      />

      <button onClick={handleAddTask}>Add Task</button>
      <ul>
        {tasks.map((task, index) => (
          <li key={index}>
            <input
              type="checkbox"
              checked={task.completed}
              onChange={() => handleToggleCompleted(index)}
            />
            <span className={task.completed ? 'completed' : ''}>{task.task}</span>
            <button onClick={() => handleRemoveTask(index)}>Remove</button>
          </li>
        ))}
      </ul>
    </div>
  );
}

export default App;
```



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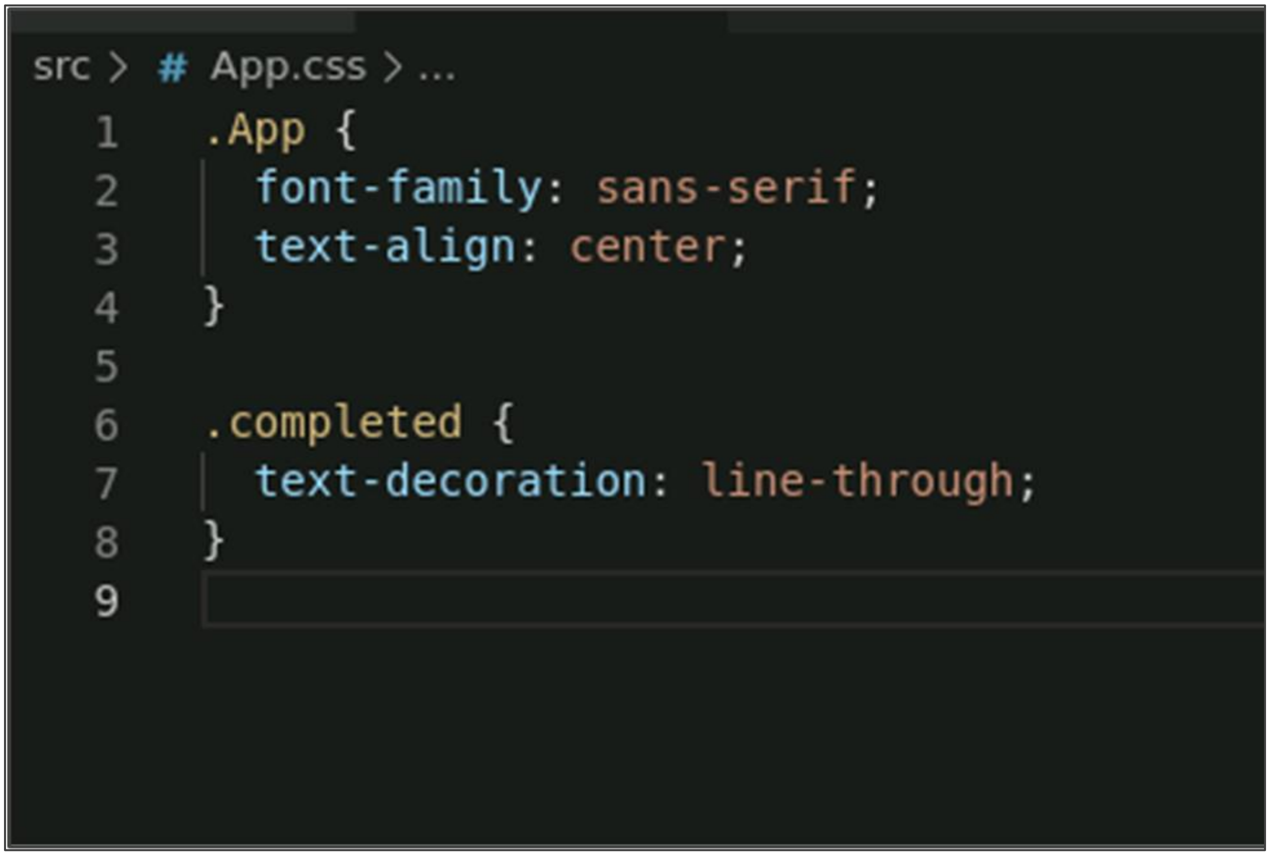
2.2 Similarly, open the **src/App.css** file and replace the existing code with the provided code:

```
.App {

  font-family: sans-serif;
  text-align: center;
}

.completed {
  text-decoration: line-through;
}
```

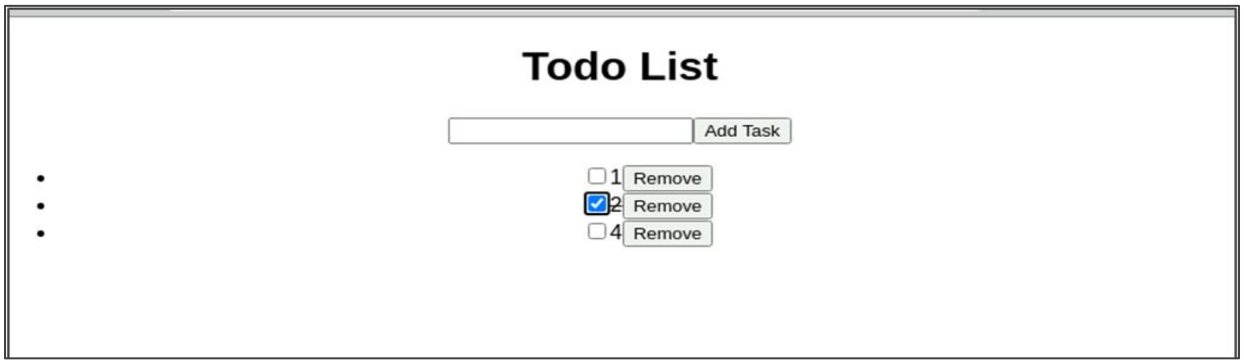


```
src > # App.css > ...
.App {
  font-family: sans-serif;
  text-align: center;
}

.completed {
  text-decoration: line-through;
}

```

Step 3: Run the app and verify the functionality

3.1 Go to the terminal and execute the command **npm start** within the project directory **todo-app** to run the application

3.2 Once the server starts successfully, open **http://localhost:3000** in your browser to view the app.



Todo List

- ☐ 1 Remove
- ☑ 2 Remove
- ☐ 4 Remove

In the browser, you will see the heading **Todo List** along with an input field and an **Add Task** button. Enter a task in the input field and click on **Add Task** to add it to the list. Each task will be displayed as a list item with a checkbox. Click the checkbox to toggle the task's completion status, which will be indicated by a line-through text style. Finally, click on the **Remove** button to remove the corresponding task from the list.

With this, you have successfully created a Todo List application using hooks and styling.