**Working of Contact App**

First I have created component file to store all the components.

1. **Index.tsx**

I have a index.tsx file to use store to store the data of contacts and give the access of store to entire app and also have the appRouter for single page application.

Imported Tailwind CSS from index.css

1. **App.tsx**

Added aal components and added paths to it using react router.

1. **Dashboard.tsx**

I have created a simple dashboard

1. **Sidebar.tsx**

This component is used for render sidebar for every component.This the is the best practice to render for reacct router.

1. **Contact.tsx**

This is the main component that manages the state and interactions between the various subcomponents (ContactList and Modal). It handles adding, editing, viewing, and deleting contacts.

1. **Modal.tsx**

This component provides a form for creating, editing, or viewing a contact. It is rendered as a modal dialog.

1. **ContactList.tsx**

This component displays a list of contacts and provides buttons to edit, view details, or delete each contact**.**

The component renders a list of contact items.

For each contact, it displays the first and last name, and three buttons (View Details, Edit, Delete).

If there are no contacts, it displays a message indicating that no contacts were found.

1. **Store.tsx,contactSlice.tsx**

This 2 files are used to manage storage for contact data

configureStore is used to set up the Redux store with reducers and middleware.

The store is configured with a single reducer for managing contact data, which is wrapped with persistence capabilities using redux-persist

contactSilice is used to create a slice of the Redux store. A slice includes a reducer and actions for managing a part of the Redux state.

This is the working of the contact application

**Map and Chart**

To render the chart and map with the covid data I created one component named as **Graphs.tsx…react-leaflet** is used to display the covid map.

Leaflet is a popular open-source JavaScript library for interactive maps, and react-leaflet wraps this functionality in React components, making it easier to use Leaflet with React.

This component have imported 2 components one is to render the chart and another one is for Map.

* **MapComponent.tsx**

is a React functional component that displays a map using Leaflet and overlays markers for COVID-19 data of various countries. It utilizes React Query for fetching data from an external API and manages the data's loading and error states.

<https://disease.sh/v3/covid-19/countries>

This api is used to fetch the countires from api

* **LineChartComponent.tsx**

The LineChartComponent is a React component that displays a line chart of COVID-19 case fluctuations over time. It uses the recharts library for chart rendering and react-query for data fetching.

<https://disease.sh/v3/covid-19/historical/all?lastdays=all>

This api is used to fetch the data for cases over days

This how the Map and chart component works…