### **REACT PROJECT ->**

### Step 1: Set Up the React Environment

You can set up a new React application using Create React App. Open your terminal and run:

```
npx create-react-app todo-list
cd todo-list
npm start
```

#### Step 2: Create the Todo List Application

- 1. App Component (App.js):
  - This will be the main component that holds the state and renders the other components.

```
import React, { useState } from 'react';
import TodoForm from './TodoForm';
import TodoList from './TodoList';
import './App.css';

function App() {
    const [todos, setTodos] = useState([]);

    const addTodo = (text) => {
        const newTodos = [...todos, { text, completed: false }];
        setTodos(newTodos);
    };

    const toggleTodo = (index) => {
        const newTodos = [...todos];
        newTodos[index].completed = !newTodos[index].completed;
        setTodos(newTodos);
    };
}
```

```
const deleteTodo = (index) => {
  const newTodos = todos.filter((todo, i) => i !== index);
  setTodos(newTodos);
};
return (
  <div className="app">
  <h1>Todo List</h1>
  <TodoForm addTodo={addTodo} />
  <TodoList todos={todos} toggleTodo={toggleTodo} deleteTodo={deleteTodo} />
  </div>
);
}
export default App;
TodoForm Component (TodoForm.js):
   • This component contains the form to add new todos.
import React, { useState } from 'react';
function TodoForm({ addTodo }) {
 const [value, setValue] = useState(");
 const handleSubmit = (e) => {
  e.preventDefault();
 if (!value) return;
  addTodo(value);
 setValue(");
};
```

```
return (
  <form onSubmit={handleSubmit}>
   <input
   type="text"
   className="input"
   value={value}
   onChange={(e) => setValue(e.target.value)}
   placeholder="Add a new todo"
  />
  <button type="submit">Add</button>
  </form>
);
}
export default TodoForm;
TodoList Component (TodoList.js):
   • This component renders the list of todos.
import React from 'react';
function TodoList({ todos, toggleTodo, deleteTodo }) {
return (
  <div className="todo-list">
  {todos.map((todo, index) => (
   <div key={index} className={`todo ${todo.completed ? 'completed' : "}`}>
    <span onClick={() => toggleTodo(index)}>{todo.text}</span>
    <button onClick={() => deleteTodo(index)}>Delete/button>
   </div>
  ))}
  </div>
);
```

export default TodoList;

# Step3 -> Run the Application

npm start

# images->





