CAPSTONE PROJECT

Online Streaming Service

A PROJECT REPORT

Submitted by

MOHAMED ROOMI [192211658] SANDEEP [192211677]

Under the guidance of

Mr. M. Kathiravan

in partial fulfillment for the completion of course CSA4301- INTERNET PROGRAMMING FOR SERVER-SIDE APPLICATIONS

SIMATS ENGINEERING

THANDALAM



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DECLARATION

We, Mohamed Roomi, students of Bachelor of Engineering in Computer Science, Department

of Computer Science and Engineering, Saveetha Institute of Medical and Technical Sciences,

Saveetha University, Chennai, hereby declare that the work presented in this Capstone Project

Work entitled "Online Streaming Service" is the outcome of our ownbonafide work and is

correct to the best of our knowledge and this work has been undertaken taking care of

Engineering Ethics.

Mohamed Roomi(192211658) Sandeeep

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BONAFIDE CERTIFICATE

Certified that this project report titled "Online Streaming Service" is the bonafide work of "S Mohamed Roomi" Students of Bachelor of Engineering in Computer Science, Saveetha institute of Medical and Technical Sciences, Chennai, who carried out the project work under my supervision as a batch. Certified further, that to the best of my knowledge the work reported herein does not form any other project report.

Date: Project supervisor Head of the Department

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INTRODUCTION

With the rise of on-demand content, the consumption of movies and TV shows has shifted drastically towards online platforms. Movie streaming services are becoming the preferred medium for people to access a wide range of films at their convenience. This project focuses on creating a user-friendly and feature-rich movie streaming website where users can explore, watch, and enjoy movies across various genres.

The homepage of the website will provide an engaging user experience with high-quality thumbnails of popular and trending movies. Users can easily browse through categories such as action, drama, comedy, and documentaries. The goal of this project is to create a seamless and immersive movie-watching experience by implementing intuitive navigation, dynamic movie recommendations, and an efficient search system.

A key feature of the website will be its personalized movie recommendations based on user preferences. Interactive elements such as user reviews, movie ratings, and watchlists will also enhance engagement, making it not just a viewing platform but a social space where users can share their thoughts and connect with others.

ABSTRACT

This project aims to develop a dynamic movie streaming website called "MovieMania" that offers users access to a large collection of movies and TV shows. The website will feature an intuitive interface with easy navigation, personalized movie recommendations, and user interaction elements such as ratings and reviews. The platform will include sections like new releases, top-rated, and trending movies. Users will also have the ability to create personalized watchlists and receive content recommendations based on their watch history and preferences.

The project utilizes a modern tech stack, including HTML, CSS, JavaScript, and a backend service for movie data management. The streaming website is designed to be responsive, providing a smooth viewing experience across devices such as desktops, tablets, and smartphones.

AIM:

To design and implement a movie streaming web application that allows users to explore and watch movies with ease.

MATERIALS REQUIRED:

- Hypertext Markup Language (HTML)
- Cascading Styles Sheet (CSS)
- JavaScript (JS)
- Backend services for media streaming
- Development environment like Visual Studio Code (VS Code)

MOVIEMANIA

MovieMania provides a platform where users can explore various movies from different genres and categories. The homepage offers an immediate overview of the most popular and trending movies. Users can access detailed movie pages that provide a synopsis, cast, user reviews, and trailers. Additionally, users can filter movies by genres, release year, and ratings.

MovieMania will include personalized recommendations based on user viewing history, allowing them to discover new movies tailored to their taste. The watchlist feature enables users to save movies for later viewing, and users can also rate and review the movies they've watched.

METHODOLOGY

The frontend of MovieMania is developed using HTML for structure, CSS for design, and JavaScript for interactivity. Bootstrap is used to ensure responsive design across various screen sizes, offering a seamless experience on both desktop and mobile devices.

For the backend, a server-side application is built to manage the movie database, user profiles, and streaming services. The database stores movie metadata, user data, and watch history. The backend system also handles user authentication, providing a secure login system for account management.

Interactive features such as dynamic movie filtering, search functionality, and personalized recommendations are powered by JavaScript and integrated with the backend API to fetch relevant data in real-time.

IMPLEMENTATION

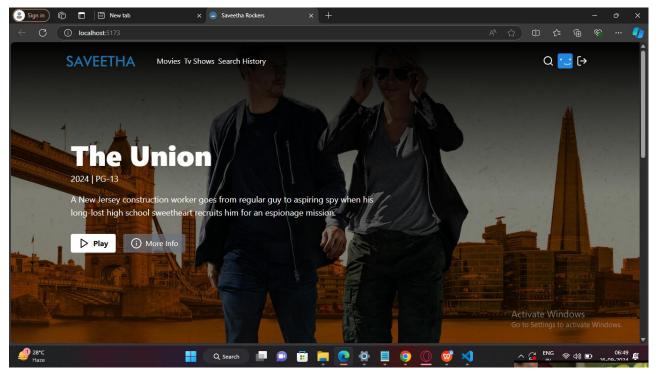
The layout of the movie streaming website is built using HTML and CSS, with Bootstrap for responsiveness. The homepage features sections for various categories such as Trending, Top-Rated, and New Releases. Each section displays movie cards that include a thumbnail, title, and rating.

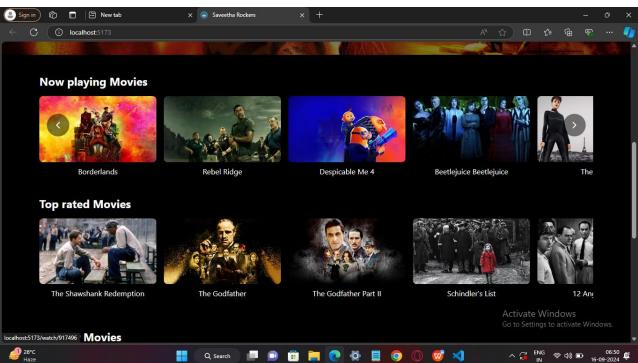
JavaScript is used to implement features such as filtering movies by genre, real-time search functionality, and the creation of personalized watchlists. Backend services manage user data and movie streams, ensuring that users can watch movies without interruptions.

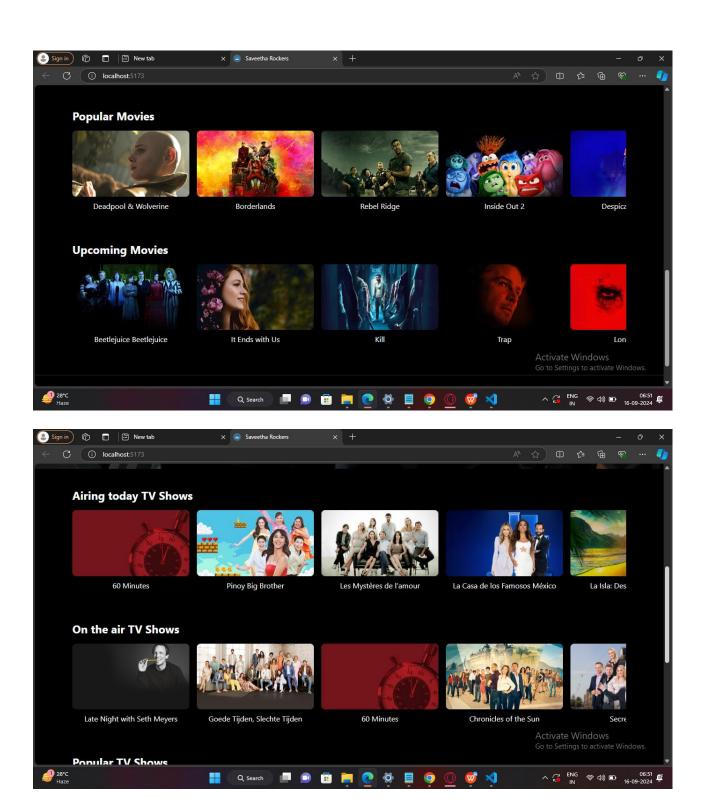
Animations and transitions are used to provide a smooth and engaging user experience. For example, hover effects are applied to movie cards, and a loading spinner is displayed while fetching data from the backend.

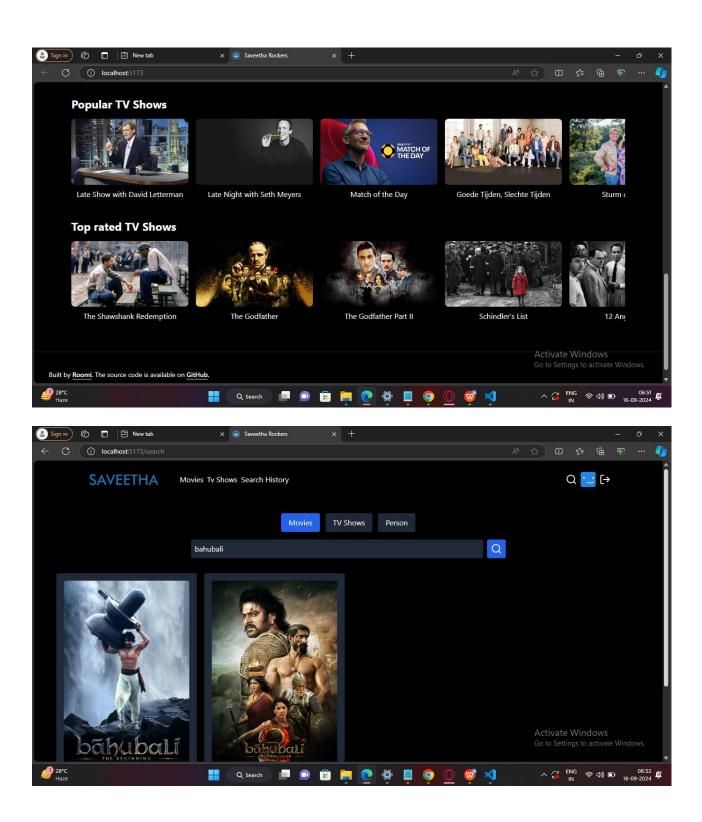
OUTPUT

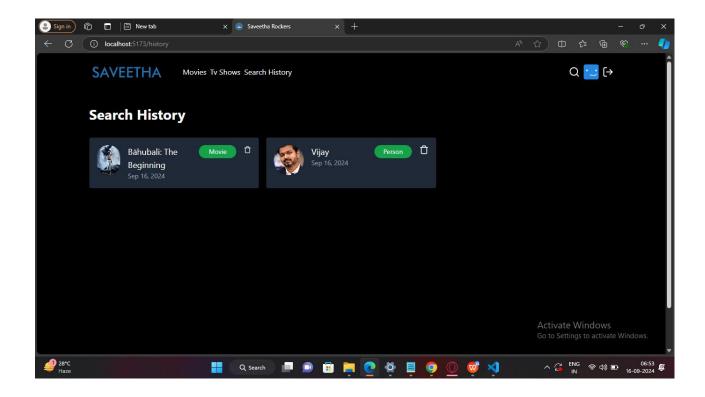
The final output is a fully functional movie streaming website where users can browse through a vast collection of movies, view movie details, add movies to their watchlist, and interact with the platform by rating and reviewing movies.











CONCLUSION

This project successfully developed a movie streaming platform that provides users with a rich viewing experience. Future enhancements include integrating social media sharing options, improving recommendation algorithms, and adding TV shows to the content library.