### Introduction:

The Movie Recommendation App is a web application that suggests movies to users based on their preferences such as genre, rating, and release year. The app utilizes DOM manipulation to display movie recommendations, for loops to iterate through movie data, functions to handle user input and recommendation logic, closures to manage private data or state, and an array of objects to store and manage movie data.

### **Features:**

**Movie Recommendation Display:** The app displays recommended movies based on user preferences, such as genre, rating, and release year. DOM manipulation is used to dynamically update the movie recommendations on the user interface.

**User Input:** The app allows users to input their preferences, such as genre, rating, and release year, through a user interface. DOM manipulation is used to capture and validate user input.

**Movie Data Management:** The app utilizes an array of objects in a JSON file to manage movie data. Each object represents a movie with properties such as title, genre, rating, and release year. For loops or forEach functions are used to iterate through the movie data for recommendation logic.

**Recommendation Logic:** The app uses functions to implement recommendation logic based on user preferences. The recommendation logic involves filtering movies based on genre, rating, and release year, and displaying the filtered movies as recommendations to the user.

**Private Data or State Management:** Closures are used to manage private data or state in the app. Closures are functions that encapsulate private data or state within the function scope, allowing for better data privacy and organization.

## **Usage:**

- 1. **User Interface:** The app provides a user interface where users can input their movie preferences, such as genre, rating, and release year.
- Movie Recommendation Display: After users input their preferences, the app displays movie recommendations based on the user's preferences. The recommendations are dynamically updated on the user interface using DOM manipulation.
- 3. **Recommendation Logic:** The app uses functions to implement recommendation logic based on user preferences. For example, it may filter movies based on genre, rating, and release year, and display the filtered movies as recommendations to the user.
- 4. **Movie Data Management:** The app utilizes an array of objects in a JSON file to store and manage movie data. Each object represents a movie with properties such as title, genre, rating, and release year. For loops are used to iterate through the movie data for recommendation logic.
- 5. **Private Data or State Management:** Closures are used to manage private data or state in the app. Closures are functions that encapsulate private data or state within the function scope, allowing for better data privacy and organization.

### **Conclusion:**

The Movie Recommendation App is a web application that suggests movies to users based on their preferences. It utilizes DOM manipulation, for loops, functions, closures, and an array of objects to provide movie recommendations based on user preferences. The app provides a user-friendly interface for users to input their preferences and displays movie recommendations dynamically.

# UI:

