# **TaskManagement App Using React.js**

#### Introduction

Our Task Management App is a simple and effective tool to help you organize and stay on top of your daily tasks. It's built using React, which makes the app fast, reliable, and interactive.

#### **Features**

- Task Creation: Easily add and edit tasks with custom details.
- **Filtering & Searching:** Quickly locate tasks using advanced filters and a responsive search bar.
- **Real-Time Feedback**: Instant notifications for task updates using Toast notifications.
- **Interactive UI:** A clean, responsive interface designed with React's component architecture for seamless navigation.
- Dynamic State Management: Components like TaskManager, TaskItem, and TaskFilter dynamically handle user actions with React's state and props.
- Dark & Light Mode: Built-in theme switcher for enhanced accessibility and user preference.
- **Flexibility:** Easily scalable and maintainable code, designed for future enhancements.

### **Homepage Design**

The homepage of your Task Management App is designed to provide a clean, intuitive interface that welcomes users while offering quick access to key features. Below is a detailed description tailored for your current setup, including a Navbar with Bootstrap and a dark/light mode toggle.

## **Technologies Used**

- **React.js:** A JavaScript library for building dynamic, interactive user interfaces with reusable components.
- **Bootstrap:** A front-end framework for designing responsive, mobile-first web pages with pre-built components.
- React Toastify: A library for displaying customizable toast notifications in React apps.

- **Bootstrap Icons:** A collection of vector icons that integrate seamlessly with Bootstrap, customizable via CSS.
- **Confetti:** A JavaScript library for generating fun, celebratory confetti animations.
- **Axios:** A promise-based HTTP client for making API requests and handling responses in JavaScript.
- **JSON Server:** A fast and easy tool for setting up a fake REST API from a JSON file for development purposes.



The src folder in a React app contains all the source code

The components folder in a React app stores reusable UI elements and logic that make up the application's interface.

The Navbar component provides a navigation bar for the app

The <u>SearchBar.jsx</u> component provides a search input field that allows users to filter or search for tasks or other items in the application.

The <u>TextFilter.jsx</u> component allows users to filter tasks based on specific keywords or text input, helping them narrow down the displayed tasks.

The <u>TaskForm.isx</u> component provides a form for users to input and submit new tasks, allowing task creation or updates in the application.

The <u>TaskItem.jsx</u> component displays individual tasks with options to edit, mark as completed, or delete, representing each task in the task list.

The <u>TaskManagement.jsx</u> component serves as the main container for managing tasks, displaying the list of tasks, and handling interactions like adding, editing, or deleting tasks.

The <u>api.js</u> file inside the <u>services</u> folder is used to define and manage API requests using libraries like Axios, to interact with a backend or mock API.

The <u>App.jsx</u> component serves as the root component that initializes the React app, handles routing between different pages, and includes global states and main layout elements like the Navbar.

The <u>db.json</u> file is used in conjunction with JSON Server to simulate a backend by storing mock data The index.css file contains global styles that are applied throughout the entire application,

The main.jsx file is the entry point of a React application