Iteration 3 Planning Document

Introduction

This is a brief overview of the project and its objectives: Cinemax aims to be a standalone mini IMDb clone, enabling users to log in, browse movies, track their recently viewed movies, and recommend movies to friends. It seeks to offer a comprehensive platform for movie enthusiasts to explore and share their cinematic experiences.

Vision Statement

The Cinemax System will serve as a comprehensive platform for movie enthusiasts, providing a rich database of films from classics to the latest releases. Positioned as a desktop Java application, it will feature an interactive graphical user interface (GUI) integrated with a database to store and retrieve movie information, user reviews, ratings etc.

Cinemax will allow users to explore detailed movie information, including titles, synopses, genres, and release dates, and on top of that allow users to create ratings and reviews. The system will offer advanced search capabilities, enabling users to find movies based on criteria such as title, genre, or rating. It will support personalized user experiences through watchlists and recommendations based on viewing history or from friends.

The system will be equipped with features to scroll through the movie database, get movie details for a closer look, and highlight top-rated or trending movies using visual cues. User interaction will be facilitated through a straightforward registration and login process, allowing for a personalized dashboard and interaction with the movie community through reviews and ratings.

Cinemax will be utilized by a diverse audience, including casual viewers, film buffs, and critics. For users, it will offer an engaging platform to discover new movies and

revisit classics, while for developers and administrators, it will provide a robust backend for managing movie data and user interactions efficiently.

In its initial release, the system focused on core functionalities such as movie listings, user reviews, and search capabilities. In our final iteration, we have expanded on those original functionals while adding much more. More details on every functionality are listed below in the user stories section.

The success of CInemax will be evaluated based on user engagement levels, the accuracy and comprehensiveness of the movie database, and the effectiveness of personalized recommendations. Feedback from the user community will be instrumental in iterating the system, with a focus on enhancing usability, content richness, and overall user satisfaction.

By offering a seamless and informative movie discovery experience, Cinemax aims to become the go-to resource for movie information and community interaction. Its success will be measured not only in user numbers but in the quality of the movie-going experience it provides, fostering a vibrant and engaged movie-loving community.

Review of Past Iterations

Summary of Iteration 1

Achievements and completed user stories:

- Implemented foundational model classes.
- Created a basic login GUI.
- Developed a basic movie display UI.
- Integrated with the OMovie API for movie details.

Challenges and lessons learned:

- Realized that relying on an external API conflicted with the project's goal of being standalone, indicating a need to switch to a functional database approach.

Summary of Iteration 2

Achievements and completed user stories:

- Developed a full database, leveraging the initial API to populate it with over 1000 movie details.
- Enhanced the movie browsing UI for a better user experience.
- Added functionality for tracking and displaying users' recently viewed movies.
- Implemented a movie recommendation system based on users' viewing habits.
- Introduced a basic friend system for social interaction within the platform.

Challenges and lessons learned:

- The complexity of integrating various functionalities (e.g., recommendation system, friend system) highlighted the need for robust testing and efficient database management.

Purpose and Goals of the Current Iteration

The third iteration aims to refine user interfaces, introduce a comprehensive friends system, implement user reviews with commenting functionality, and enable direct movie recommendations among friends to enrich the user experience and social interaction capabilities within Cinemax.

Big User Stories

- User Profiles: As a registered user, I need to be able to create and manage my profile, have my own movie recommendations, friends list and recently viewed to personalize my experience on the platform.

- Rating and Review System: I want to be able to write my own reviews on movies and give them personalized ratings as well as the ability to interact with other users who leave reviews on the platform. Threads based on others' reviews as well as being able to like or dislike reviews would be essential.

- Search Functionality: I want a search function to find movies by title, genre, or rating. In turn, after finding my movie I want to easily find the details about the movie.

- Recommendation System: As a new user I wanna see the most popular movies based on the common user views. Upon using the app I want movies to be recommended to me based on what I have previously viewed with this constantly updating so I am always recommended new movies.

- Friend Functionality: As a user, I want to be able to add my friends who are users of the app. I also want to be able to recommend them movies as well as see their recently viewed movies.

Detailed User Stories

1. User Profile Features

1.1. **Login and Registration**

Priority: High
Estimated Cost: 7 Days
Actual Cost: 10 days
Details: Initially started in iteration 1 and successfully completed in iteration 2. This foundational feature allows users to create and access their accounts, essential for a personalized experience.

1.2. **Recently Viewed Display on Dashboard**

Priority: Medium
Estimated Cost: 8 Days
Actual Cost: 11 days
Details: Development began in iteration 1 with the feature completed in iteration 2. It enhances user engagement by allowing them to easily revisit previously viewed content.

1.3. **User Friend List on Dashboard**

Priority: High
Estimated Cost: 5 Days
Actual Cost: 9 days
Details: The logic for managing user friends started in iteration 1 and was completed in iteration 2, with the user interface finalization in iteration 3. This feature supports social connectivity within the app.

2. Rating / Review System

2.1. **Leaving a Review**

Priority: High
Estimated Cost: 10 Days
Actual Cost: 14 days
Details: The backend logic was finalized in iteration 2, and the user interface was developed in iteration 3. This allows users to provide feedback on content.

2.2. **Commenting on a Review**
Priority: Medium
Estimated Cost: 7 Days
Actual Cost: 8 days
Details: This functionality was introduced and completed in iteration 3, facilitating user interaction and discussions.

2.3. **Liking or Disliking a Review**
Priority: Medium
Estimated Cost: 7 Days
Actual Cost: 8 days
Details: Implemented in iteration 3, this feature engages users by allowing them to express their opinions on reviews.

3. Search Functionality

3.1. **Displaying Search Results**
Priority: High
Estimated Cost: 7 Days
Actual Cost: 7 days
Details: The ability to search by name was started in iteration 1 and completed by iteration 2, making content easily accessible.

3.2. **Detailed Movie View**
Priority: High
Estimated Cost: 10 Days
Actual Cost: 10 days
Details: Completed in iteration 1 with additional functionality to update the "Recently Viewed" section added in iteration 2, enhancing the user experience.

3.3. **Extended Search Criteria**
Priority: Low
Estimated Cost: 7 Days
Actual Cost: 8 days
Details: Introduced and completed in iteration 3, this allows users to refine their searches by genre, rating, and name, providing a more targeted search experience.

4. Recommendation System

4.1. **Popular Movies for New Users**

Priority: Medium
Estimated Cost: 5 Days
Actual Cost: 7 days
Details: Started and completed in iteration 2, this feature aims to engage users from their first visit.

4.2. **Recommendations Based on Recently Viewed**

Priority: High
Estimated Cost: 10 Days
Actual Cost: 12 days
Details: The algorithm started in iteration 2 and was a challenging task, completed in iteration 3. It personalizes the user experience by suggesting movies similar to those recently watched.

4.3. **Updating Recommendations with New Views**

Priority: High
Estimated Cost: 9 Days
Actual Cost: 8 days
Details: Finalized in iteration 3, this feature ensures that the recommendation system evolves with the user's changing preferences but at a performance cost.

5. Friend Functionality

5.1. **Adding/ Removing Friend / Requests**

Priority: High
Estimated Cost: 12 Days
Actual Cost: 14 days
Details: The backend logic was completed in iteration 1, with the user interface coming in iteration 3, facilitating social interactions within the app.

5.2. **Recommending a Movie to a Friend**

Priority: Medium
Estimated Cost: 7 Days
Actual Cost: 9 days
Details: Introduced and completed in iteration 3, this feature leverages the social aspect to enhance content discovery.

5.3. **Viewing Friends' Recently Viewed Movies**

Priority: Low
Estimated Cost: 7 Days
Actual Cost: 7 days
Details: Implemented in iteration 3, it allows users to discover new movies through their friends' viewing habits.