# Assignment: Build a Movie Search App using OMDb API and Redux

## **Objective:**

Create a fully functional movie search app that allows users to search for movies by title, view movie details, and manage search results using Redux for state management.

# **Requirements:**

#### 1. Frontend Framework:

• Use **React** for building the user interface.

#### 2. State Management:

Use **Redux** for managing the application's state.

# 3. API Integration:

- Use the **OMDb API** (Open Movie Database) to fetch movie data based on user input.
- API Documentation: <u>OMDb API</u>

#### 4. Features to Implement:

- **Search Functionality**: Users should be able to input a movie title into a search bar, and the app will fetch results from the OMDb API.
- Movie List Display: Display the results of the search in a list format, showing at least the movie's title, year, and poster.
- Movie Details View: On selecting a movie from the list, display more detailed information about the movie (e.g., director, plot, rating, etc.).
- **Error Handling**: Show an appropriate error message if no movie is found or if there's an issue with the API.

### 5. State Management with Redux:

- **Search State**: Store the search query and the resulting list of movies in the Redux store.
- Loading State: Implement a loading state that shows a spinner or message when data is being fetched from the API.
- Error State: Store and display any error messages if the API request fails.

#### **Project Setup:**

## 1. OMDb API Key:

To use the OMDb API, you need an API key. You can obtain it by registering at OMDb API.

### 2. Redux Setup:

- Configure Redux store with reducers and actions to handle:
  - Movie search queries.
  - Managing the list of fetched movies.
  - Handling loading and error states.

## 3. React Components:

- **Search Bar Component**: A form to allow users to input the movie title.
- **Movie List Component**: A component to display the list of movies returned from the search.
- Movie Details Component: A separate view to display details of a selected movie.
- Loading and Error Components: Optional components to show loading spinners and error messages.

### **Bonus (Optional Enhancements):**

- 1. **Pagination**: Add pagination for search results if the list is too long.
- 2. Favorites List: Allow users to add movies to a favorites list and save this list in Redux.
- 3. **Styling**: Use a CSS framework (like Bootstrap or Material-UI) or custom CSS for better UI/UX.

Good luck!