**Contact Management App Documentation**

**Overview:**

The Contact Management App is a web application built using React with TypeScript and Redux. It allows users to manage their contacts by storing, updating, and deleting contact details. Additionally, the app includes features for data visualization using charts and maps.

**Installation:**

To run the app locally, follow these steps:

* Clone the GitHub repository: GitHub Repo Link
* Navigate to the project directory in your terminal.
* Run the command **npm install** to install all dependencies.
* After installing dependencies, run **npm start** to start the development server.
* Open your browser and go to http://localhost:3000 to access the app.

**API Endpoints:**

The app utilizes two external APIs to fetch COVID-19 data (i) **country-wise** (ii) **date-wise.**

**Endpoint-1:** https://disease.sh/v3/covid-19/countries

Description: This endpoint provides COVID-19 statistics for all countries, including data on active cases, recovered cases, deaths, longitude, and latitude.

Usage: The app fetches data from this endpoint to display country-wise COVID-19 statistics on the map (leaflet map is used).

**Endpoint-2:** https://disease.sh/v3/covid-19/historical/all?lastdays=all

Description: This endpoint provides COVID-19 statistics date-wise for all over the world.

Usage: The app fetches data from this endpoint to display date-wise COVID-19 statistics on a line chart (CanvasJS is used for line chart).

**Features:**

**1. Contact Management:**

Users can add new contacts by providing their name, email, phone number, address and status (active or in-active).

Existing contacts can be updated with new information or deleted from the list.

Contact data is stored using Redux state management for easy access and manipulation.

**2. Data Visualization:**

The app includes charts and maps to visualize COVID-19 data.

Charts display trends in active cases, recovered cases, and deaths over time.

The map displays markers for each country with pop-up information containing COVID -19 statistics.

**Technologies Used:**

**React:** JavaScript library for building user interfaces.

**TypeScript:** Superset of JavaScript with static typing for improved code quality and maintainability.

**Redux:** State management library for managing application state.

**React-Query:** Library for fetching, caching, and updating asynchronous data in React applications.

**React-Leaflet:** React components for interacting with Leaflet maps.

**Conclusion:**

The Contact Management App provides users with a convenient way to manage their contacts and stay informed about COVID-19 statistics worldwide. With its intuitive interface and robust features, the app offers a seamless experience for users to organize their contacts and visualize important data.

**GitHub Repository:** https://github.com/Abhi2Brain?tab=repositories

**Deployed App:** https://contact-management-app-plum-eta.vercel.app/