VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BELAGAVI, KARNATAKA-590014

Industry Internship Report

On

"MOVIE WEB APP"

Submitted by

MUHAMMED SHANIL CK

4DM21CS035

UNDER THE GUIDANCE OF

Prof Basavaraj Neelagund

Dept of CS&E

In partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

In

COMPUTER SCIENCE AND ENGINEERING

YENEPOYA INSTITUTE OF TECHNOLOGY

N.H.13, THODAR, MOODBIDRI-574225, MANGALORE, D.K.

2023-24

YENEPOYA INSTITUTE OF TECHNOLOGY

THODAR, MIJAR POST, MOODBIDRI-574225

(Affiliated to Visvesvaraya Technological University, Belagavi)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Industry Internship report entitled **"MOVIE WEB APP"** is an authentic record of the work carried out by **MUHAMMED SHANIL CK, USN:4DM21CS035,** student of 5th semester in partial fulfillment of requirements for the award of Bachelor's Degree in **Computer Science & Engineering** prescribed by Visvesvaraya Technological University during the year **2023-24**.

Signature of the Guide	Signature of the HOD
(Prof Basavaraj Neelagund)	**(Dr. Manjunath Kamath K)**

External Viva

Name of the examiner	**Signature with Date**
1._____	1. _____
2. _____	2. _____

ACKNOWLEDGEMENT

The successful completion of any work would be incomplete without a mention of the people who made it possible, whose constant guidance and encouragement served as a beacon light and crowned our efforts with success. I owe my gratitude to many people who helped and supported me during my Project **"Movie Web App"**

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Finally, yet importantly, I express my heartfelt thanks to my family & friends for their wishes, encouragement and providing me moral strength for the successful industry internship work.

MUHAMMED SHANIL CK (4DM21CS035)

TORC INFOTECH

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OLD ROAD, KALAMASSERY
KOCHI, KERALA

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Muhammed Shanil C K, a Yenepoya Institute Of Technology student, has completed 4 weeks of Internship on Web Development with AI tools from October 26, 2023, at TORC INFOTECH PVT LTD, Kochi. During this internship, we found the student to be sincere, honest, hardworking, and dedicated with a professional attitude. The Student is proactive and is constantly looking to improve existing skill sets. We also observed that the student is skilled in execution.

We wish the student every success in all future endeavours.

ABHI KRISHNA H
Managing Director

TORC INFOTECH KOCHI-683104

SEAL

#startupindia

KERALA STARTUP MISSION

AICTE

ABSTRACT

This internship opportunity focuses on Full stack development. Full stack development is a multifaceted approach to creating interactive and dynamic websites or web applications. This comprehensive skill set covers both the front-end and back-end aspects of development, enabling individuals to handle the entire software development process. The term "full stack" refers to the complete range of technologies and frameworks a developer should be proficient in, ensuring a seamless integration of various components.

On the front-end, a full stack developer must master HTML for structuring content, CSS for styling, and JavaScript for creating interactive user interfaces. This encompasses the visual elements users interact with, emphasizing responsiveness and a polished user experience. Conversely, the back-end involves server-side programming, database management, and server configuration. Full stack developers commonly work with server-side languages like Node.js, Python, Ruby, or PHP to handle requests and process data. They are adept at working with databases such as MySQL, PostgreSQL, or MongoDB, ensuring efficient storage and retrieval of information.

The full stack developer acts as a bridge between these two realms, seamlessly connecting the user interface with the server-side logic. Application programming interfaces (APIs) play a crucial role in this integration, allowing communication between different software components. Understanding RESTful API design is fundamental for effective data exchange. Moreover, full stack developers need proficiency in version control systems like Git, ensuring collaboration and code management. They must also be familiar with deployment and hosting platforms, such as Heroku or AWS, to make the developed applications accessible to users. In essence, full stack web development demands adaptability and continuous learning. The ever-evolving landscape of technologies requires developers to stay updated with the latest frameworks and tools. This abstract underscores the holistic nature of full stack web development, emphasizing the need for a well-rounded skill set to create robust and user-friendly digital experiences

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Chapter 1

INTRODUCTION

The future of cinematic entertainment !. embark on an exciting journey to create the ultimate movie app that will revolutionize the way audiences experience and engage with their favorite films. Our project is more than just an app, it's a gateway to a world of captivating stories, stunning visuals, and immersive cinematic experiences. Imagine having a personalized movie companion at your fingertips, offering tailored recommendations based on your preferences, seamless streaming, and an interactive community where film enthusiasts can connect and share their passion. This project is not just about technology; it's about enhancing the magic of storytelling and making the world of movies more accessible and enjoyable for everyone. Get ready to dive into a new era of cinematic wonder with our innovative movie app

Full-stack web development is the comprehensive approach of building web applications, encompassing both front-end and back-end development. On the front end, developers create the user interface and experience using languages like HTML, CSS, and JavaScript. This involves designing responsive and interactive elements that users interact with directly. On the back end, developers focus on server-side logic, databases, and server deployment. Common back-end technologies include Node.js, Python and Java.

A full-stack developer is adept at both ends of the web development spectrum, facilitating seamless communication between the user interface and the server. They integrate databases, manage user authentication, and handle server-side operations. Understanding the full stack enables developers to create dynamic and feature-rich web applications. Tools like Git for version control and various frameworks simplify the development process. Collaboration, adaptability, and problem-solving skills are vital for a full-stack developer, as they navigate through the entire web development lifecycle, from conceptualization to deployment. Embracing this holistic approach empowers developers to craft robust, scalable, and user-friendly web applications.

Chapter 2

LITERATURE SURVEY

In the rapidly evolving realm of digital entertainment, the intersection of technology and storytelling has given rise to a myriad of movie-related applications, each vying to redefine how audiences experience and engage with cinematic content. A literature survey of the current landscape reveals a dynamic ecosystem where innovation and user-centric design play pivotal roles in shaping the success of movie apps. Research highlights the importance of personalized content recommendations, seamless streaming experiences, and social connectivity within these applications, as users increasingly seek tailored, on-demand access to a diverse range of films. Moreover, studies emphasize the significance of user interface design, content curation algorithms, and collaborative features in fostering an immersive and enjoyable movie-watching experience. As we embark on the development of our movie app, this literature survey serves as a compass, guiding us through the currents of industry trends and user expectations, ensuring that our project not only meets but exceeds the evolving demands of modern cinephiles.

Advantages:

1) Convenience and Accessibility
2) Personalization
3) Wide Range of Content
4) Interactivity and Social Features
5) Revenue Streams

Disadvantages

1) Licensing and Copyright Challenges.
2) Competition
3) Technical Challenges
4) Data Security and Privacy Concerns
5) Content Discovery

Creating a movie app presents exciting opportunities to redefine how audiences experience films, but it demands careful navigation of legal, technical, and competitive challenges to ensure long-term success and user satisfaction.

Chapter 3

PROBLEM STATEMENT AND SOLUTION STRATEGY

3.1. Problem Statement

In the ever-evolving landscape of digital entertainment, a notable gap exists in the seamless and personalized access to a diverse array of cinematic content. Current movie apps, while offering convenience, often fall short in providing a truly immersive and tailored experience for users. The prevailing challenges include limited content discovery tools, a lack of effective personalization algorithms, and difficulties in securing comprehensive licensing agreements. Additionally, the dominance of established players poses hurdles for newcomers in the industry. Technical issues, such as inconsistent streaming quality and device compatibility, further hinder the creation of a movie app that delivers a cutting-edge and user-centric experience. Addressing these challenges is imperative to redefine the way audiences engage with films, ensuring a user-friendly, secure, and inclusive platform that caters to the varied tastes and preferences of modern cinephiles.

3.2. Solution Strategy

The solution strategy for developing an exceptional movie app revolves around a multi-faceted approach that prioritizes innovation, user engagement, and strategic partnerships. To address the challenge of limited content discovery and personalization, our primary focus is on implementing advanced algorithms that analyze user behavior and preferences, ensuring highly accurate and tailored movie recommendations. Simultaneously, forging strategic partnerships with major film studios and content distributors will enable us to curate a comprehensive and diverse content library, including exclusive releases. A key aspect of our strategy involves optimizing the user interface for seamless navigation, integrating social features to foster community engagement, and incorporating customizable profiles and watchlists for an immersive viewing experience. Ensuring high-quality, buffer-free streaming across various devices will be achieved through robust streaming infrastructure and adaptive technologies. Legal compliance is a priority, with a dedicated legal team navigating licensing complexities and ensuring adherence to copyright laws. Strategic marketing efforts will create awareness, leveraging social media, influencers, and partnerships to establish a strong brand presence. Finally, stringent data security measures and transparent privacy policies will build trust among users.

Chapter 4

PROPOSED SYSTEM

As part of learning to code, we completed a project that involved creating a basic Movie app website using HTML, CSS, and JavaScript. This project was designed to showcase our skills in front-end web development. It is a responsive and user-friendly web application that allows users to play music. We used HTML and CSS to design and style the interface, and We implemented JavaScript to handle user input and interaction such as basic playback controls -play, pause, and next. We also gained experience working with version control tools such as Git and GitHub.

A movie app website aims to provide users with an immersive and user-friendly platform for fetching the movie details. The website typically features a sleek and intuitive user interface that allows users to play a search movie which were released all over the world. Key features include update day by day. Responsive design ensures a seamless experience across various devices. Users can explore different genres, create personalized movies, and get details of whoever casted. Additionally, integration with social media platforms may enhance the sharing of movie details. The mobile application combines functionality with an engaging design to create a compelling digital space for movie enthusiasts to enjoy and explore diverse movie content.

Chapter 5

SYSTEM REQUIREMENT SPECIFICATION

5.1. Hardware Requirements

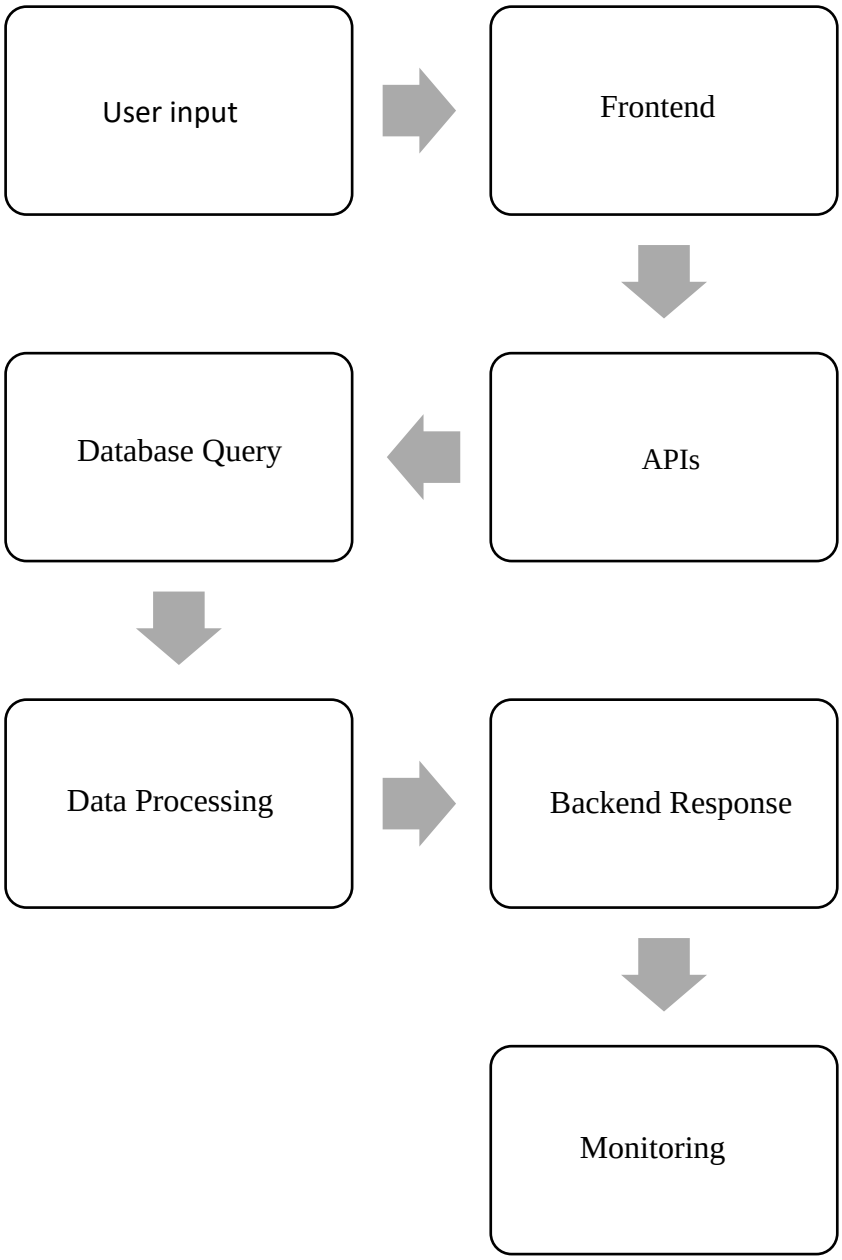
- Processor – Intel(R) Celeron(R) N4020 @ 1.10 GHz
- RAM – 4 GB
- Hard Disk – 250 GB

5.2. Software and Libraries Requirements

- Language: Python 3.x
- Operating System: Windows 7 or above
- Python Libraries:
    - Numpy
    - Scipy
    - Pandas
    - Matplotlib
    - Sklearn
- Developer tools: Jupyter Notebook, VS code

Chapter 6

SYSTEM DESIGN



Chapter 7

IMPLEMENTATION/WORK DURING INTERNSHIP

7.1. WEEKLY REPORT

7.1.1 WEEK 1

Introduction, Career Opportunities, Basic Web Development, and Environment Setup

Introduction to the Internship:

The initial week of the Full stack Development internship commenced with a warm welcome and thorough orientation. The team provided an overview of the project's objectives, fostering a sense of inclusion and purpose.

Career Opportunities in Fullstack Development:

Participants engaged in sessions exploring the diverse career opportunities within Fullstack Development. The discussions shed light on the significance of being well-versed in both frontend and backend technologies, emphasizing the role of Full stack Developers in creating cohesive and efficient software solutions.

Basic HTML, CSS, and JavaScript:

With a foundational understanding of the internship context and career prospects, hands-on coding sessions commenced. Participants delved into the basics of web development, starting with HTML, CSS, and JavaScript.

Setting up the Development Environment:

An essential aspect of Week 1 was setting up the development environment. Visual Studio Code (VSCode) was chosen as the integrated development environment (IDE) for its versatility and extensive plugin support.

Downloading Visual Studio Code:

Participants were guided through the process of downloading and installing Visual Studio Code from the official website. The step-by-step instructions ensured a smooth setup for both

Windows and macOS users.

Visit the [Visual Studio Code website] (https://code.visualstudio.com/).

Click on the "Download" button.

Follow the on-screen instructions for your operating system.

Once the installation is complete, launch Visual Studio Code.

Configuring Visual Studio Code:

To enhance the development experience, participants were introduced to essential VSCode extensions. The "Live Server" extension, for instance, was recommended for quickly launching and previewing HTML files.

 Open Visual Studio Code.

 Navigate to the Extensions view by clicking on the Extensions icon in the Activity Bar on the side of the window or using the keyboard shortcut `Ctrl+Shift+X`.

 Search for "Live Server" and click on the "Install" button.

 Once installed, click on the "Reload" button to activate the extension.

 Open an HTML file, right-click, and select "Open with Live Server" to launch a live

7.1.2 WEEK 2

React Fundamentals and Node.js Installation

Frontend Exploration with React:

The second week of the Fullstack Development internship centered around a comprehensive exploration of React, a JavaScript library for building user interfaces.

Understanding React Components:

Participants delved into the core concept of React components. They grasped the difference between functional and class components and gained a deep understanding ofJSX, the syntax extension for JavaScript recommended by React.

State Management in React:

The week extended to the essential topic of state management in React. Participants learned the significance of state in creating dynamic and interactive components and explored the usage of the useState hook.

Hands-On Coding Tasks:

Practical coding tasks were integral to solidifying React concepts. Participants engaged in creating interactive components, handling user input, and managing component state, fostering a hands-on approach to learning.

Introduction to Node.js:

Complementing the frontend exploration, the week introduced participants to the backend aspect of development using Node.js. The event-driven, non-blocking I/O model of Node.js was emphasized, highlighting its suitability for scalable applications.

Node.js Installation:

To enable participants to seamlessly navigate both frontend and backend development, the installation of Node.js was a key focus. Clear instructions were provided for installing Node.js and npm (Node Package Manager) on various operating systems.

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1. Visit the [Node.js website] (https://nodejs.org/).
2. Download the recommended LTS version for your operating system.
3. Follow the installation instructions provided on the website.
4. Once installed, open a terminal or command prompt and verify the installation

7.1.3 WEEK 3

Login/Signup Page Development and Firebase Integration

Login/Signup Page Development:

Building upon the foundation laid in previous weeks, participants immersed themselves in the development of a login/signup page. The focus was on creating an interactive and user-friendly authentication experience.

Enhancing the Login Page:

The login page structure, introduced in Week 2, was refined and extended to accommodate both

login and signup functionalities. Participants implemented input validation and designed a seamless user interface for a streamlined authentication process.

CSS Styling for Authentication Page:

CSS styling was applied to enhance the visual appeal and responsiveness of the login/signup page. Participants fine-tuned the styles to create an engaging user interface.

JavaScript for Authentication Logic:

JavaScript played a pivotal role in implementing the authentication logic. Participants created an

auth.js script that handled form submissions, validated user input, and interacted with Firebase for authentication.

Firebase Integration:

The second major aspect of Week 3 was the integration of Firebase for authentication services. Firebase provided a seamless and scalable solution for user authentication.

Setting up Firebase:

Participants were guided through the process offsetting up a Firebase project, obtaining API keys, and configuring Firebase Authentication.

Connecting Firebase to the Project:

The Firebase JavaScript SDK was added to the project, enabling seamless integration with Firebase services. Participants learned how to initialize Firebase and access authentication functionalities.

Firebase Configuration:

The configuration details, including the Firebase project's API key, were added to the JavaScript

file to establish a connection with Firebase.

7.1.4 WEEK 4

Working on project

In Week 4 of the Fullstack Development internship, participants embarked on an exciting projects to develop different real-time websites.

Project Objectives:

React Components:

Participants created reusable React components to efficiently manage the UI, ensuring a dynamic and responsive user experience.

API Integration:

The project involved integrating a Movie Database API to fetch and display relevant movie information. Axios, a promise-based HTTP client, facilitated seamless communication with the API.

7.2 CODE:

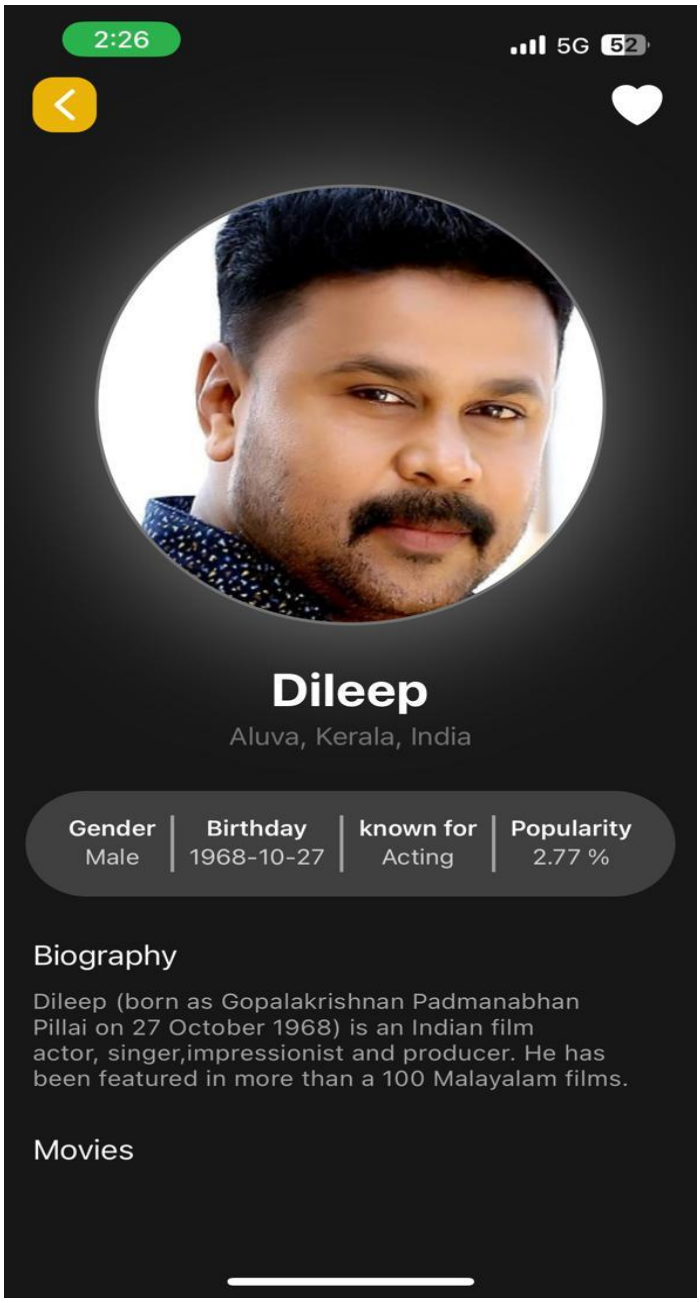
```
import axios from "axios";
import { apiKey } from "../constants";



// endpoints
const apiBaseUrl = 'https://api.themoviedb.org/3';
const trendingMoviesEndpoint = `${apiBaseUrl}/trending/movie/day?api_key=${apiKey}`;
```

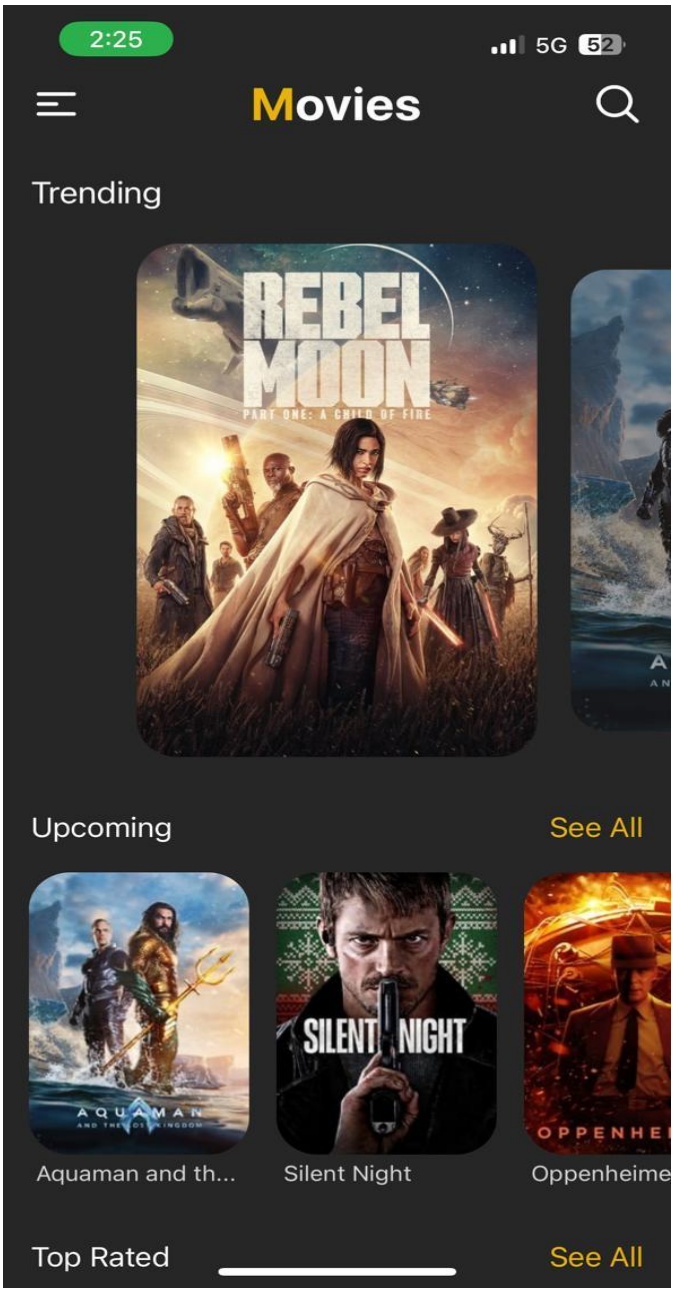
```
const upcomingMoviesEndpoint = `${apiBaseUrl}/movie/upcoming?api_key=${apiKey}`;

const topRatedMoviesEndpoint = `${apiBaseUrl}/movie/top_rated?api_key=${apiKey}`;

const searchMoviesEndpoint = `${apiBaseUrl}/search/movie?api_key=${apiKey}`;

// endpoints with dynamic params

// movie

const movieDetailsEndpoint = id=> `${apiBaseUrl}/movie/${id}?api_key=${apiKey}`;

const movieCreditsEndpoint = id=> `${apiBaseUrl}/movie/${id}/credits?api_key=${apiKey}`;

const similarMoviesEndpoint = id=> `${apiBaseUrl}/movie/${id}/similar?api_key=${apiKey}`;

// person

const personDetailsEndpoint = id=> `${apiBaseUrl}/person/${id}?api_key=${apiKey}`;

const personMoviesEndpoint = id=> `${apiBaseUrl}/person/${id}/movie_credits?api_key=${apiKey}`;

// functions to get images of different widths, (show images using these to improve the loading times)

export const image500 = posterPath=> posterPath? 'https://image.tmdb.org/t/p/w500'+posterPath : null;

export const image342 = posterPath=> posterPath? 'https://image.tmdb.org/t/p/w342'+posterPath : null;

export const image185 = posterPath=> posterPath? 'https://image.tmdb.org/t/p/w185'+posterPath : null;

// fallback images

export const fallbackMoviePoster = 'https://img.myloview.com/stickers/white-laptop-screen-with-hd-video-technology-icon-isolated-on-grey-background-abstract-circle-random-dots-vector-illustration-400-176057922.jpg';

export const fallbackPersonImage = 'https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRmUiF-YGjavA63_Au8jQj7zxnFxS_Ay9xc6pxleMqCxH92SzeNSjBTwZ0l61E4B3KTS7o&usqp=CAU'

const apiCall = async (endpoint, params)=>{

    const options = {

        method: 'GET',
```

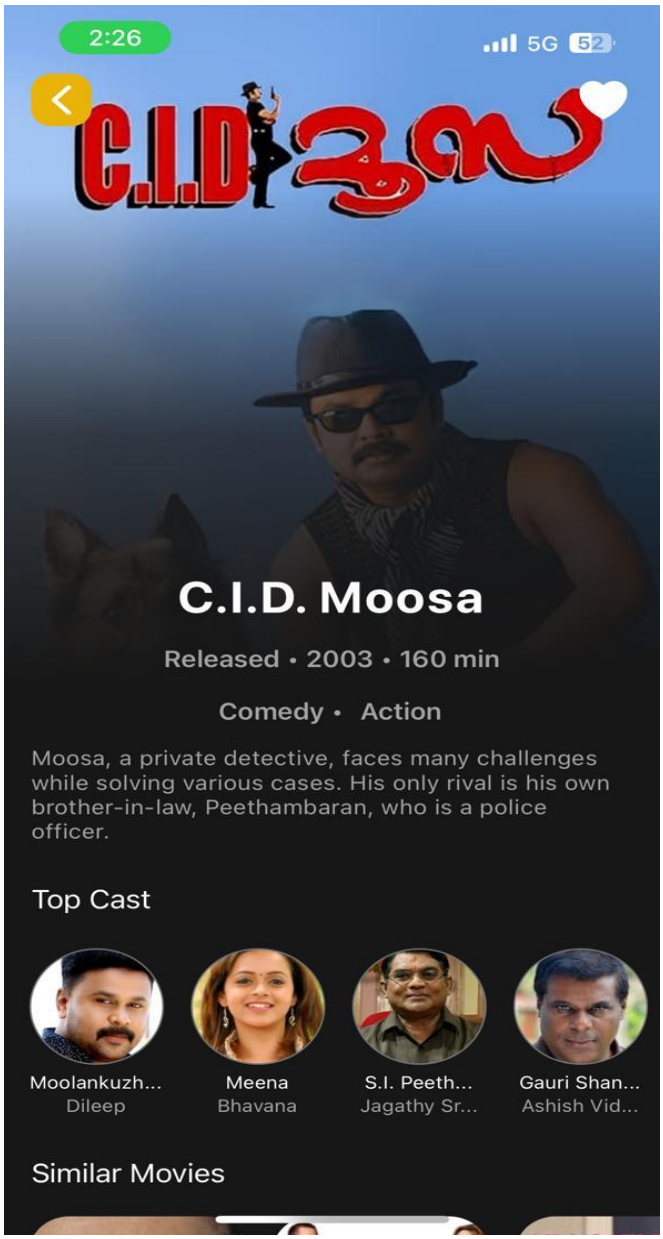
```
        ul: endpoint,
        params: params? params: {}
    };
    try{
        const response = await axios.request(options);
        return response.data;
    }catch(error){
        console.log('error: ',error);
        return {};
    }
}
// home screen apis
export const fetchTrendingMovies = ()=>{
    return apiCall(trendingMoviesEndpoint);
}
export const fetchUpcomingMovies = ()=>{
    return apiCall(upcomingMoviesEndpoint);
}
export const fetchTopRatedMovies = ()=>{
    return apiCall(topRatedMoviesEndpoint);
}



// movie screen apis
export const fetchMovieDetails = (id)=>{
    return apiCall(movieDetailsEndpoint(id));
```

```
}
export const fetchMovieCredits = (movieId)=>{
    return apiCall(movieCreditsEndpoint(movieId));
}
export const fetchSimilarMovies = (movieId)=>{
    return apiCall(similarMoviesEndpoint(movieId));
}

// person screen apis
export const fetchPersonDetails = (personId)=>{
    return apiCall(personDetailsEndpoint(personId));
}
export const fetchPersonMovies = (personId)=>{
    return apiCall(personMoviesEndpoint(personId));
}

// search screen apis
export const searchMovies = (params)=>{
    return apiCall(searchMoviesEndpoint, params);
}
```

7.3 SNAPSHOTS:



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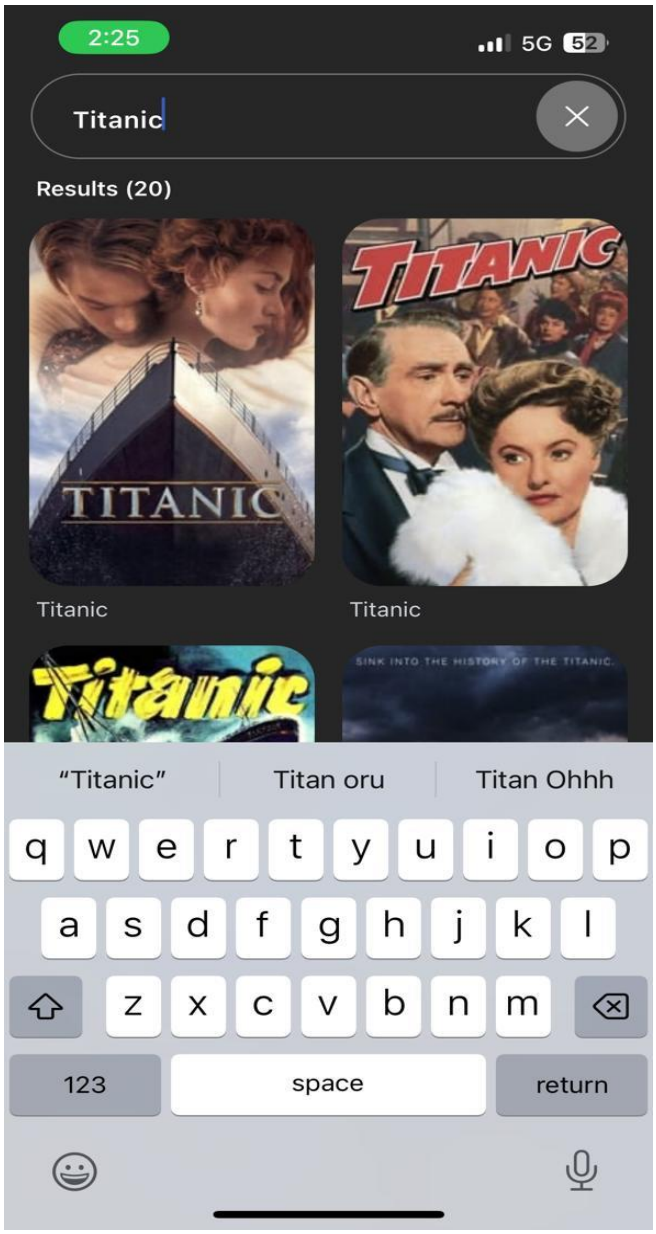
5G 52
C.I.D. Moosa
Released • 2003 • 160 min
Comedy • Action
Moosa, a private detective, faces many challenges while solving various cases. His only rival is his own brother-in-law, Peethambaran, who is a police officer.
Top Cast
Moolankuzh... Dileep
Meena Bhavana
S.I. Peeth... Jagathy Sr...
Gauri Shan... Ashish Vid...
Similar Movies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5G 52
Titanic
Results (20)
TITANIC
Titanic
TITANIC
Titanic
"Titanic"
Titan oru
Titan Ohhh
123
space
return

Chapter 8

REFLECTION/LEARNINGS

Reflecting on the development and impact of our movie app, it's inspiring to see how technology has reshaped the landscape of entertainment. The journey began with a vision to create more than just a streaming platform, aiming to build a community that celebrates the diverse and dynamic world of cinema.

The iterative process of designing the app taught us the importance of user-centric approaches. The emphasis on a sleek, intuitive interface and personalized recommendations was not merely about enhancing user experience but about forging connections between individuals and the stories that resonate with them. Witnessing users engage in shared playlists and real-time viewing parties underscored the significance of fostering a sense of belonging in the digital realm.

CONCLUSION

In conclusion, the movie app we have envisioned is not just a platform for searching films, but a gateway to a personalized and immersive cinematic experience. By seamlessly integrating cutting-edge technology with user-friendly features, we aim to redefine the way audiences engage with movies. Our commitment to providing a diverse and extensive library, coupled with intuitive recommendation algorithms, ensures that users discover content that resonates with their unique tastes.

REFERENCES

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