

Movie Recommendation Website Report

[Project Development]

By:

Siva S
Mariselvi M

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Introduction:

This report outlines the development of a Movie Recommendation Website that allows users to log in, sign up, browse movies, rate them, and receive personalized recommendations. The platform features a React-based frontend and a Firebase backend, ensuring dynamic functionality and a seamless user experience.

Features:

User Authentication:

- **Login and Signup:** Users can create an account or log in using existing credentials.
- **Session Management:** User sessions are maintained securely using Firebase Authentication.

Homepage:

- **Movie Categories:** Displays curated lists of movies such as trending, top-rated, and recommended.
- **Search Bar:** Allows users to search for movies by title or genre.
- **Personalized Recommendations:** Registered users receive movie suggestions based on their viewing and rating history.

Movie Page:

- **Details View:** Displays movie information such as title, genre, release year, synopsis, and cast.
- **User Interactions:** Users can rate, comment, and save movies to their watchlist.

Rating Page:

- **Rate Movies:** Users can rate movies on a scale (e.g., 1 to 10 stars).
- **Review Section:** Users can leave written reviews and view other users' ratings.
- **Feedback Integration:** Ratings and reviews contribute to the recommendation algorithm.

Architecture:

Frontend:

The frontend is built using **React** for a responsive and interactive user interface.

- **Homepage:** Features dynamically loaded movie lists using React components.
- **Movie Page:** Uses React hooks and Firebase queries to retrieve movie details.
- **Forms:** Secure forms for login, signup, and submitting reviews.

Backend:

The backend functionality is handled by **Firebase**:

- **Firebase Authentication:** Manages user signup, login, and session persistence.
- **Firebase Firestore:** A NoSQL database for storing user data, movie details, and ratings.
- **Firebase Functions:** Used for server-side logic such as recommendation algorithms.

Database:

A **Firebase Firestore** database is used to store and manage data:

- **Collections:**
 - **Users:** Stores user profiles, credentials, and preferences.
 - **Movies:** Contains movie information such as title, genre, and ratings.
 - **Ratings:** Records user ratings and reviews.

Workflow:

User Authentication:

1. User submits login/signup form.
2. Firebase Authentication validates credentials and manages sessions.

Movie Browsing:

1. Homepage fetches movie lists from Firestore.
2. Users can click on a movie to view details.

Rating and Reviews:

1. User submits a rating or review.
2. Firestore updates the database and triggers a recommendation update via Firebase Functions.

Recommendations:

1. Firebase Functions analyze user preferences and interactions.
2. Recommendations are displayed on the homepage.

Technologies Used:

Frontend

- **React**: For UI/UX.
- **Firebase Hosting**: For deploying the frontend.

Backend

- **Firebase**: For backend services including authentication, database, and functions.

Database

- **Firebase Firestore**: NoSQL database for managing data.

Deployment:

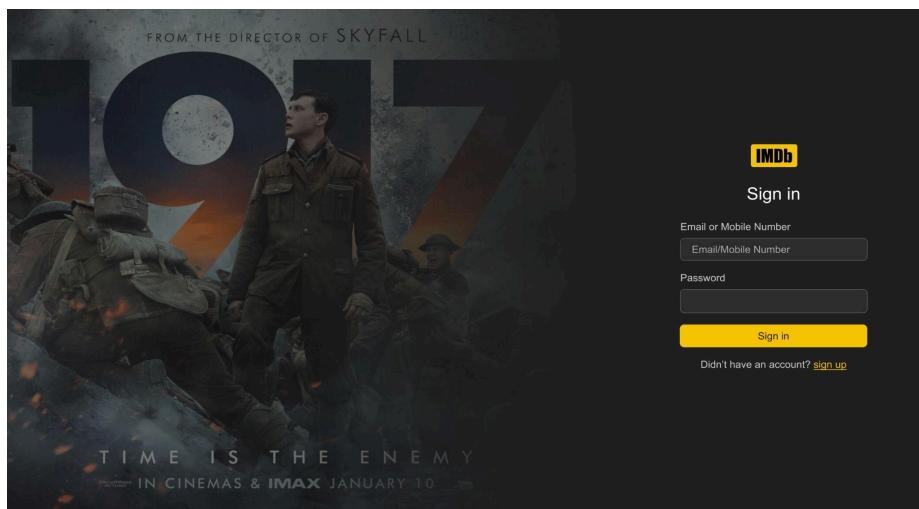
- **Frontend**: Hosted on Firebase Hosting.
- **Backend**: Managed through Firebase Functions and Firestore.

Requirement Analysis:

The core pages and functionalities of the Movie Recommendation Website include:

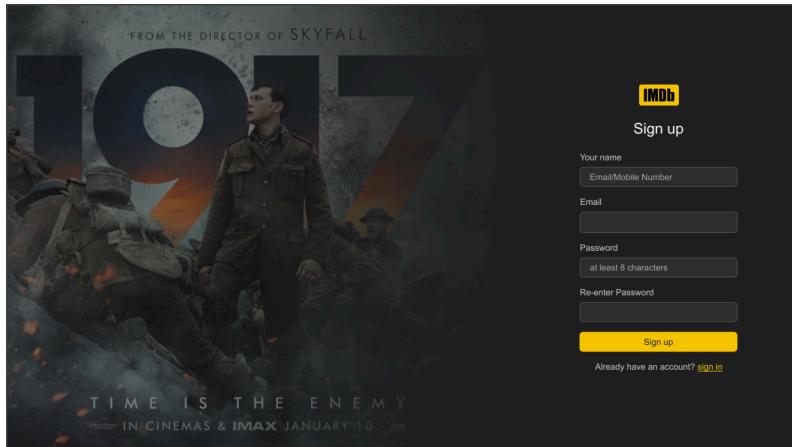
Login Page:

- Allows users to log in using their email and password.
- Firebase Authentication ensures secure login and session management.



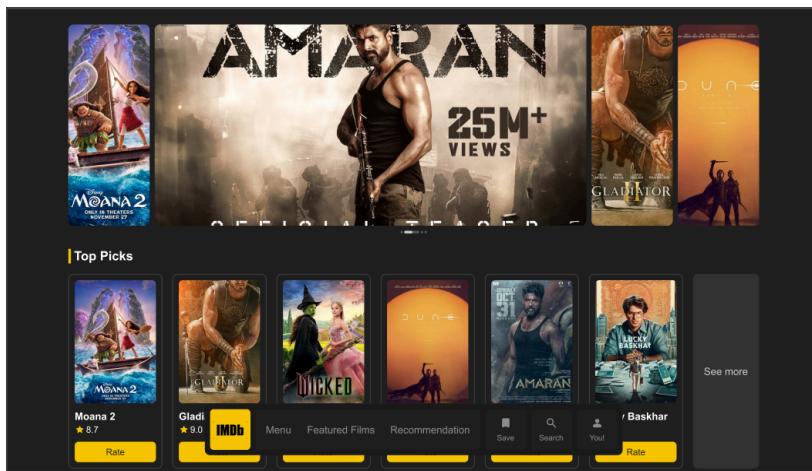
Signup Page:

- Enables new users to create an account by providing necessary details such as email and password.
- Implements validation and error handling for user input.



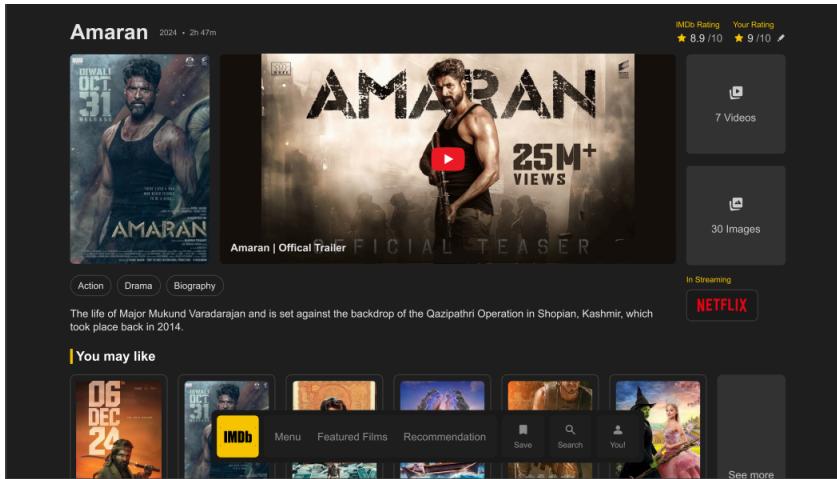
Homepage:

- Displays a dynamic collection of movies including trending, top-rated, and recommended categories.
- Provides a search bar for movie lookup and personalized recommendations for logged-in users.



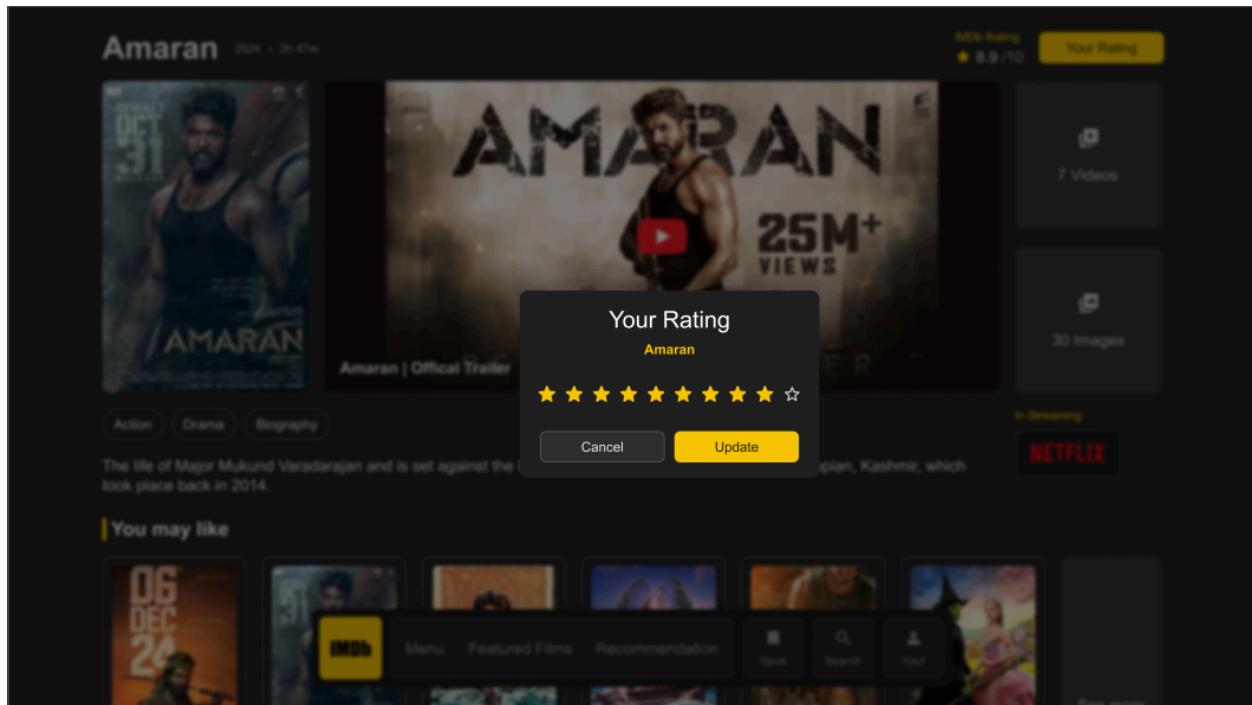
Movie Page:

- Provides detailed information about a selected movie.
- Allows users to interact with the movie by rating, reviewing, and adding it to their watchlist.



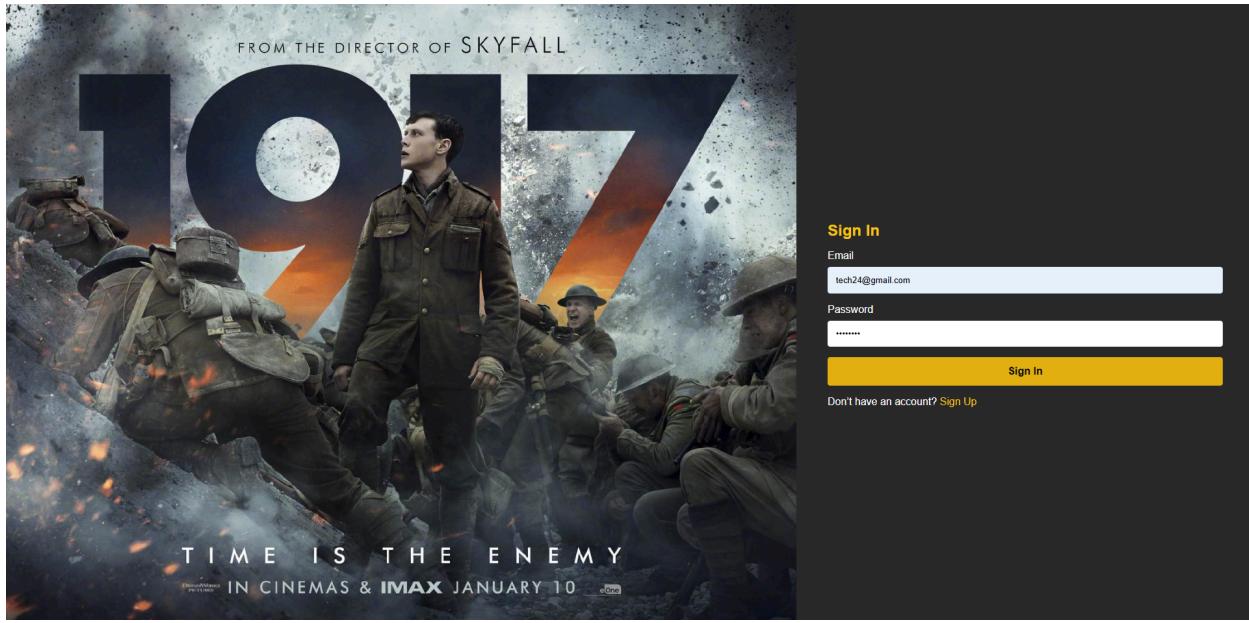
Rating Page:

- Enables users to rate movies on a predefined scale (e.g., 1-10 stars).
- Displays other users' reviews and ratings for a movie.
- Contributes data to the recommendation engine for better suggestions.

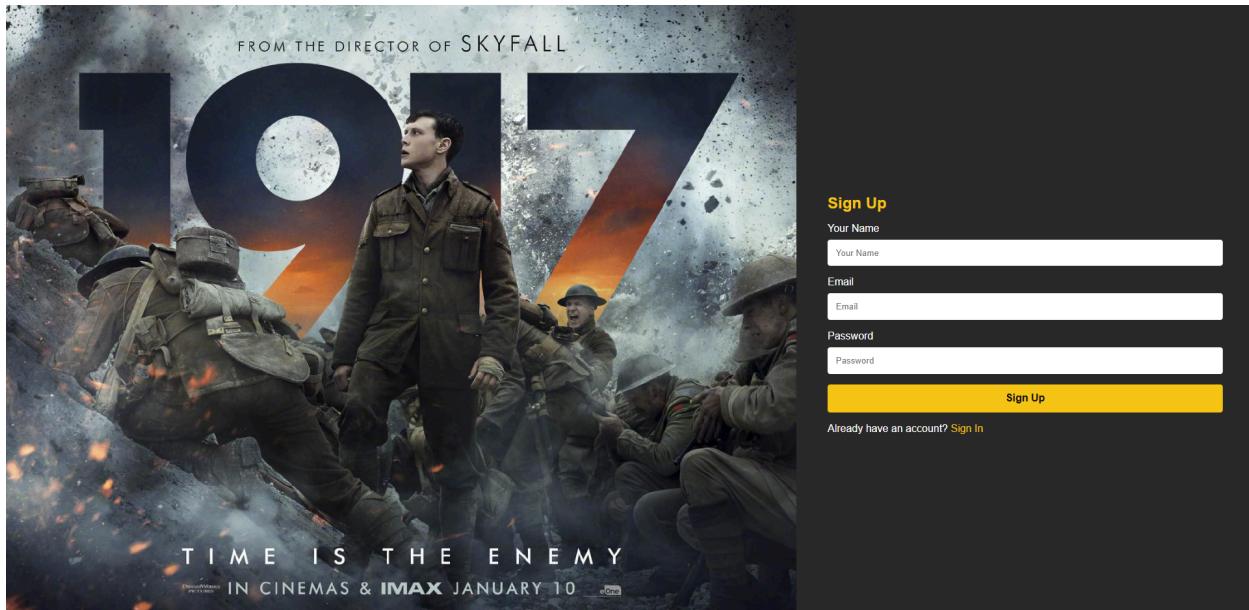


Work:

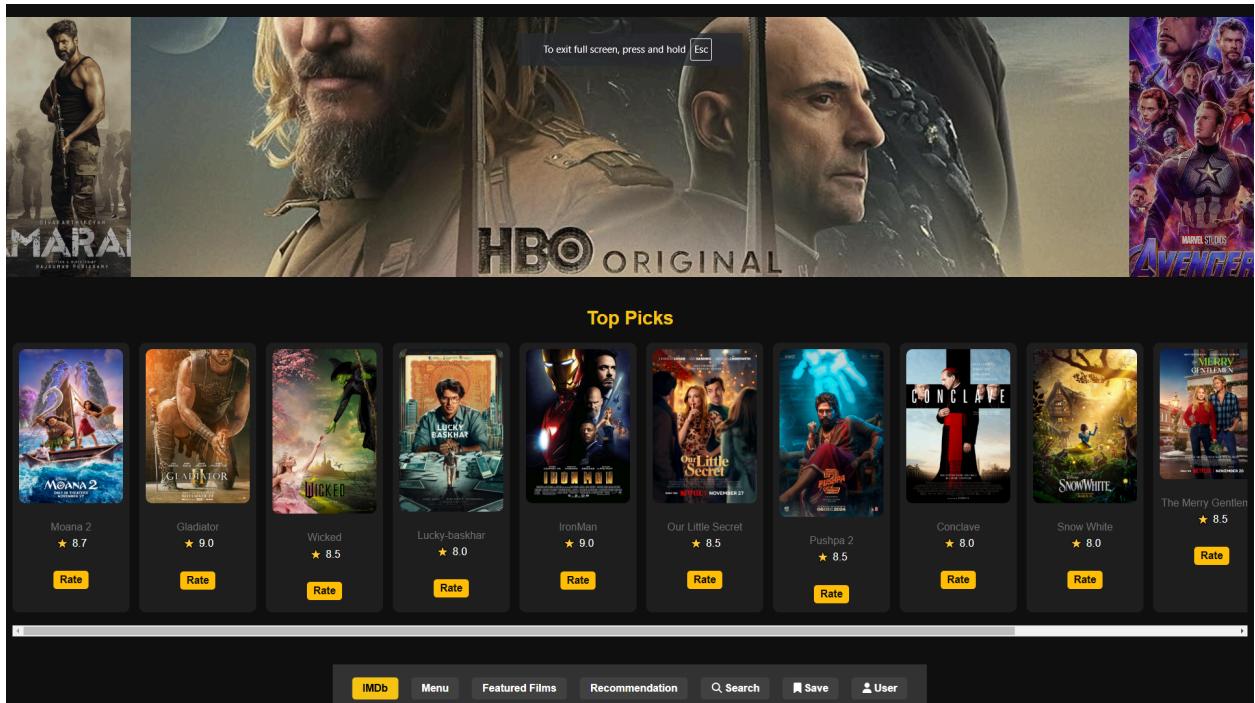
Login Page:



SignUp Page:



Home Page:



Movie Page:

Moana 2 (2024)

To exit full screen, press and hold Esc

Moana 2 is a 2024 American animated musical adventure film produced by Walt Disney Animation Studios for Walt Disney Pictures. It is the sequel to Moana (2016) and the second installment in the Moana franchise. Directed by David Tadros, Jason Hand, and Dana Ledoux Miller (in their feature directorial debuts) and produced by Christina Chen and Yvette Merino, from a screenplay by Jared Bush and Kristen Anderson-Lopez. Auli'i Cravalho, Dwayne Johnson, Temuera Morrison, Nicole Scherzinger, Rachel House, and Alan Tudyk all reprise their roles from the first film, with Huelai Chung, Rose Matafeo, David Fane, Awhima Rarau, and Gerald Ramsey joining the cast.

Set three years after the first Moana, it follows the titular character reuniting with the demigod Maui and assembling a wayfinding crew in order to find the lost island of Motufeta and break 1 its curse. 2

Sea Adventure | Comedy | Family | Computer Animation | Adventure | Animation | Fantasy | Musical | Tragedy | War

IMDb Rating: ★ 8.9/10
Your Rating: ★ 9/10 Rate Submit

Moana2 | Official Trailer

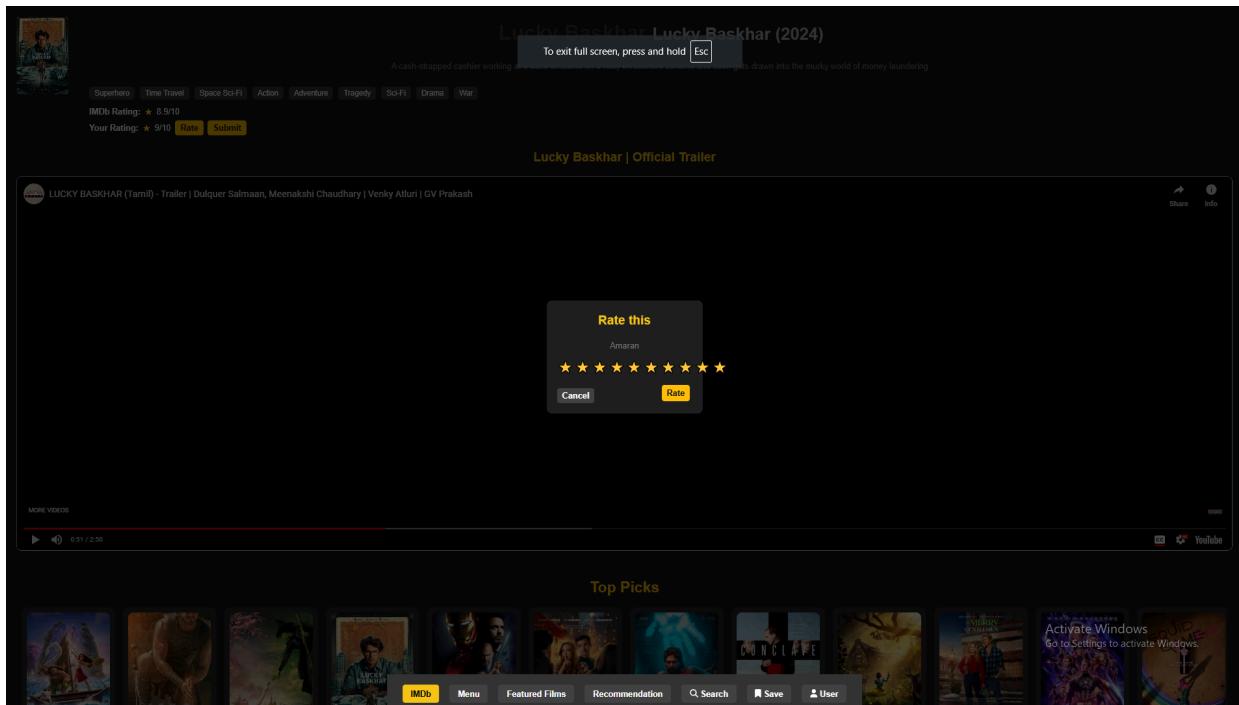
Moana 2 | Official Trailer

Copy link

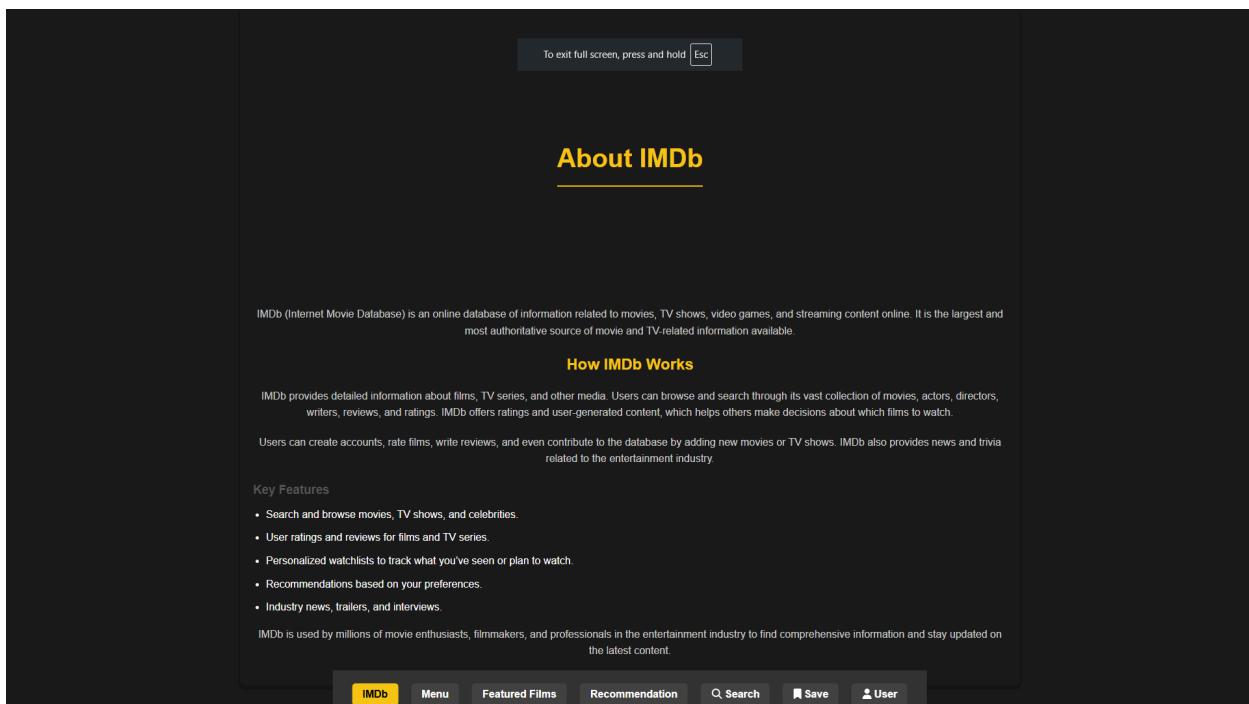
Activate Windows
Go to settings to activate Windows.

IMDb Menu Featured Films Recommendation Search Save User

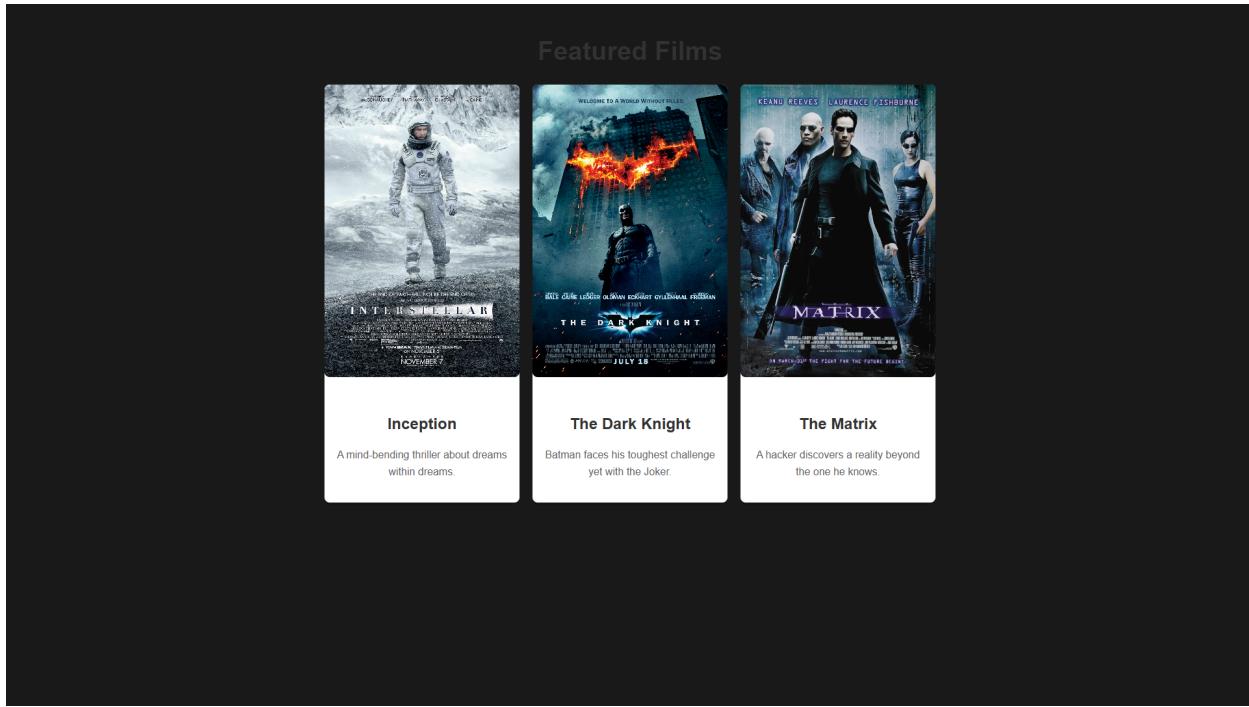
Rating Page:



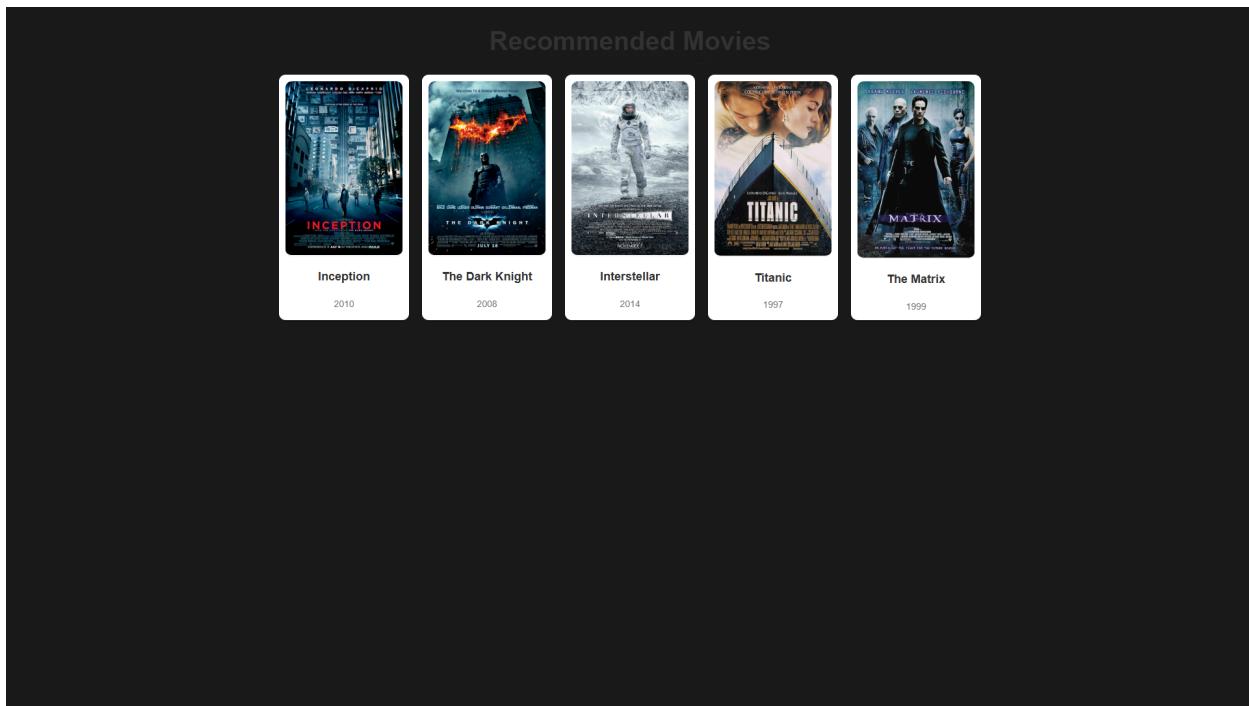
Imdb Page:



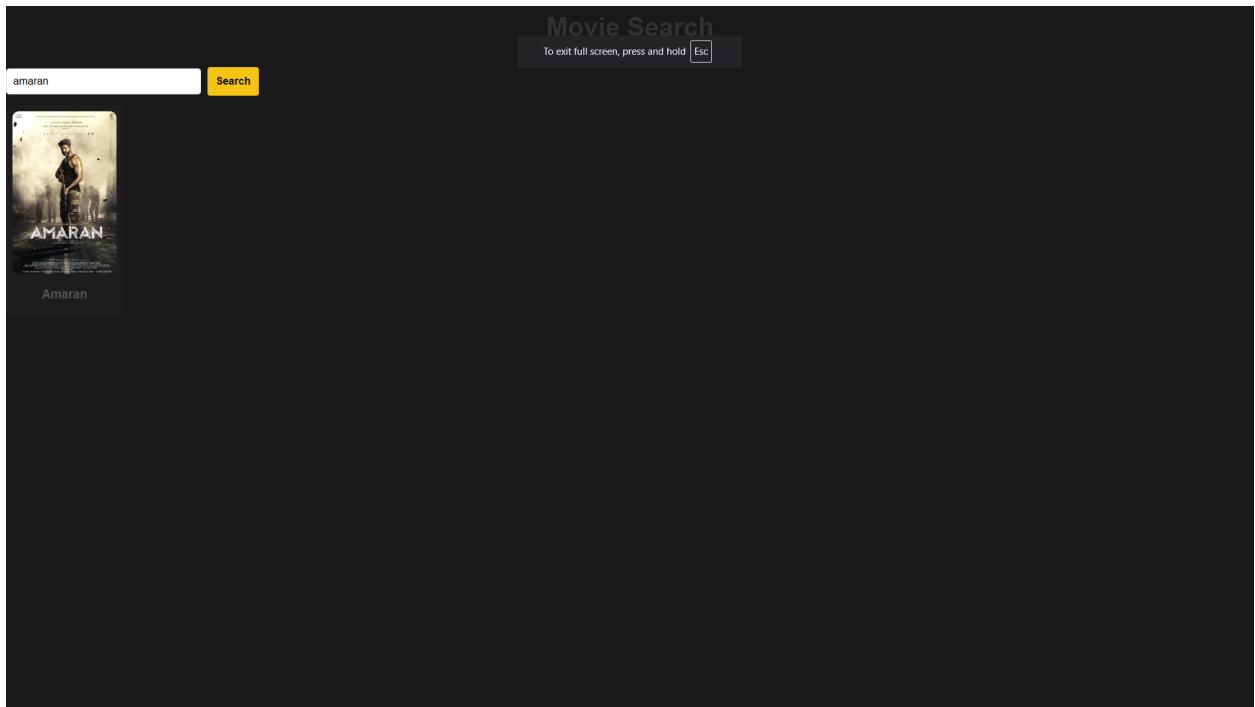
Featured Page:



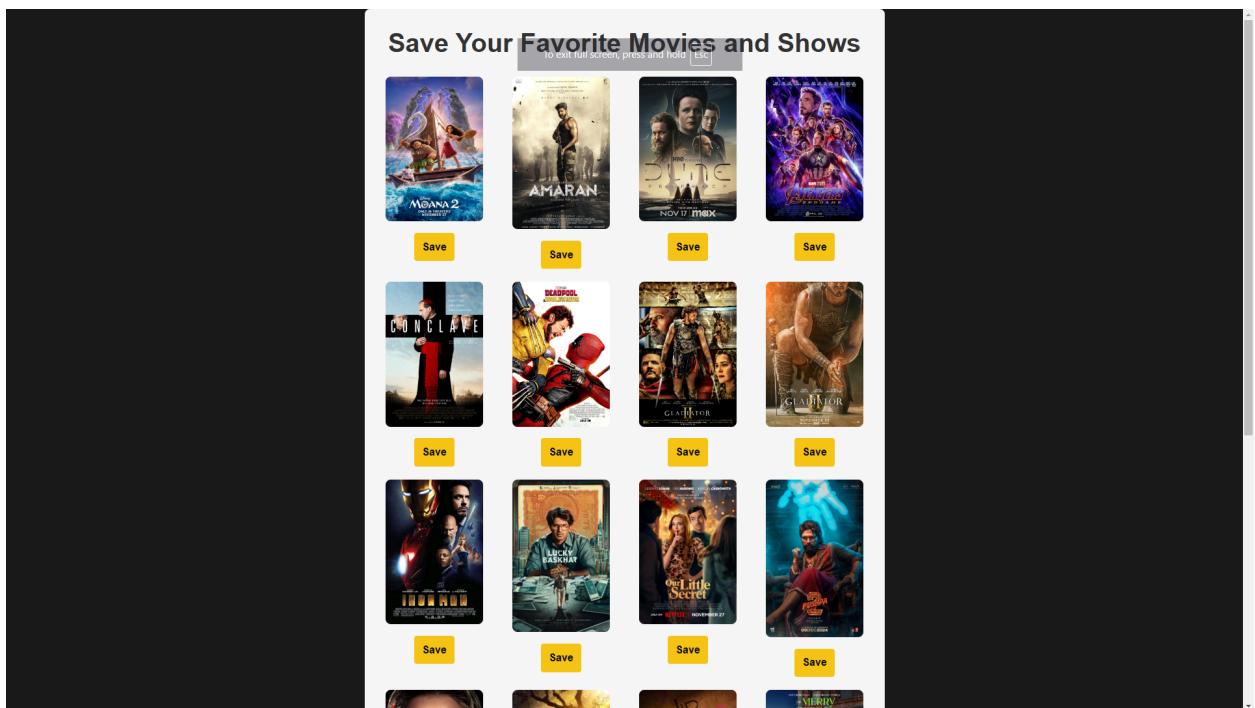
Recommendation Page:



Search Page:



FavouriteMovies Page:



User Page:

To exit full screen, press and hold Esc

Total IMDb Users

83,000,000

Registered users worldwide on IMDb

Most Watched Movies

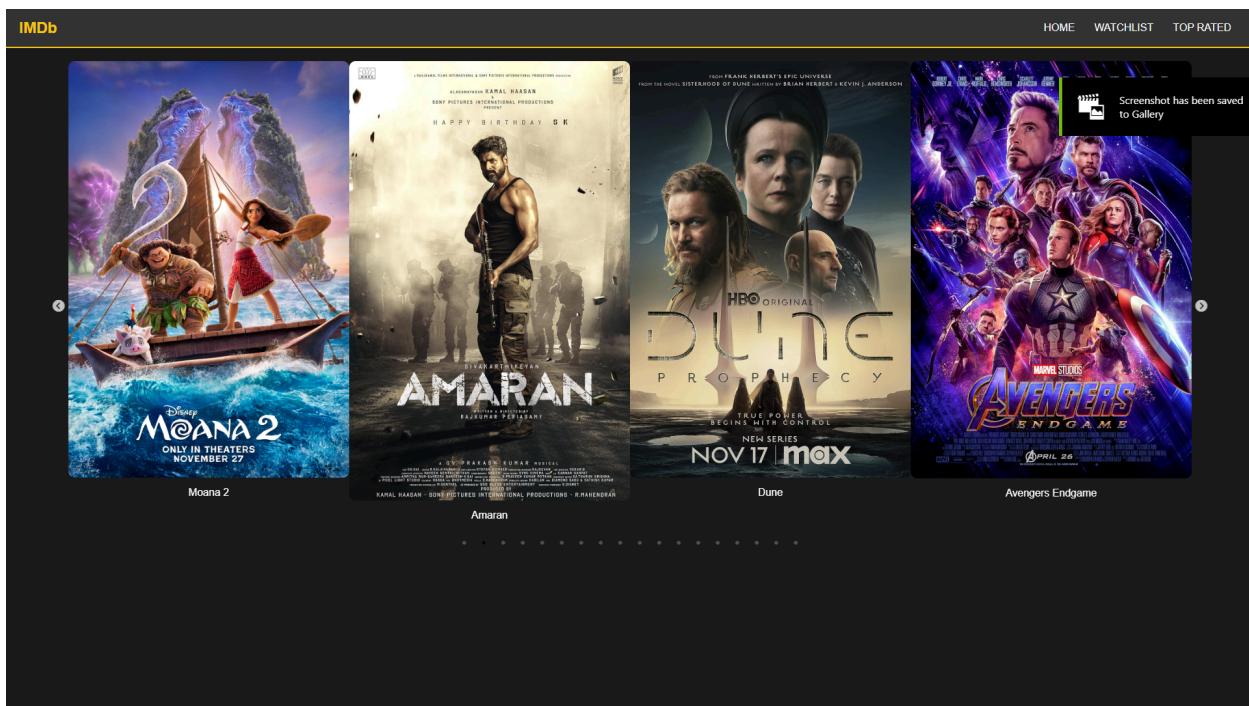
 Avatar 2 1,500,000 views	 Avengers: Endgame 1,200,000 views	
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Most Reviewed Movies

 Inception 85,000 reviews	 The Dark Knight 79,000 reviews	
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[IMDb](#) [Menu](#) [Featured Films](#) [Recommendation](#) [Q Search](#) [Save](#) [User](#)

Imdb Menu Page:



Conclusion:

This Movie Recommendation Website combines React and Firebase technologies to deliver a personalized and engaging experience. The seamless integration of the frontend, backend, and database ensures efficient operation and scalability.

Links:

MovieRecommendationIMDbPage Url (Hosted):

<https://sivatech24.github.io/MovieRecommendationImdb/>

MovieRecommendationIMDb React Project Files:

<https://github.com/Sivatech24/MovieRecommendationImdbProject>

GoogleDrive Link For Zip Files:

 **CrystalDeltaProject**

https://drive.google.com/drive/folders/1mSV6dRN6TxOlrtb3tuaX-X_26iF5Zxj?usp=sharing

GitHub All Project Files:

<https://github.com/Sivatech24/MovieRecommendationIMDbAllFilesUsed>