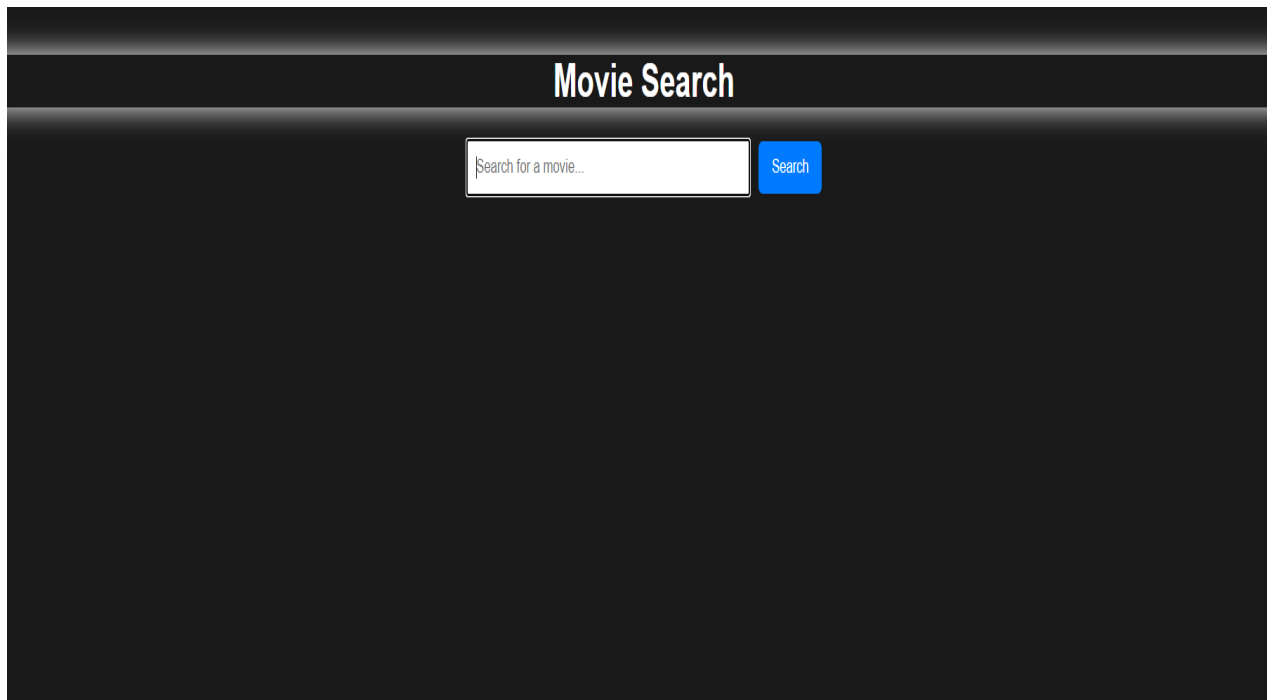# Task:4

# Task Name: API

# Project Name: Movie-App

## 1. Task Description

The task involves fetching and displaying data from a public API (such as a movie database like OMDB or The Movie Database) using **React**. The component should make an API call to fetch movie details (e.g., title, rating, release date), then display this information in a clean, user-friendly interface. Proper error handling and loading states should also be implemented.

## 2. Task Output Screenshot

# Movie Search

spider    **Search**

| | |
|---|---|
| Spider-Man: No Way Home (2021) | Spider-Man (2002) |
| Spider-Man: Homecoming (2017) | Spider-Man 2 (2004) |
| The Amazing Spider-Man (2012) | |

Spider-Man: Into the Spider-Verse (2018)   Spider-Man 3 (2007)   Spider-Man: Far from Home (2019)   The Amazing Spider-Man 2 (2014)   Spider-Man: Across the Spider-Verse (2023)

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# Movie Search

Yeh Jawaani Hai Deewani    **Search**

Yeh Jawaani Hai Deewani (2013)

### 3. Widget/Algorithm Used In Task

- Axios/Fetch: For making HTTP requests to the public API.
- useEffect: A React hook to perform the data fetching when the component mounts.
- useState: To manage the state of the fetched data, loading, and errors.
- Loading Spinner: A widget to indicate the data is being fetched.
- Error Message: A widget to show if the API call fails.
- Data Display Components: Card/List components to display movie information.

### 4. Algorithm explanation

- Set up a React component and use useEffect to trigger an API call on component mount.
- Use Axios or fetch to retrieve data from the public API.
- Manage the response data in the component's state using useState.
- Display a loading spinner while the data is being fetched.
- If data is fetched successfully, display it using a list or card component; if there's an error, show an appropriate error message.
- Make the component reusable by passing different API endpoints as props for fetching other types of data.

### 5. How to start:

Install Node Module in frontend and backend folder: Go to terminal "npm install" How to Start: Go to terminal "npm run server" OR "npm start".