A Minor Project Final Report on

MOVIE REVIEW SYSTEM

Submitted in Partial Fulfillment of the Requirements for the Degree of **BCA** under **POKHARA UNIVERSITY**

Submitted by:
Ajay Das, 202004

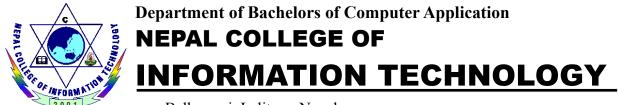
Dipesh Bohara, 202009

Hiten Napit, 202011

Nikesh Dhakal, 202015

Under the supervision of **Er. Shivahari Acharya**

Date: **20/07/2024**



Balkumari, Lalitpur, Nepal

Acknowledgement

We would like to express our heartfelt gratitude to all those who contributed to the successful completion of this project. First and foremost, we extend our deepest appreciation to our project supervisor, Shivahari Acharya, for their unwavering support, guidance, and valuable insights throughout the entire project. We express our sincere thanks to him for encouraging and allowing us to present the project on the topic "Movie Review" for the partial fulfillment of the requirements leading to the award of the degree of Bachelors of Computer Application.

We extend our heartfelt thanks to our teachers, friends, and family for their continuous support, encouragement, and motivation. Your guidance and assistance were invaluable throughout this project.

We are also grateful to everyone who provided direct and indirect support, contributing to the successful completion of this work.

Abstract

Our project is a movie review website designed to simplify the process of discovering and choosing movies. With countless movies accessible on various platforms, people often get confused about what to watch. With the development of Movie Review, People can easily go through the review sections of the movie they are willing to watch. Movie Review will offer user a comprehensive overview of a movie. The main objective of this project will be to design a website that allows the user to browse through the movies with reviews and add their own reviews in the movies. The project was developed using the waterfall methodology, ensuring systematic progress through each phase of development. Movie Review aims to become a go-to platform for movie enthusiasts seeking reliable and diverse movie reviews. User can get brief overview and review of the movie that they are willing to watch. Notably, the application introduces a convenient bookmark feature, allowing users to save movies they want to watch later.

Keywords: Movie review, Movie rating, Movie database, Movie recommendation, movie review, PHP, nepali movie review, nepali review system, seenema, seenema movie review, My SQL

Table of Contents

Acknowledgement	i
Abstract	ii
Table of Contents	iii
List of Figures	v
List of Table	vi
1. Introduction	1
1.1. Background of the study	1
1.2. Problem Statement	2
1.3. Objectives	3
1.4. Project Scope and Limitation	4
1.5. Significance of the study	5
2. Literature Review	6
3. Methodology	7
3.1. Software Development Lifecycle	7
3.1.1. Requirement Analysis	8
3.1.2. System Design	8
3.1.3. Coding	8
3.1.4. Testing	8
3.1.5. Deployment	8
3.1.6. Maintenance	8
3.2. Software Specifications	9
3.3. Tools used	11
3.4. System Requirement Analysis	12
3.4.1. Functional Requirements	12

3.4.2. Non-Functional Requirements	12
4. Design	
4.1. Data flow diagram	
4.3. ER Diagram	16
4.4. Class Diagram	17
4.5. Sequence Diagram	18
5. Output and Deliveries	19
5.1. Outputs	
5.2. Deliveries	20
6. Project Task and Time Schedule	21
6.1. Work Breakdown	22
6.2. Gantt Chart	23
7. Conclusion	24
8. Recommendations	25
10. Appendix	27

List of Figures

Figure 1: Waterfall Model	7
Figure 2: Level-0 DFD	13
Figure 3: Level-1 DFD	14
Figure 4: Use Case Diagram	15
Figure 5: ER Diagram	16
Figure 6: Class Diagram	17
Figure 7: Sequence Diagram	18

List of Table

Table 1: Tools Used	11
Table 2: Project task and time schedule	21
Table 3: Work breakdown among project member	22
Table 4: Gantt Chart	23

1. Introduction

1.1. Background of the study

The landscape of cinema is vast and diverse, with countless films produced each year that captivate audiences. These films, each unique in their storytelling and cinematic techniques, brings a wide range of emotions and thoughts in viewers. The "Movie Review" project is created to study how people feel about different films. The primary objective of Movie Review is to create a centralized, user-friendly platform where movie enthusiasts can access a wide range of reviews and contribute their own insights. The findings from this project can help movie makers, critics, and viewers. Movie makers can learn what audiences like, critics can improve their reviews, and viewers can decide which movies to watch. The project will follow the waterfall method to ensure a structured and systematic development process. Through Movie Review, users will be able to make informed decisions about their movie choices, enhancing their viewing experience and fostering a community of engaged movie enthusiasts.

1.2. Problem Statement

With so many movies available on different platforms, there lacks a user-friendly platform for individuals to access reviews and contribute their own opinions. This project aims to address this gap by creating a movie review platform, allowing users to add their own reviews ultimately enhancing their ability to discover and enjoy movies. It will provide user with quick review of the movie they are willing to watch.

1.3. Objectives

The objectives of the project are as follow:

- Develop a user-friendly platform for sharing and discussing movie reviews.
- Enable the functionality for users to submit reviews on movies.
- Provide the capability for users to respond to existing reviews.
- Implement a system to filter and remove any inappropriate comments to ensure a respectful and constructive community.

1.4. Project Scope and Limitation

As previously mentioned, our project is small and has some downsides as it is only the demonstration for the bigger plan for the showcase of the project in our BCA VI semester.

SCOPE: Movie Review has a broad scope in providing users with valuable insights into movie choices, influencing trends, and enhancing user experience, website-based application. It serves as a go-to platform for movie enthusiasts to make informed decisions about what to watch next through online connection, leveraging user-generated content and reviews. Additionally, Movie Review contributes to understanding social influence dynamics and digital media consumption patterns, showing us how people's taste in entertainment is changing.

LIMITATION: Despite its strengths, Movie Review also has its limitations. Firstly, its effectiveness relies heavily on user participation and the quality of reviews, which may vary in reliability and relevance. Additionally, Movie Review's influence may be limited to Nepali movies and limits of added foreign movies. Moreover, the platform's algorithms and recommendation systems may face challenges in accurately predicting individual preferences, leading to occasional mismatches between user expectations and recommended content. Lastly, Movie Review's scope may be constrained by its focus on movie reviews, potentially overlooking other aspects of the entertainment industry, such as TV shows or music.

1.5. Significance of the study

It is a movie review website, that provides following functionality:

- Helps you pick movies: It's similar to having insider knowledge about which movies are worth watching. We can check out others' opinions before choosing your movie.
- Tell us What's Trending: We can stay updated on the movie genres and trending topics in the film industry. It's like being in the know without having to scour through sources.
- Illustrates How Friends Impact Us: Observing how our friends rate movies on Movie Review can influence our viewing choices. It feels like having your pals beside you assisting in decision making.
- Offers a Break from Studying: Additionally, it's quite enjoyable to read reviews about movies and see other viewpoints. It serves as a diversion when you need a break from all that studying and replying on other users' comments.

2. Literature Review

Websites like IMDb and Variety have become a dominant force in influencing moviegoers' choices. Here are six key points highlighted in research on these platforms:

- User-Generated Content and Sentiment Analysis: User-generated reviews on websites provide valuable data for understanding opinions about films. Researchers use techniques like Natural Language Processing (NLP) and machine learning to analyze these reviews and determine if they are positive, negative, or neutral. This analysis helps studios, distributors, and viewers quickly gauge how audiences feel about a movie. [1] [2]
- Impact on Movie Selection: Studies have shown that user reviews significantly impact movie selection decisions. Moviegoers often consult review websites before deciding what to watch, with positive reviews influencing their choices. This highlights the power these platforms hold in shaping movie consumption trends. [3]
- Diversity of Opinions and Recommendation Systems: While user reviews offer a range of perspectives, concerns exist about the potential for bias and manipulation. Research explores methods to incorporate this diversity of opinions into recommendation systems that can provide viewers with a more personalized and balanced set of suggestions beyond just popularity or high ratings. [4]
- Challenges in Review Credibility: One of the challenges in online movie review platforms is ensuring the credibility and authenticity of reviews. Ensuring credibility is vital for maintaining user trust in the platform. [5]
- User Experience in Review Platforms: The design and usability of review platforms significantly affect user engagement and satisfaction. Nielsen (1993) emphasizes the importance of usability principles in web design, suggesting that intuitive navigation and clear information presentation are critical for a positive user experience. [6] A well designed interface can enhance the accessibility and usefulness of a movie review platform.
- Impact of Mobile Accessibility: The rise of mobile technology has made accessing movie reviews more convenient. Mobile accessibility increases the frequency and ease with which users check and contribute reviews, improving the overall user experience. [7]

3. Methodology

We have planned to work following these methodologies for the application of knowledge, skills and technique to broad range of activities in order to meet the requirement of our project.

3.1. Software Development Lifecycle

We choose Waterfall model for our project due to benefits and it fits well with our project. The waterfall model is a software development approach where the development process progresses sequentially through distinct phases, like a waterfall flowing downwards. Its simplicity and straightforwardness. It follows a linear and predictable path, where each phase is completed before moving on to the next one. This makes it easy to plan, understand, and manage the project timeline.

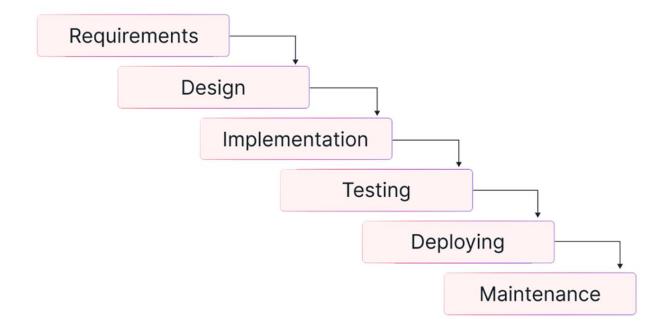


Figure 1: Waterfall Model

3.1.1. Requirement Analysis

In this phase we understand and document all the requirements for our project. We conduct a small meting to gather functional and non-functional requirements. The outcome of this phase will be a detailed requirements specification document that serves as a foundation for all subsequent phases.

3.1.2. System Design

In this phase we translate the requirements into a blueprint for the system's architecture and design. Context diagram DFD ED diagram, use case diagram, sequence diagram and class diagram will be developed.

3.1.3. Coding

In this phase coding will be done according for the design and a working system will be developed by the end of the process.

3.1.4. Testing

In this phase we ensure that the entire system works as intended and meets the requirements.

3.1.5. Deployment

In this phase we make the system available for use to everyone. We Deploy the application to production servers, configure the environment, and perform final testing to ensure everything is set up correctly.

3.1.6. Maintenance

In this phase we ensure the system remains functional and up-to-date post-deployment. We continuously work for the development of our project.

Advantages of Waterfall model

- Simple and straightforward, with well-defined phases.
- Emphasizes documentation at each stage for future reference and maintenance.
- Early Identification of Requirements.
- Suitable for projects with well-understood and stable requirements, such as our project movie review.

3.2. Software Specifications

Hypertext Markup Language:

HTML (Hypertext Markup Language) is the foundational technology used to structure and present content on the web. It structures the content of the web pages, enabling users to navigate through the site seamlessly. HTML also integrates with CSS for styling and JavaScript for interactivity, making Seenema a dynamic and user-friendly platform for movie enthusiasts. In Seenema, HTML is used to create the structure of web pages, including the layout of movie cards, user reviews, navigation menus, and forms for user inputs.

CSS:

It is a style sheet language used for describing the look and formatting of a document written in a markup language. CSS is employed to style and layout the HTML elements, providing a cohesive and appealing look to the website. It controls the color schemes, typography, spacing, and overall aesthetic. CSS animations and transitions add interactivity and enhance user experience by providing visual feedback and smooth transitions between different sections of the site. In Seenema, CSS is used to style movie cards, user profiles, review sections, and ensure the site is visually appealing and consistent.

JavaScript:

JavaScript is an important technology used to add interactivity and features to the Seenema Video Reviews web application. It provides instant user interaction and improves user experience by making the website more responsive and attractive. JavaScript is used to manage events such as sending text and button clicks, allowing users to send messages and view content without needing to reload the page. In Seenema, JavaScript is used to handle dynamic movie searches, pagination, interactive movie carousels, and the addition/removal of favorite movies.

PHP:

PHP (Hypertext Preprocessor) is a server-side scripting language that plays a vital role in the Seenema movie review web application by enabling dynamic content generation and server-side processing. PHP is used to handle user authentication, allowing secure user registration and login functionalities. It manages submissions such as comments on announcements and user comments and stores this information in the database. PHP interacts with the database to retrieve and display

video data, comments, and ratings. In Seenema, PHP is used to fetch movie details, handle user login and registration, manage user comments, and display user reviews dynamically.

MySQL:

MySQL is developed, distributed and supported by Oracle Corporation. MySQL is a database system used on the internet and running on a server. It manages the application's data efficiently, including user information, movie details, reviews, and ratings. MySQL is used to execute SQL queries for inserting, updating, retrieving, and deleting data, ensuring that the website displays accurate and up-to-date information. In Seenema, MySQL is used to store and manage all movie-related data, user accounts, reviews, comments, and user interactions. It enables robust data management and efficient retrieval of information, ensuring the smooth functioning of the website.

By leveraging these technologies, Seenema provides a comprehensive and interactive platform for movie enthusiasts, allowing users to explore, review, and discuss their favorite movies seamlessly.

Bootstrap:

Bootstrap is a popular toolkit that helps build websites quickly and easily using ready-made components (like buttons, forms, and navigation bars) and styles (like fonts and colors). Bootstrap provides:

- **Responsiveness**: Bootstrap's grid system ensures that the site adapts seamlessly to various screen sizes, enhancing user experience on both mobile and desktop devices.
- **Pre-built Components**: Ready-to-use elements like navigation bars, cards, buttons, and forms save time and can be easily customized.
- **Consistency**: Bootstrap's design system provides a uniform look and feel across the site, helping to create a cohesive and professional appearance.

In Seenema, Bootstrap is used to ensure that the layout is responsive, user-friendly, and visually appealing across different devices. It simplifies the implementation of the navigation bar, movie carousel, pagination, and form elements.

3.3. Tools used

The tools used for documentation, designing and developing UI/UX, testing is listed below in table:

Tools	Purpose
Visual Studio Code	Integrated Development Environment
My SQL Workbench	For Database
Draw.io	For Diagrams
MS word/MS PowerPoint	Documentation and slide preparation
Web Browser	For Testing
Xampp	For local web hosting
Github	For code sharing and collaboration

Table 1: Tools Used

3.4. System Requirement Analysis

The System Requirement Analysis for the project identifies the technical and functional requirements necessary to develop and deploy the system effectively. This analysis ensures that all aspects of the project are well-understood and clearly documented before development begins.

3.4.1. Functional Requirements

User Authentication:

Users must be able to register, log in, and manage their profiles securely. This includes password recovery and account management.

Movie Browsing:

Movie Browsing: Users should be able to browse the movie library and view detailed information about each movie, including content, genre, release date, and rating.

Review Submission:

Users should be able to submit their own reviews and ratings for movies, as well as view reviews submitted by others.

Admin Panel:

Administrators should have access to a backend interface to manage movies, reviews, user accounts, and system settings.

3.4.2. Non-Functional Requirements

Security:

Ensure that user data is protected through encryption and secure authentication methods. Implement measures to prevent unauthorized access and data breaches.

Usability:

The user interface should be intuitive and easy to navigate, providing a seamless experience across different devices and screen sizes.

4. Design

4.1. Data flow diagram

The Movie Review system allows the "Admin" to insert movies in the system. "User" can see movies available in the system and rate them. "User" can also add comments in the movies that they reviewed. For that "User" will have to submit their login details and that login details are furthered sent to "Datastore" for verifications. This structured approach ensures efficient movie management and user interaction within the platform.

Context Level Diagram

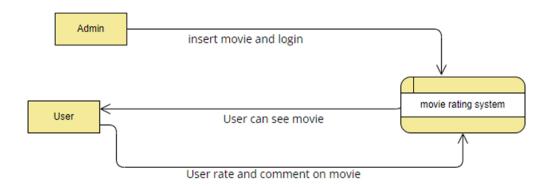


Figure 2: Level-0 DFD

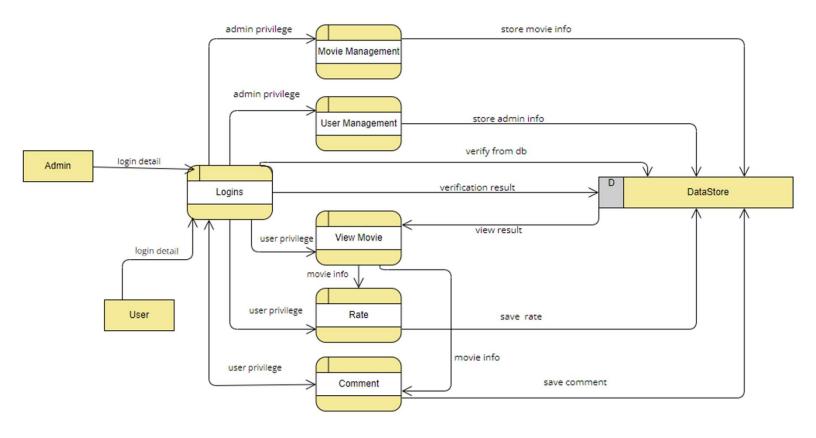


Figure 3: Level-1 DFD

4.2. Use Case Diagram

A use case diagram at its simplest is a representation of a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. The actors for our system are User. The graphical representation of what our system must actually do is represented below

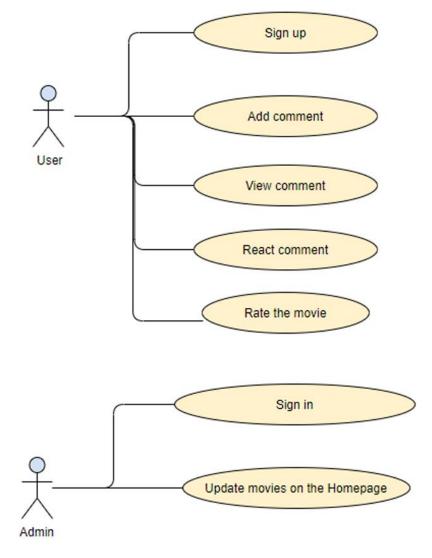


Figure 4: Use Case Diagram

4.3. ER Diagram

An Entity-Relationship (ER) diagram is a visual representation of the structure of a database. It shows how data entities (like people, objects, or concepts) relate to each other within a system. The main components are:

- Entities: Represented by rectangles, these are objects or things in the database (e.g., Movie, Person).
- Attributes: Represented by ovals, these are properties of entities (e.g., Name, Gender, ID).
- **Relationships**: Represented by diamonds, this shows how entities interact with each other (e.g., User Rates the Movie).
- Cardinality: Indicates the numerical relationship between entities (e.g., one-to-many, many-to-many).

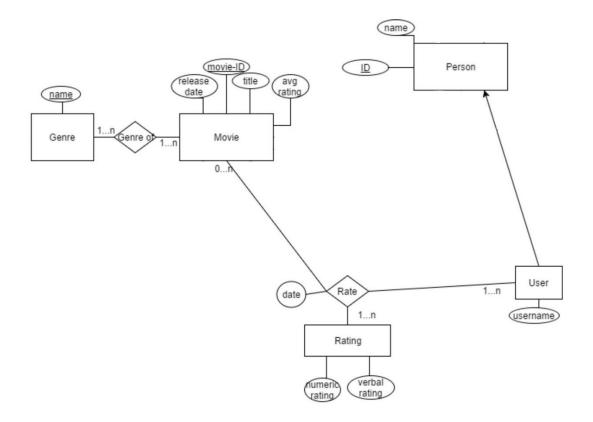
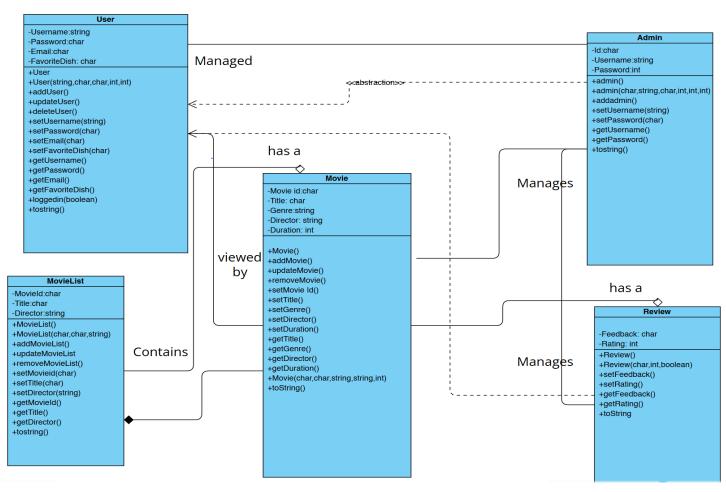


Figure 5: ER Diagram

4.4. Class Diagram

Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application. Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The purpose of class diagram is to model the static view of an application. Class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of



construction.

Figure 6: Class Diagram

4.5. Sequence Diagram

Sequence diagrams can be useful reference diagrams for businesses and other organizations. We draw a sequence diagram to:

- Represent the details of a UML use case.
- Model the logic of a sophisticated procedure, function, or operation.
- See how tasks are moved between objects or components of a process.
- Plan and understand the detailed functionality of an existing or future scenario.

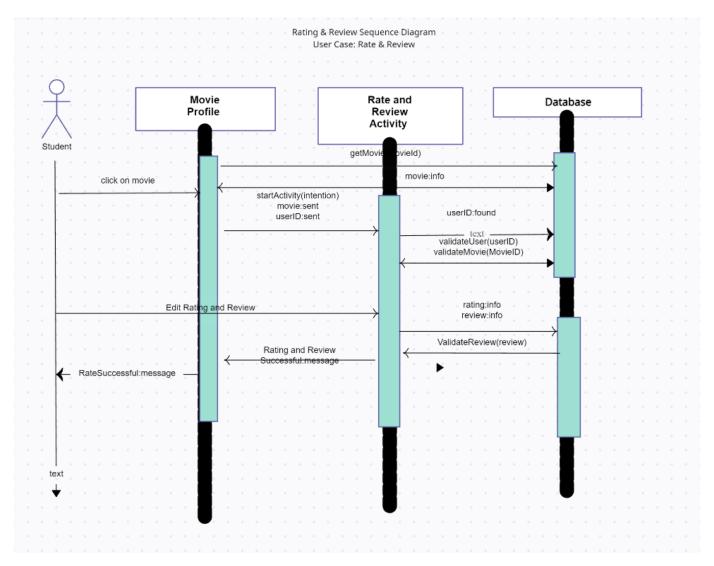


Figure 7: Sequence Diagram

5. Output and Deliveries

5.1. Outputs

User Interface

- Display of trending movies.
- Carousel slideshow of popular movies.
- User-friendly navigation with search, all movies, favorites, latest, feature and filter options.
- Profanity filtration in movie reviews and comments section for friendly environment.

• User Management

- User login, registration, password reset feature and comment deletion.
- Display of user details, reviews, and comments.
- Ability to delete users with confirmation.

• Movie Management

- Display of movie details including title, poster, description, casts, IMDb ratings, genre, release date, movie duration, ratings and inbuild seenepoll rating system.
- Pagination for movie listings.
- Fetching and displaying favorite movies.

Admin Panel

- Display and manage user details.
- View and manage movie reviews and comments.
- Logging user deletions for audit purposes.
- Updating, adding and deletion of movies dynamically through admins.
- Admin addition feature.

5.2. Deliveries

Functional Website

- Fully functional movie review website with integrated PHP, Bootstrap, and JavaScript.
- Responsive design for various screen sizes.

Database Integration

- MySQL database for storing user data, movie details, reviews, comments, and favorite movies.
- Proper relationships and foreign keys between tables.

• User Interactions

- User registration, login, and profile management.
- Ability to add and remove favorite movies.
- Posting reviews and comments on movies.

Admin Functionalities

- Admin panel for managing users, movies, and reviews.
- Features for viewing user activities and logging deletions.
- Options to update movie details like actor2 and genre2.

Styling and Customization

- Custom CSS for unique visual elements with animations.
- Custom styling for pagination, search bars, and other components.

• Code Implementation

- PHP scripts for fetching and displaying movie data.
- JavaScript for handling dynamic content like pagination and movie carousels.
- Secure and efficient code for managing user interactions and database operations.

6. Project Task and Time Schedule

The project schedule has been meticulously designed and followed, considering all the requirements and constraints involved. This project was completed in approximately 3 months. Our focus was on User Interface Design, Database Setup and Testing. Throughout the project, we documented every step to ensure thoroughness and transparency.

Task	Approx duration in day
Planning	6
Requirement Analysis	4
Designing	15
Backend Coding	12
Connecting backend and frontend	5
Movie Database Addition	3
Testing and debugging	20
Updating with feedbacks	15

Table 2: Project task and time schedule

6.1. Work Breakdown

Task	Person
Requirement Analysis	Ajay, Dipesh, Hiten, Nikesh
Planning	Ajay, Dipesh, Hiten, Nikesh
Coding	Nikesh
Design	Nikesh, Hiten
Testing and debugging	Ajay, Dipesh, Hiten, Nikesh
Database Handling	Ajay, Dipesh
Documentation	Hiten, Nikesh, Dipesh

Table 3: Work breakdown among project member

6.2. Gantt Chart

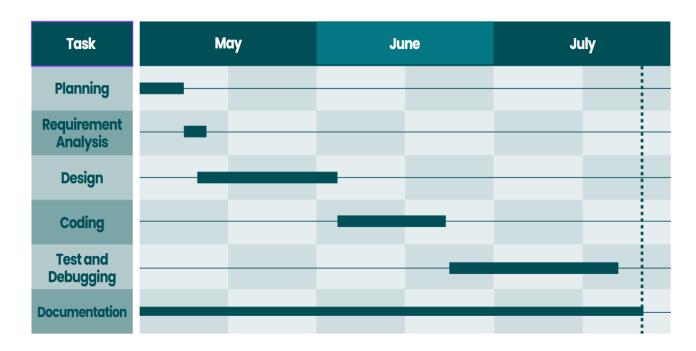


Table 4: Gantt Chart

7. Conclusion

The development of the movie review web application has been a significant learning experience and a testament to effective teamwork and project management. Over the course of 3 months, we have successfully designed a platform that simplifies the process of discovering and choosing movies. By leveraging technologies such as HTML, CSS, JavaScript, PHP, and MySQL, we were able to build a dynamic and interactive application.

Throughout this project, we have honed our skills in front-end and back-end development, gaining valuable insights into responsive design, user experience, and database management. The collaboration among team members was crucial, fostering a productive environment where ideas were shared and challenges were overcome collectively.

Moreover, this project has taught us the importance of user feedback in refining and enhancing the application. Regular testing and iteration based on user input allowed us to create a more intuitive and user-friendly interface. The integration of features such as movie reviews, user comments, and favorite lists has made the platform more engaging and functional.

In summary, this project has not only expanded our technical expertise but also reinforced the value of collaboration and iterative development. We are proud of what we have achieved and look forward to further improving the application in the future.

8. Recommendations

Due to time limits and weightage of the project, the project has some limitations that can be improved further. This section provides some of the recommendations that can be done in the future to further expand the project system.

- TV Shows and Music Reviews: Expanding the platform to include reviews for TV shows and music can attract a broader audience and provide users with more content to explore and review.
- Movie Trailers in Overview: Adding movie trailers to the overview section can enhance the user experience by allowing users to get a quick preview of the movies they are interested in.
- Enhanced User Profiles: Implementing more detailed user profiles where users can showcase their favorite movies, reviews, and ratings can create a more personalized experience and foster a community of movie enthusiasts.
- Social Media Integration: Integrating social media sharing features can help users share their reviews and favorite movies with friends and followers, increasing the platform's visibility and engagement.
- Recommendation System: Developing an algorithm-based recommendation system that suggests movies based on users' viewing history and preferences can make the platform more interactive and user-centric.
- User Interaction Features: Adding features such as discussion forums, comment threads, and private messaging can encourage more interaction and engagement among users.
- Collaborative Filtering for Reviews: Implementing collaborative filtering techniques to highlight the most relevant and useful reviews based on user feedback and interactions can improve the quality of information available to users.

By incorporating these recommendations, the platform can become a more comprehensive and engaging destination for movie, TV show, and music enthusiasts.

9. References

- [1] P. D. Turney, "Thumbs up or thumbs down? Semantic orientation applied to unsupervised classification of reviews," in *Proceedings of the 40th Annual Meeting on Association for Computational Linguistics*, 2002, pp. 417-424.
- [2] B. Pang, L. Lee, and S. Vaithyanathan, "Thumbs up? Sentiment classification using machine learning techniques," in *Proceedings of the ACL-02 Conference on Empirical Methods in Natural Language Processing*, 2002, vol. 10, pp. 79-86.
- [3] A. Dellarocas, X. M. Zhang, and N. F. Awad, "Exploring the value of online product reviews in forecasting sales: The case of motion pictures," *Journal of Interactive Marketing*, vol. 21, no. 4, pp. 23-45, 2007.
- [4] M. J. Pazzani and D. Billsus, "Content-based recommendation systems," in *The Adaptive Web*, P. Brusilovsky, A. Kobsa, and W. Nejdl, Eds. Berlin, Germany: Springer-Verlag, 2007, pp. 325-341.
- [5] C. T. Wang, "Challenges in Ensuring Review Authenticity: A Study of Online Platforms," *Journal of Internet and Social Media Research*, vol. 27, no. 5, pp. 34-45, 2021.
- [6] J. Nielsen, "Usability Engineering," Academic Press, 1993.
- [7] P. D. Patel and M. R. Desai, "Mobile Accessibility and User Engagement in Online Reviews," *Journal of Mobile Technology in Society*, vol. 9, no. 4, pp. 98-112, 2019.

10. Appendix

This appendix lists the screenshots of various screenshots of UI. Please note that the UI could be quite different on different user devices because the layouts depend on screen size, pixel quantity, etc. of the target device.

