To-Do Application Overview

Overview

The To-Do Application is a simple, user-friendly web application built using React and Tailwind CSS. It allows users to manage and organize their daily tasks effectively. Users can create, update, delete, and track their tasks, making it an ideal solution for personal productivity and task management. To see the live deployment, visit https://to-do-list-app-eosin-sigma.vercel.app/.

Features

- **Add Tasks:** Users can add new tasks to their to-do list by entering the task description in the input field and clicking the "Add" button.

- **Delete Tasks:** Each task includes a delete button, allowing users to remove tasks that are no longer relevant.

- **Mark as Completed:** Users can easily mark tasks as completed by checking the checkbox next to the task. Completed tasks are visually distinguished from pending tasks.

- **Sorting and Filtering:** Users can sort tasks by newest, oldest, alphabetical, or importance. They can also filter tasks by status (all, active, or completed).

- **Responsive Design:** The application is fully responsive, ensuring a seamless experience on both desktop and mobile devices.

- **Local Storage:** Tasks are stored in the browser's local storage, ensuring that the to-do list persists even after page refreshes.

- **Interactive UI:** The user interface features dynamic interactions, providing an intuitive and smooth experience as users add, complete, or delete tasks.

- **Minimalistic & Clean Layout:** The application has a minimalistic and clean design, focusing on usability without unnecessary clutter.

- **Dark Mode Support:** Users can toggle between light and dark themes to suit their preferences.

Components

The application consists of the following main components:

- **TodoApp.js:** The main application component that manages the state of the tasks, including adding, editing, deleting, and sorting/filtering tasks. It also handles the logic for displaying the "All tasks completed!" message and triggering the confetti animation.

- **AddTaskForm.js:** This component handles the user input for adding new tasks, including the input field and the "Add" button.

- **Task.js:** This component represents an individual task and includes the functionality for marking a task as completed, editing, deleting, and toggling the importance of a task.

- **ThemeToggle.js:** This component provides a toggle button to switch between light and dark themes, leveraging the next-themes library.

Technologies Used

- **Next.js:** The core framework for building the application, supporting server-side rendering (SSR) and static site generation (SSG).

- **React:** Used for the UI components and state management.

- **Tailwind CSS:** A utility-first CSS framework for building responsive, modern, and fast designs. Tailwind helps in quickly building custom UI components.

- **localStorage:** Used to persist tasks in the browser storage, so tasks remain even after a page reload.

Installation and Setup

- **Clone the repository:** Clone the repository from GitHub:

```
git clone https://github.com/chiragak/to-do-list-app.git
```

- **Navigate to the project directory:** After cloning, navigate into the project folder:

```
cd to-do-list-app
```

- **Install dependencies:** Install the required dependencies using npm or yarn:

```
npm install
```

- **Set up Tailwind CSS:** If you are starting from scratch or want to ensure that Tailwind is set up correctly, follow these steps:

  - Install Tailwind and PostCSS:

    ```
    npm install tailwindcss postcss autoprefixer
    ```

  - Generate the Tailwind config file:

    ```
    npx tailwindcss init
    ```

  - Create a postcss.config.js file:

    ```js
    module.exports = {
      plugins: {
        tailwindcss: {},
        autoprefixer: {},
      },
    };
    ```

  - Update the tailwind.config.js file with the content paths:

    ```js
    /** @type {import('tailwindcss').Config} */
    module.exports = {
      content: [
        './pages/**/*.{js,ts,jsx,tsx}',
        './components/**/*.{js,ts,jsx,tsx}',
    ```

```
    ],
    theme: {
      extend: {},
    },
    plugins: [],
};
```
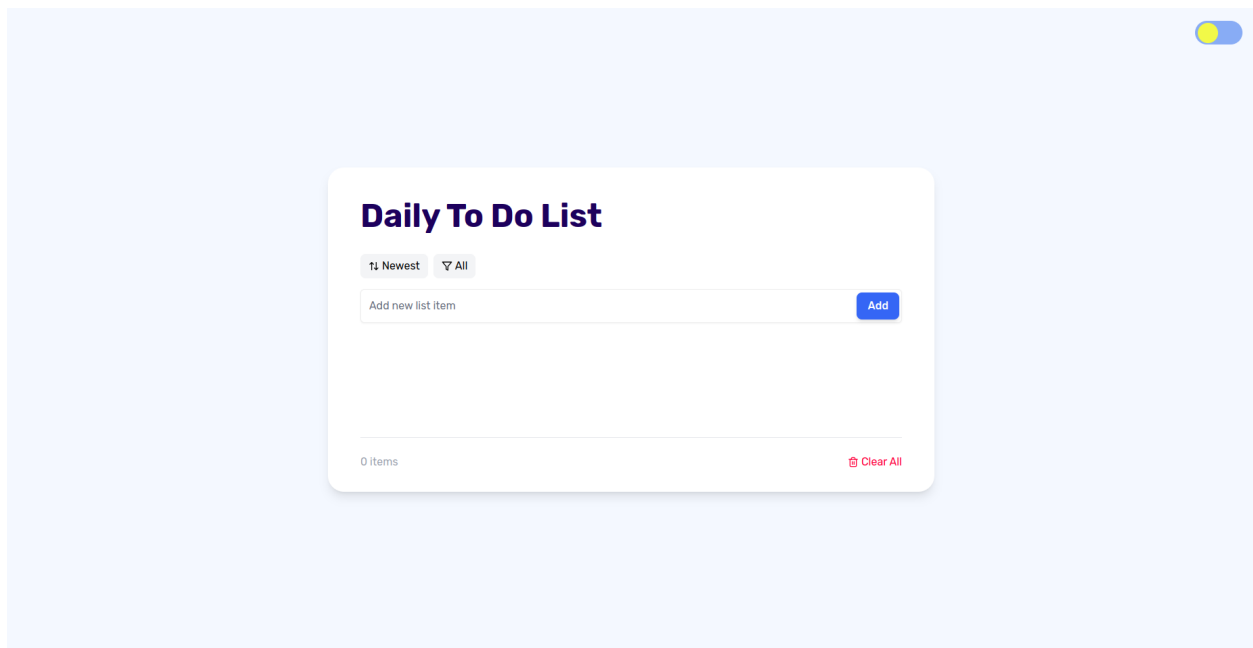
- Import Tailwind in your global CSS (styles/globals.css):

```
@tailwind base;
@tailwind components;
@tailwind utilities;
```

- **Start the development server:** Once the dependencies are installed, you can start the development server:

```
npm run dev
```

This will launch the application at http://localhost:3000 in your browser.
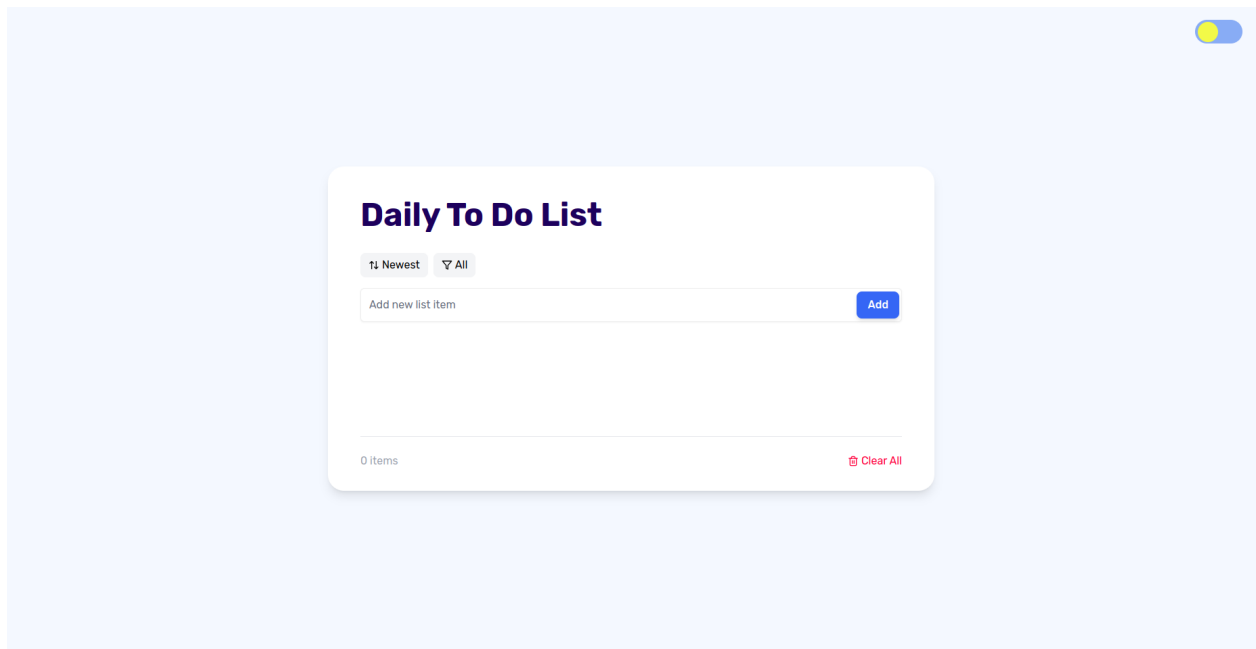

Usage

- **Adding Tasks:** Users can add new tasks by typing into the input field and hitting the "Add" button.

- **Marking Tasks as Completed:** Tasks can be marked as completed by checking the box next to the task.

- **Deleting Tasks:** Tasks can be deleted by clicking the delete button next to them.

- **Task Filtering:** Users can filter tasks based on their status (All, Completed, or Pending).

- **Persistence:** Tasks are stored in the browser's localStorage, which persists even after refreshing the page.
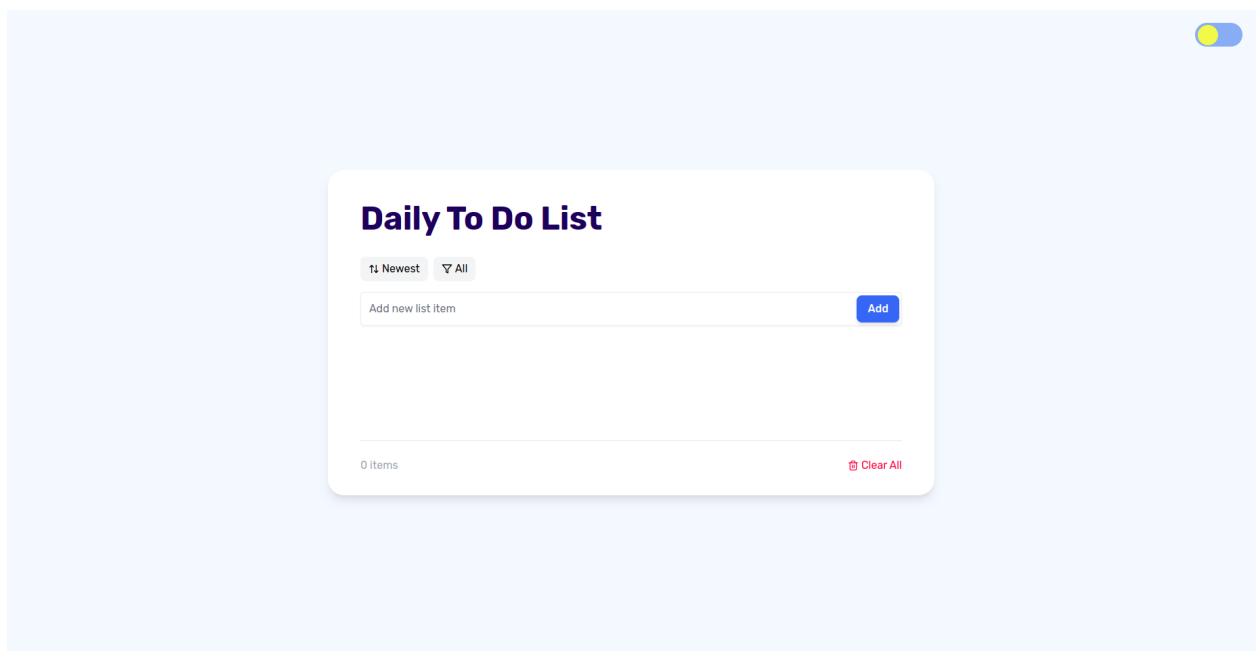
Customization

The application is designed to be easily customizable. You can modify the styling, layout, or add additional features by making changes to the existing components or creating new ones. The use of Tailwind CSS allows for quick and efficient styling adjustments.
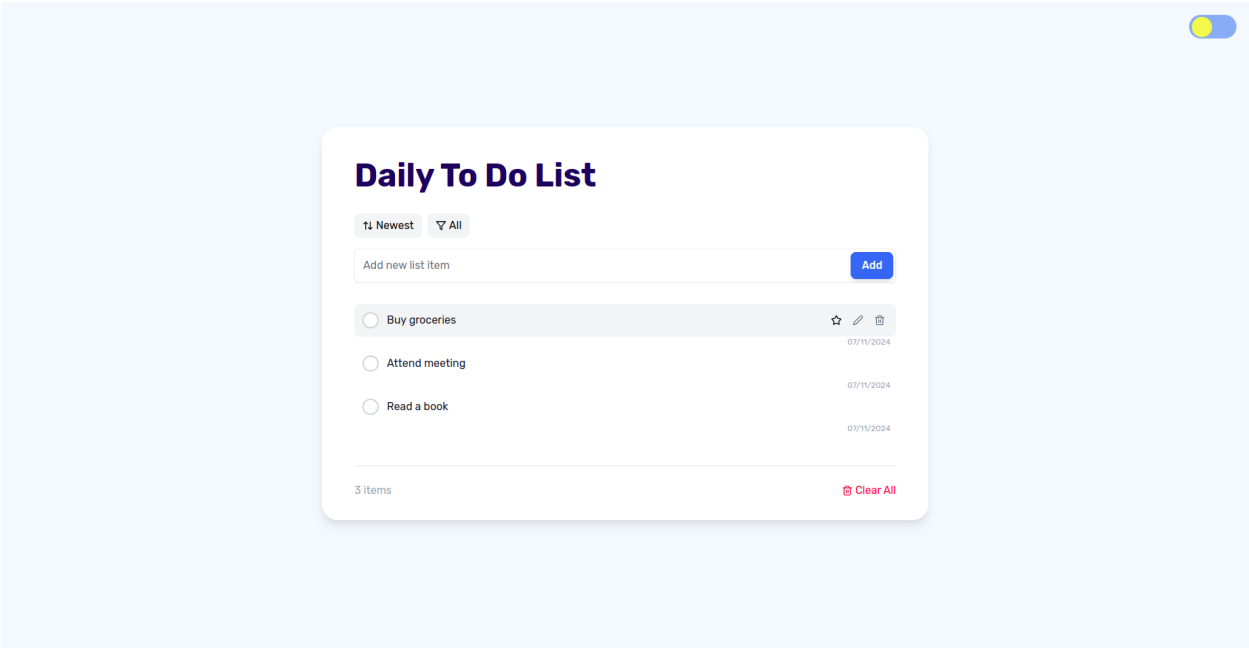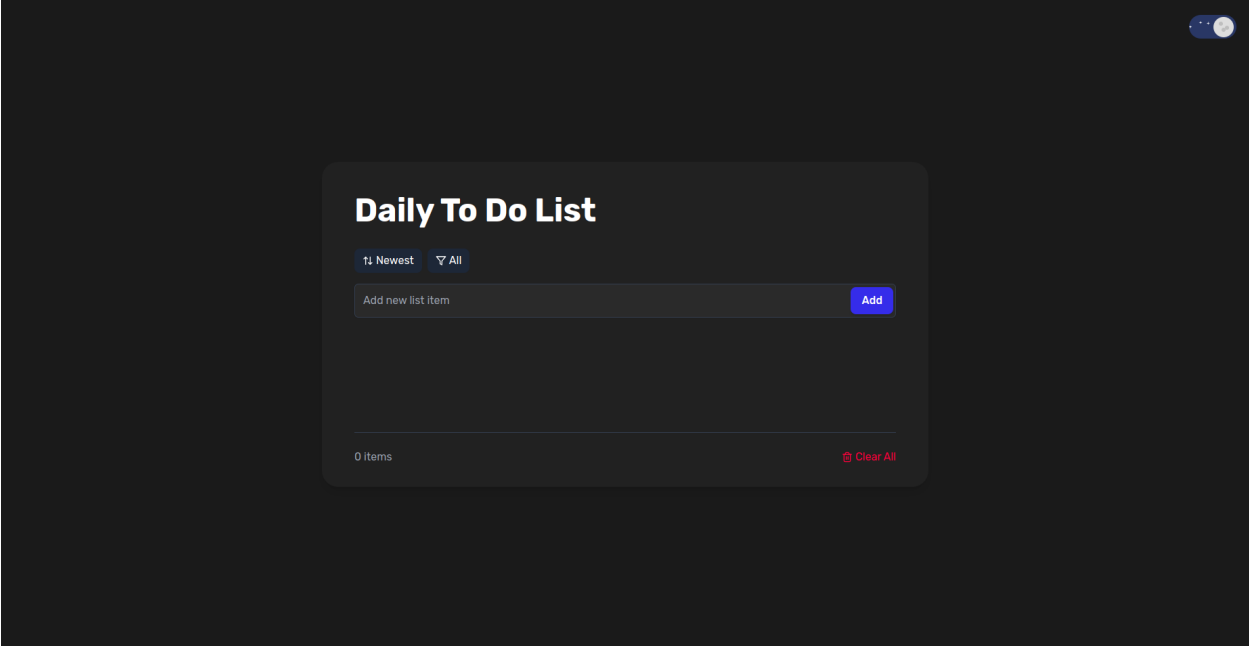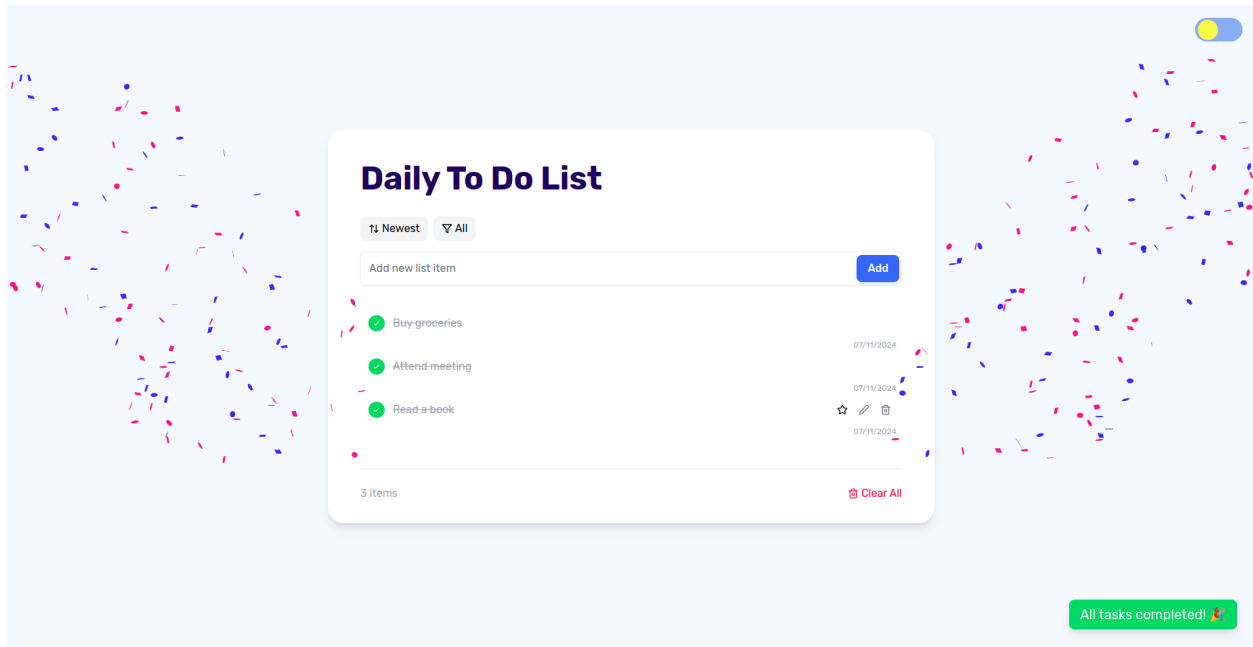
Conclusion

The To-Do Application is a simple yet powerful task management tool, designed to help users stay organized and productive. With its intuitive interface, responsive design, and localStorage integration, it provides a seamless experience for managing daily tasks. Whether you're an individual looking to streamline your personal life or a team collaborating on projects, this application can be a valuable asset in your productivity toolkit.

These are some of the screenshots of my web application

Daily To Do List

↑↓ Newest   ▽ All

| Add new list item | Add |

0 items   🗑 Clear All

Daily To Do List

↑↓ Newest   ▽ All

| Add new list item | Add |

○ Buy groceries   ☆ ✎ 🗑
07/11/2024

○ Attend meeting
07/11/2024

○ Read a book
07/11/2024

3 items   🗑 Clear All

Contact Information

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