

Software Requirements And Design Specification

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1 Introduction

1.1 System Introduction

Readinook is an android based application developed for reader, it works as a social media platform where the allowing readers to share their thoughts and connect with each other. Readinook serves as a social media platform tailored for readers, offering features like reviews, ratings, community creation, list organization, reading goals, chatting, live reading channels, reading time monitoring, note-taking, and author interactions. Readinook integrates social networking and reading management functionalities to enhance the reading experience through community engagement, content discovery, and reading progress tracking.

1.2 Background of the System

In an era where digital transformation significantly impacts how we consume media, reading—once a solitary activity has evolved. Recognizing the potential to innovate within this space, Readinook was conceived as a groundbreaking Android-based mobile application designed to revolutionize the reading experience by integrating it with the dynamic world of social media. This fusion not only seeks to enhance readers' engagement with literary content but also aims to build a vibrant community of readers, authors, and literary enthusiasts.

The inception of Readinook stems from a simple observation: while reading is a deeply personal and introspective activity, the joy and insights gained from it are amplified when shared with others. Traditional book clubs have always provided a space for such exchanges, but the digital age presents an opportunity to expand this concept beyond geographical limitations. With the proliferation of social media, there was a clear gap in the market for a platform specifically tailored to the needs and interests of the reading community.

Readinook's mission is to create a global community where readers can discover, connect, and engage with one another in meaningful ways. By offering a suite of features designed to cater to every aspect of the reading experience, Readinook aims to encourage more people to read, share their insights, and discover new worlds within the pages of books

1.3 Objectives of the System

- Provide a digital platform that enhance the reading experience, making it more engaging, interactive, and enjoyable for users.
- Create a space where readers from around the world can connect, share their experiences, and discover new books and authors, thereby fostering a sense of global community among book lovers.
- Offer social networking features tailored for the reading community, allowing users to share reviews, participate in discussions, and engage in live reading sessions.
- Offer a resource for educators, students, and lifelong learners to discover literature, share insights, and engage in discussions, thus supporting educational objectives.

1.4 Significance of the System

The significance of Readinook lies in its innovative approach to blending the solitary act of reading with the dynamic world of social networking, thereby revolutionizing the way people engage with literature. By creating a dedicated platform for readers, authors, and literary enthusiasts, Readinook not only facilitates the discovery of new books and authors but also fosters a global community where individuals can share insights, reviews, and discussions about their favorite reads. This amalgamation of reading and social interaction addresses the contemporary need for digital connection and community building, making literature more accessible and enjoyable for a wider audience. Furthermore, by providing tools for organization, goal setting, and live reading sessions, Readinook enhances the reading experience, encouraging more people to read regularly and connect over shared literary interests. The system's significance extends beyond mere entertainment; it supports literacy, education, and the deepening of cultural appreciation for literature across diverse global communities.

2 Overall Description

2.1 Product Perspective

Readinook exists within the intersection of social networking and digital reading platforms, distinguishing itself by specializing in features tailored for the avid reader community. Unlike generic social media or standalone e-reading apps, Readinook integrates the social aspect directly into the reading experience, offering unique functionalities such as live reading channels, community creation based on literary interests, and direct interaction between authors and readers. This approach leverages existing technologies—like mobile connectivity, online storage for notes, and real-time chat functionalities—while innovating in how they are applied to reading.

From a technical perspective, Readinook integrates with the broader digital ecosystem through user authentication services, social media for sharing content externally, and potential partnerships with publishers and literary databases to enrich its catalog and data accuracy. Its design acknowledges the importance of user data privacy and security, implementing best practices to safeguard personal information

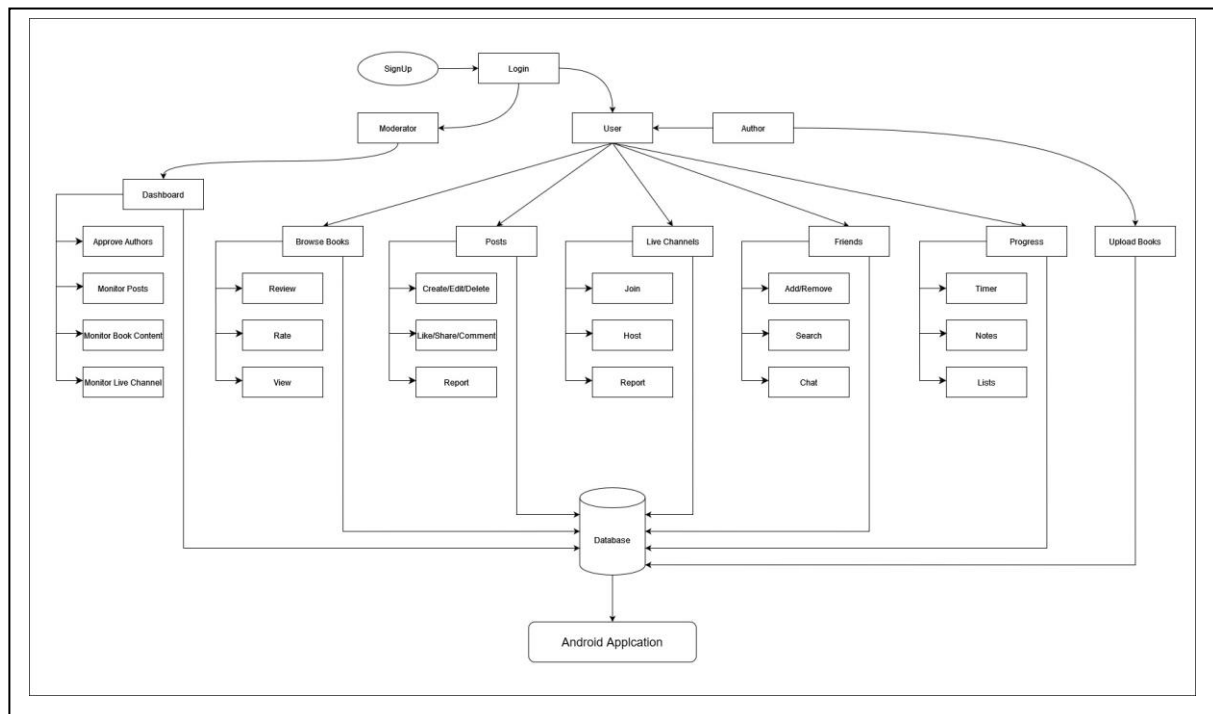


Figure 2.1: System Design

2.2 Product Scope

Readinook is designed to be a comprehensive digital platform tailored specifically for the global reading community, aiming to redefine the way readers engage with literature and each other. Its scope encompasses a wide array of features that facilitate not just the discovery of new books and authors, but also the sharing of reviews, the organization of reading lists, the setting and tracking of reading goals,

and the fostering of discussions around literary works. By providing a space where readers can connect over shared interests, participate in live reading sessions, and interact directly with authors, Readinook seeks to cultivate a vibrant and interactive community that bridges the gap between solitary reading and social interaction.

Readinook allows reader to rate and/or review books and/or authors. Furthermore, it allows them track their reading progress by setting goals, real time reading session tracking and note taking during a reading session. Readinook also offers the option to socialize via chatting with friends through application or joining interest-based communities and live reading sessions. Live reading session offers one to host and multiple users to join and then either carrying out a reading session together or have a discussion topic of interest. Readinook allows authors to publish their work through the platform after approval from a moderator. Moreover, Readinook allows users to create interactive textual posts offering their friends and followers to like, comment and share it. So, in simple words, Readinook is a social media platform for readers and authors.

2.3 Product Functionality

2.3.1 Social Networking for Readers:

- **Reviews and Ratings:** Users can post detailed reviews and rate books, authors, and literary works, facilitating informed decision-making for fellow readers.
- **Live Reading Sessions:** This feature enables users to participate in real-time group reading activities, discussing and sharing thoughts as they read.
- **Textual Posts and Sharing:** Beyond reviews, users can make posts about literary topics, share quotes, or discuss reading habits, enhancing the social experience.

2.3.2 Author Engagement

- **Author Profiles:** Authors can create profiles to share their work, update readers on upcoming projects, and engage directly with their audience.
- **Content Sharing:** A platform for authors to publish excerpts, whole works, or articles, allowing them to reach a wider audience and receive direct feedback.
- **Direct Interaction:** Features such as Q&A sessions, live discussions, and direct messaging enable authors to interact with readers, fostering a closer connection between the two.

2.3.3 Additional Functionalities

- **Friend System:** Users can add friends, view their reading lists and reviews, and engage in private chats, promoting deeper social connections within the platform.
- **Search and Discovery:** Advanced search functionalities help users discover books, authors, and communities based on their interests, reading history, and recommendations.
- **Notifications and Updates:** Real-time notifications keep users informed about new reviews, community posts, author updates, and messages, ensuring they stay engaged with the platform.

2.4 Users and Characteristics

There are three types of users in our system.

- General Reader
- Authors
- Administrator/Moderator

General Readers:

General readers are individuals who use the app to discover, read, and review books. They vary in terms of reading habits, genres of interest, and technological expertise. Browsing books, adding books to reading lists, writing reviews, rating books, and participating in discussions, add friends and chat with them through the application, create live reading channels in which they can start reading together in a group and share their thoughts in real time.

Authors:

Authors use the app to share their work, engage with readers, and receive feedback. They are typically more invested in building a presence within the community. Uploading books, managing author profiles, responding to reviews, and engaging with readers.

Administrator/Moderator:

Administrators oversee the app's functionality, manage content, and ensure community guidelines are followed. Moderators focus on maintaining a safe and constructive environment. Managing user accounts, moderating content, resolving disputes, and overseeing community interactions.

2.5 Operating Environment

The Readinook application is an android application developed in flutter. The back-end database used for this application is Firebase, providing a robust and scalable solution for real-time data storage and user authentication.

Hardware Platform:

The Readinook app is designed to run on a wide range of devices, including smartphones and tablets.

Minimum Requirements:

- **Processor:** Quad-core or equivalent
- **RAM:** At least 4 GB
- **Storage:** Minimum of 100 MB of free storage space for the app installation, with additional space for user data such as images, reviews, and book lists.

Operating System and Version:

- **Mobile Platforms:**
 - **Android:** Supports Android 5.0 (Lollipop) and higher.
 - **iOS:** Not supported IOS.

- **Other Requirements:**
 - **Internet Connection:** A stable internet connection is required for data synchronization and real-time communication with Firebase.
 - **Permissions:** The app requires permissions for storage access, and network connectivity.

3 Specific Requirements

3.1 Functional Requirements

3.1.1 User Account Management

| Requirement Number | Requirement | Description |
|--------------------|--------------------|--|
| RFR-001 | User Registration | Users must be able to create a new account using email, social media login, or other supported authentication methods. |
| RFR-002 | User Login | Users shall log in with their registered credentials or through single sign-on (SSO) methods. |
| RFR-003 | Account Recovery | In case of forgotten credentials, users should be able to recover their accounts through email verification or other secure methods. |
| RFR-004 | Profile Management | Users should be able to update their profile information, including profile picture, bio, and personal preferences. |

3.1.2 Book Discovery and Recommendations

| Requirement Number | Requirement | Description |
|--------------------|----------------------|---|
| RFR-005 | Book Search | Users could search for books using various filters like title, author, publication year. |
| RFR-006 | Book Recommendations | The app provides personalized book recommendations based on user interests, reading history, and community trends. |
| RFR-007 | Browse Categories | Users would be able to browse books by categories and subcategories, allowing for easy exploration of different genres. |

3.1.3 Book Interaction and Reviews

| Requirement Number | Requirement | Description |
|--------------------|--------------------------|--|
| RFR-008 | Add to Reading List | Readers would create lists in order to efficiently organize their books and can also set reading goals. |
| RFR-009 | Book Reviews and Ratings | Users will rate books and write reviews to share their thoughts with the community. |
| RFR-010 | Discussion | Users would be able to create live reading channels in which they can start reading together in a group and share their thoughts in real time. |
| RFR-011 | Taking Notes | The readers monitor their reading time and take notes while reading. |

| | | |
|---------|--------------|--|
| RFR-012 | Post Reviews | These readers post reviews about their recent reads. |
|---------|--------------|--|

3.1.4 Author and Publisher Interactions

| Requirement Number | Requirement | Description |
|--------------------|--------------------------|---|
| RFR-013 | Author Profiles | Authors would create profiles to showcase their work and interact with readers. |
| RFR-014 | Upload Books | <ul style="list-style-type: none">Authors could upload books to the platform, allowing for distribution within the app.If author uses the trail version, then they can upload up to 5 books only.And if the author uses our premium version, then they can upload up to 10 books. |
| RFR-015 | Author-Reader Engagement | Authors would respond to reviews, participate in discussions, and engage with their readers. |

3.1.5 Adding Friends and Chatting:

| Requirement Number | Requirement | Description |
|--------------------|--------------------|--|
| RFR-016 | Add Friends | <ul style="list-style-type: none">Users would send and accept friend requests to connect with other readers within the Readinook community.Users will view their list of friends and see what books they're reading or reviewing (if set public). |
| RFR-017 | Direct Messaging | <ul style="list-style-type: none">Users would send direct messages to their friends for one-on-one communication.Messages may include text, emojis, and links to books or reviews. |
| RFR-018 | Group Chats | <ul style="list-style-type: none">Users will create group chats to discuss books, form book clubs, or engage in broader discussions.Group chats can be open to friends or specific invitees, allowing for a private or public setup. |
| RFR-019 | Chat Notifications | Users receive notifications when they receive a new message or are mentioned in a group chat. |

3.1.6 Administrative and Moderation Functions

| Requirement Number | Requirement | Description |
|--------------------|--------------------|---|
| RFR-020 | Content Moderation | Administrators and moderators would review and moderate user-generated content to ensure it complies with community guidelines. |
| RFR-021 | User Management | <ul style="list-style-type: none">Administrators would manage user accounts, including banning users who violate rules. |

| | | |
|--|--|---|
| | | <ul style="list-style-type: none"> verify the accuracy of book titles and associated content before it is published. This can include automated checks or manual review by moderators to ensure that the book's title matches its content. |
|--|--|---|

3.2 Behaviour Requirements

3.2.1 Use Case Diagram for Readinook

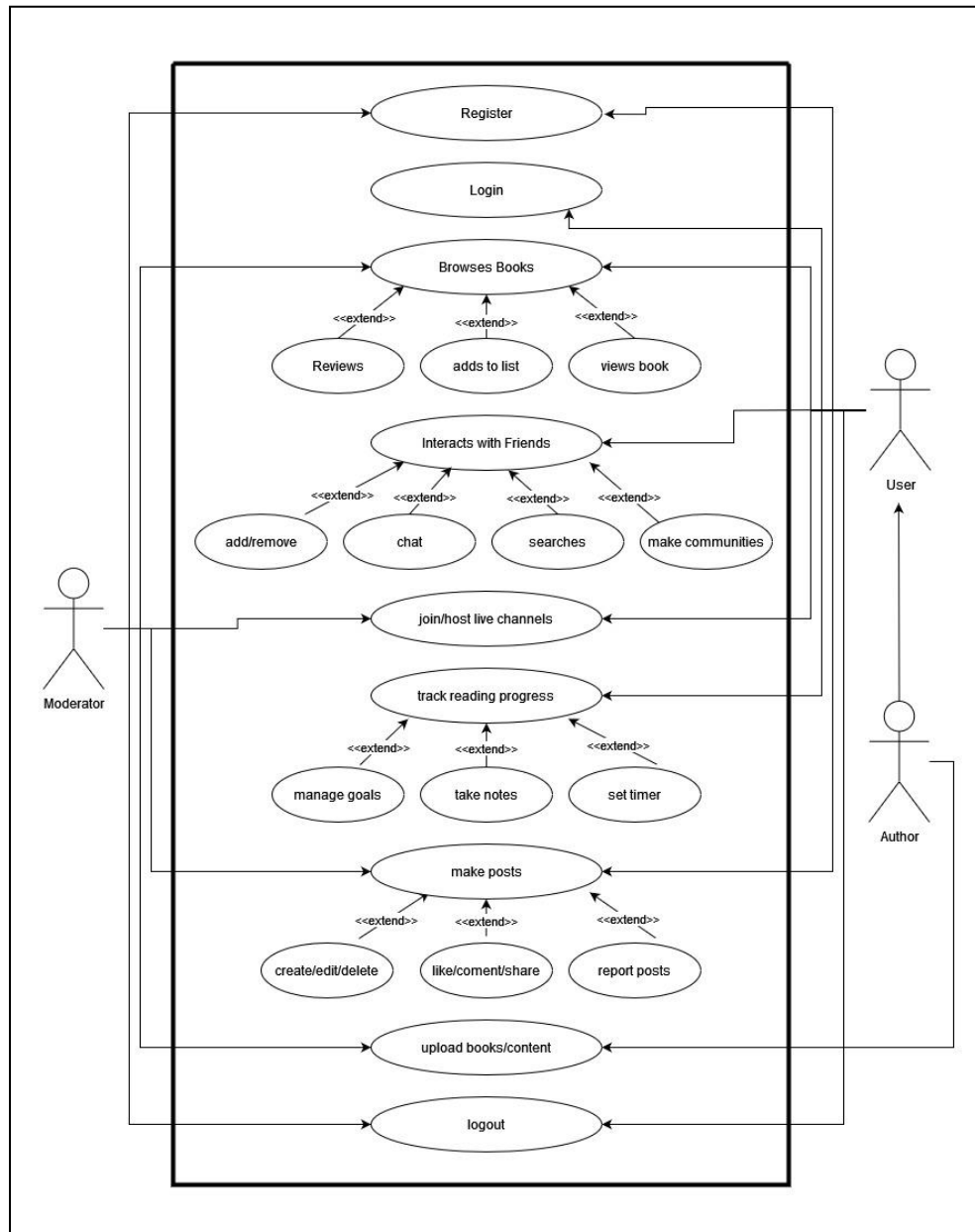


Figure 3.1: Use Case Diagram of System

3.2.2 Use Case #1: Signup

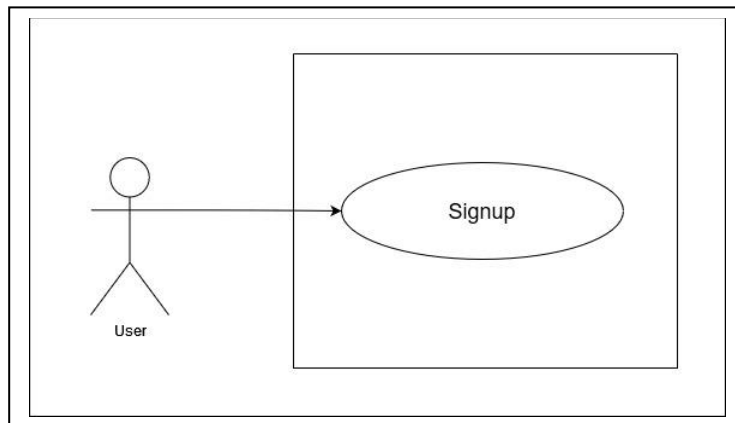


Figure 3.2: Use Case Diagram for Signup

Table 1: For Signup

| | |
|-----------------------|---|
| Actors | User |
| Description | User needs to signup if they don't already have an account. |
| Pre-Condition | User must have an Email account. |
| Steps | 1. Enter Name, Email and other required information. 2. Press "Signup" after filling relevant details. |
| Post-Condition | User will be successfully registered with the system. |

3.2.3 Use Case #2: Login

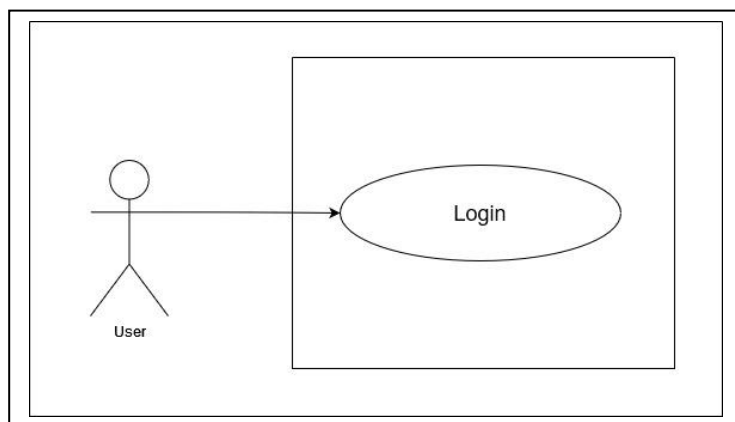
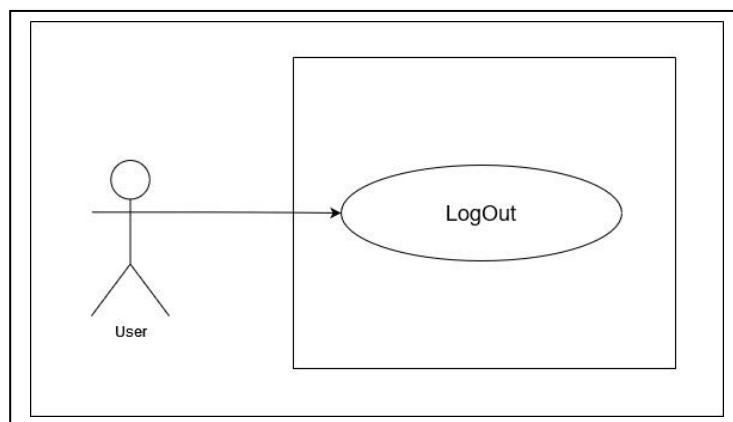


Figure 3.3: Use Case Diagram for Login

Table 2: For Login

| | |
|-----------------------|--|
| Actors | User |
| Description | User needs to Login to access the features of the system to the fullest. |
| Pre-Condition | User wants to enter system |
| Steps | <ol style="list-style-type: none"> 1. Enter Email and Password. 2. Press “Login” after filling relevant credentials. |
| Post-Condition | Successfully logged in to the system. |

3.2.4 Use Case #3: Logout

**Figure 3.4: Use Case Diagram for Logout****Table 3: For Logout**

| | |
|-----------------------|--|
| Actors | User |
| Description | User wants to logout after using the system. |
| Pre-Condition | User must be logged in to the system. |
| Steps | <ol style="list-style-type: none"> 1. Navigate to profile section. 2. Press the “Logout” button. |
| Post-Condition | Successfully logged out of the system. |

3.2.5 Use Case #4: Friends Module

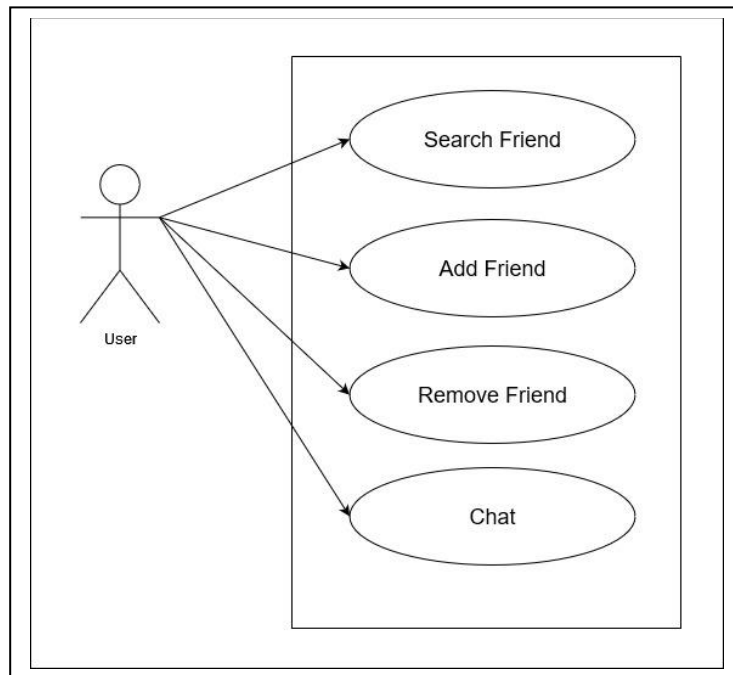


Figure 3.5: Use Case Diagram for Friends Module

Table 4: For Friends Module

| | |
|-----------------------|---|
| Actors | User |
| Description | User wants to add a friend and chat with them. |
| Pre-Condition | User must be logged in to the system. |
| Steps | <ol style="list-style-type: none"> 1. Navigate to search friend's section. 2. Type in their friend's name or username. 3. Press on "Add Friend" button. 4. After they accept the friend request, press the chat icon. 5. Start chatting with their friend. |
| Post-Condition | Friend will be added in their friend's list and they can chat with their friend successfully. |

3.2.6 Use Case #5: Posts Module

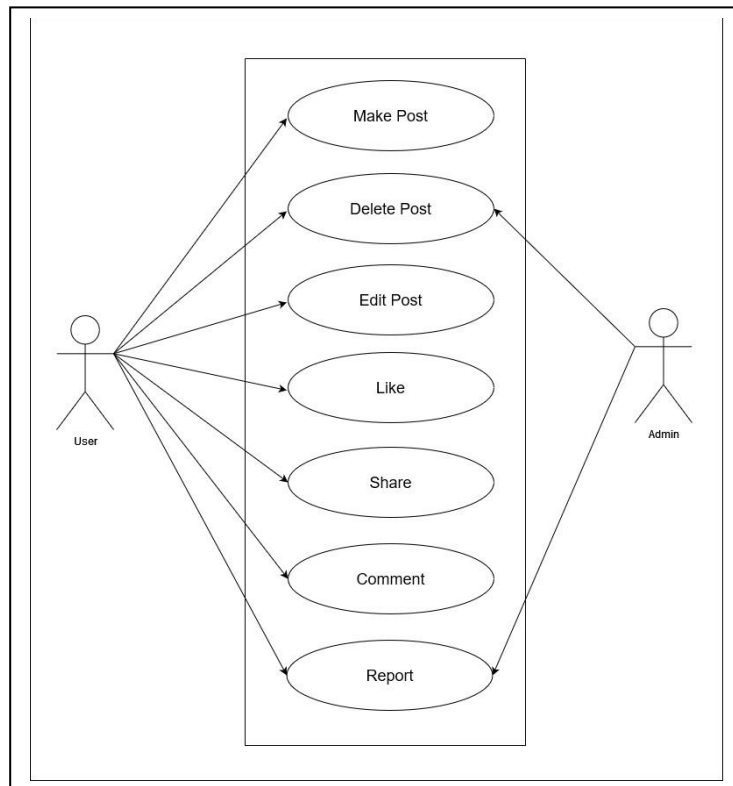


Figure 3.6: Use Case Diagram for Posts Module

Table 5: For Posts Module

| | |
|-----------------------|---|
| Actors | User |
| Description | User wants share their thoughts through a post. |
| Pre-Condition | User must be logged in to the system. |
| Steps | <ol style="list-style-type: none"> 1. Press “+” icon in the main timeline 2. Type in the text for the post. 3. Press on “Post” button. |
| Post-Condition | A post will be created successfully, which will be visible on user’s profile and on their friend’s timeline. |

3.3 External Interface Requirements

3.3.1 User Interfaces

The Readinook app offers a user-friendly interface designed to facilitate easy navigation and intuitive interaction. The user interface (UI) includes a variety of screens, buttons, and controls that allow users to accomplish different tasks within the app. This section describes the logical characteristics of each interface, common elements across screens, and the design standards used to ensure consistency and usability.

3.3.1.2 Home Screen

- **Features:**
 - The home screen serves as the starting point for users, providing quick access to popular books, recommendations, and the main navigation menu.
 - A search bar is prominently displayed at the top, allowing users to search for books, authors, or topics.
- **Standard Buttons and Functions:**
 - A navigation bar at the bottom provides quick access to key areas, such as "Home," "Search," "Friends," "Chats," and "Profile."
 - Common functions include refresh, notification, and settings buttons.

3.3.1.3 Book Details Screen

- **Features:**
 - When users select a book from any part of the app, they are taken to the book details screen, which provides information such as the title, author, genre, publication year, and a brief.
 - Users can read reviews, add the book to their reading list, rate it, or write a review.
- **Standard Buttons and Functions:**
 - The "Back" button allows users to return to the previous screen.
 - Functions to add to reading list, rate the book, and write a review are prominently displayed.
 - A share button allows users to share the book with friends or on social media.

3.3.1.4 User Profile Screen

- **Features:**
 - The user profile screen displays information about the user, including their name, profile picture, bio, and a list of books they're currently reading.
 - Users can view their friend list, access their reading lists, and manage their account settings.
- **Standard Buttons and Functions:**
 - Edit profile button to update personal information.
 - Options to view and edit reading lists, view activity history, and access account settings.

3.3.1.5 Friends and Chats Screen

- **Features:**
 - The friends screen displays a list of the user's friends, with options to add new friends or search for existing ones.

- The chats screen allows users to engage in direct messaging or group chats.
- **Standard Buttons and Functions:**
 - Buttons to start a new chat or add a new friend.
 - A list of existing chats with quick access to continue a conversation.
 - Common messaging functions such as send, delete, or react with emojis.

3.3.1.6 Error Message Display Standards

- **Consistency:**
 - Error messages should be clear and consistent across all screens.
 - They should include a descriptive explanation of the error and, if possible, steps to resolve it.
- **Error Display:**
 - Error messages typically appear as pop-up notifications or banners at the top of the screen.
 - Common error message displays include validation errors, network errors, and user-related issues (e.g., incorrect password).

3.3.2 Hardware Interfaces

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.
- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools

3.3.3 Software Interfaces

The Readinook app connects with several software components to function properly. This section describes the interfaces between the app and other software elements, including operating systems, databases, libraries, tools, and commercial components. It also identifies key data exchanges and the purpose of each interaction.

- **Operating Systems**
 - **Supported Platforms:** The Readinook app supports Android and iOS operating systems. It uses Flutter to ensure cross-platform compatibility.
 - **Version Requirements:** The app runs on Android 5.0 (Lollipop) and higher, and iOS 11 and higher.
 - **Communication with OS:** The app communicates with the operating system for common tasks like permissions management, notifications, and background processing.
- **Database and Backend Services**
 - **Firestore Integration:**
 - **Firestore:** The app uses Firestore for data storage, including book information, user reviews, and other dynamic content.
 - **Authentication:** Provides secure user authentication and authorization.
 - **Cloud Messaging:** Supports push notifications for user interactions and alerts.

- **Data Sharing:** Data between the app and Firebase is shared via secure protocols, with data being encrypted during transmission.
- **APIs Used:** The app uses Firebase SDKs to communicate with the Firebase services.
- **Libraries and Plugins:**
 - **Flutter Plugins:**
 - The app uses various Flutter plugins to enhance functionality and connect with hardware components, such as:
 - `image_picker`: For camera access.
 - `shared_preferences`: For local storage and caching.
 - `firebase_core`: For integrating with Firebase services.
 - **External Libraries:** The app might use external libraries for specific functions, such as analytics or data visualization.

3.3.4 Communications Interfaces

The Readinook app requires robust communication interfaces to support various functions, including user interactions, chat, friend requests, group messaging, and network server communication. This section outlines the major communication standards used by the app, along with any security or encryption considerations.

- **Communication Functions**
 - **Chat and Messaging:** The app allows users to send direct messages, participate in group chats, and exchange text and media files.
 - **Friend Requests:** Users can send and receive friend requests to connect with other readers.
- **Network Server Communications:** The app communicates with Firebase for real-time data exchange, including user authentication, book data, reviews, and notifications.
- **Communication Standards:**
 - **HTTP/HTTPS:** The app uses HTTP/HTTPS protocols for secure communication with Firebase. HTTPS ensures data encryption during transmission, providing a secure environment for user interactions.
 - **Push Notifications:** The app uses Firebase Cloud Messaging (FCM) to send push notifications to users, informing them of new messages, friend requests, and other important events.
 - **Email Communication:** The app may send email notifications for account-related activities, such as password recovery or account verification.
- **Security and Encryption:**
 - **Data Encryption:** All communication between the app and Firebase is encrypted to ensure data security. This includes user authentication, chat messages, and other sensitive data.

- **Secure Communication:** The app follows secure communication practices, using secure protocols and mechanisms to protect user data from unauthorized access.
- **Data Transfer and Synchronization**
 - **Real-time Data:** The app relies on Firebase for real-time data synchronization, allowing users to receive instant updates when messages are sent or friend requests are accepted.
 - **Data Transfer Rates:** The app is designed to work efficiently with typical mobile data transfer rates, ensuring smooth communication and minimal latency.

The communication interfaces in the Readinook app are designed to support user interaction and maintaining a secure and reliable communication environment. Uses encrypted protocols and secure communication standards.

4 Other Non-functional Requirements

4.1 Performance Requirements

Performance requirements define the expected responsiveness, reliability, and resource utilization for the Readinook app. These requirements ensure that the app provides a smooth user experience and meets the performance expectations of users under various circumstances. The following outlines key performance metrics and specific requirements.

- **General Performance**

- **Response Time:** Most user interactions, such as navigating between screens or opening book details, should complete instantaneously under normal conditions.
- **Startup Time:** The app should start and be ready for use within 5 seconds on supported devices.
- **Network Latency:** Data requests to and from Firebase should be processed within a reasonable time frame.

- **Chat and Messaging**

- **Message Delivery:** Messages sent in direct chats or group chats should be delivered in real-time.
- **Push Notifications:** Notifications for new messages or friend requests should arrive within a few seconds of the triggering event.

- **Data Synchronization**

- **Real-time Data Updates:** Changes to book information, user profiles, and reviews should synchronize across devices presently.
- **Offline Capability:** The app should support basic functionality in offline mode, with data synchronization occurring when a network connection is re-established.

- **Server Performance**

- **Backend Response Time:** Requests to the Firebase backend, such as user authentication or book data retrieval, should complete within few seconds.
- **Scalability:** The system should be capable of handling increased loads, such as a sudden influx of users or a high volume of chat messages, without significant performance degradation.

- **Resource Utilization**

- **Memory Usage:** The app should use system resources efficiently, with memory usage remaining within reasonable limits to prevent slowdowns or crashes.
- **Battery Consumption:** The app should be optimized to minimize battery consumption, avoiding excessive drain during normal use.

- **Error Handling and Recovery**

- **Error Recovery:** The app should be able to recover from errors or unexpected conditions quickly, with minimal disruption to the user experience.

- **Error Response Time:** Errors, such as network outages or server issues, should be detected and reported to users instantaneously.

4.2 Safety and Security Requirements

Safety and security requirements address potential risks, threats, and harms that could result from using the Readinook app. These requirements ensure user data protection, privacy, and compliance with relevant safety and security standards. A key safety concern involves the possibility of authors uploading books with incorrect titles or misleading information, which can affect user trust and content quality. This section outlines the necessary actions to mitigate such risks.

- **Safety Requirements:**

- **Data Protection:** All user data, including personal information and communication content, must be protected against unauthorized access, loss, or damage.

- **Error Handling and Recovery:** The app should have mechanisms in place to recover from errors or unexpected conditions without causing harm to users or data loss.

- **Security Requirements:**

- **User Authentication:** The app must implement secure user authentication mechanisms, such as email verification, password protection, or single sign-on (SSO), to prevent unauthorized access.

- **Data Encryption:** All data transmitted between the app and Firebase should be encrypted using industry-standard encryption protocols to ensure confidentiality.

- **Access Control:** The app should have robust access control measures, ensuring that users have access only to authorized functions and data.

- **Secure Communication:** Communication within the app, such as chat messages and friend requests, must use secure protocols to prevent interception or tampering.

- **Safeguard of content accuracy:**

- **Content Verification:** Implement mechanisms to verify the accuracy of book titles and associated content before it is published. This can include automated checks or manual review by moderators to ensure that the book's title matches its content.
- **Author Guidelines:** Provide clear guidelines for authors on proper content submission, specifying the importance of accurate titles, genre categorization, and relevant information.
- **Reporting Mechanism:** Allow users to report content that appears to be mislabeled or inaccurate, providing a process for review and correction.

These safety and security requirements help ensure that the Readinook app provides a safe and secure environment for users. By implementing these measures, the app can mitigate risks and comply with relevant safety and security standards.

5 Design Description

5.1 Composite Viewpoint

5.1.1 Package Diagram (Logical)

Users interact with system through the mobile application. Interacting with application features like Browsing books, chatting with friends, joining live channels, tracking their reading progress and creating posts. The android application delegates this information to and from the Firebase database. This diagram offers a high-level view of essential components and their interaction with each other.

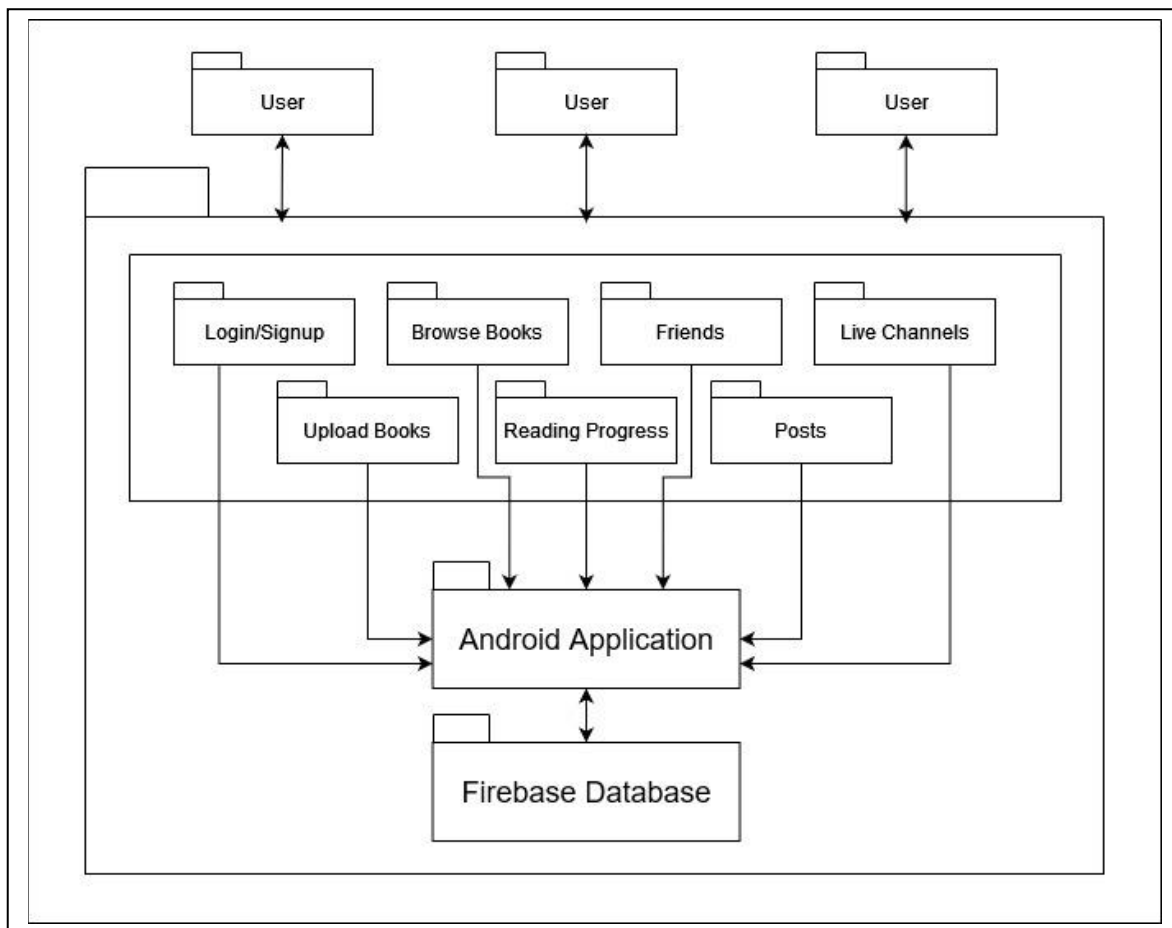


Figure 5.1: Package Diagram of the system

5.1.2 Deployment Diagram (Physical)

This diagram represents the physical deployment of the system. It showcases how different components are mapped across different hardware nodes.

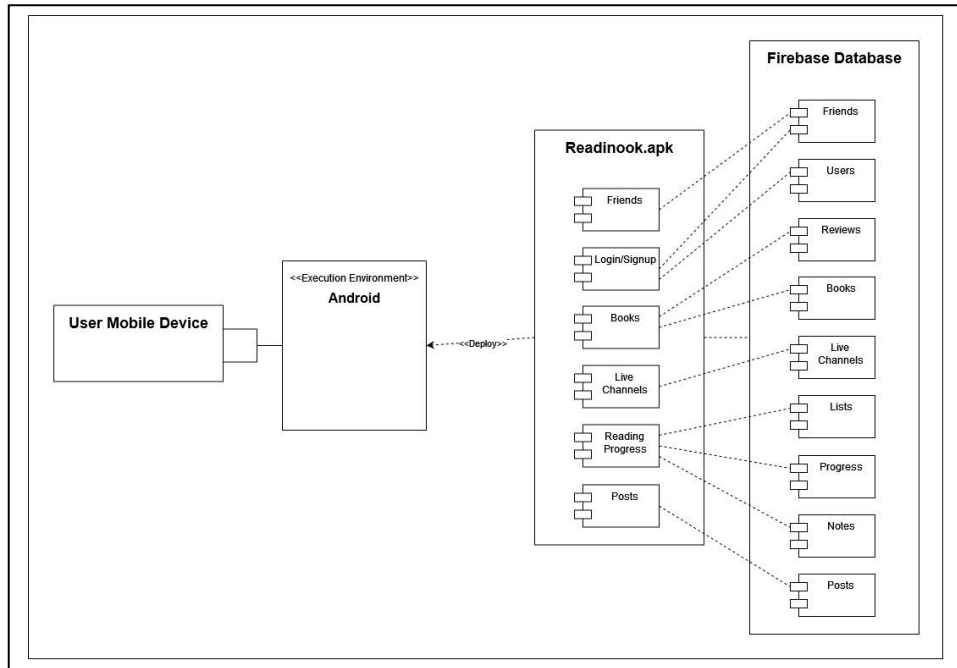


Figure 5.2: Deployment Diagram of the system

5.2 Logical Viewpoint

The logical viewpoint offers a structural look of the system. The Class diagram is used here to showcase the classes and their interaction with each other representing the structure of the system.

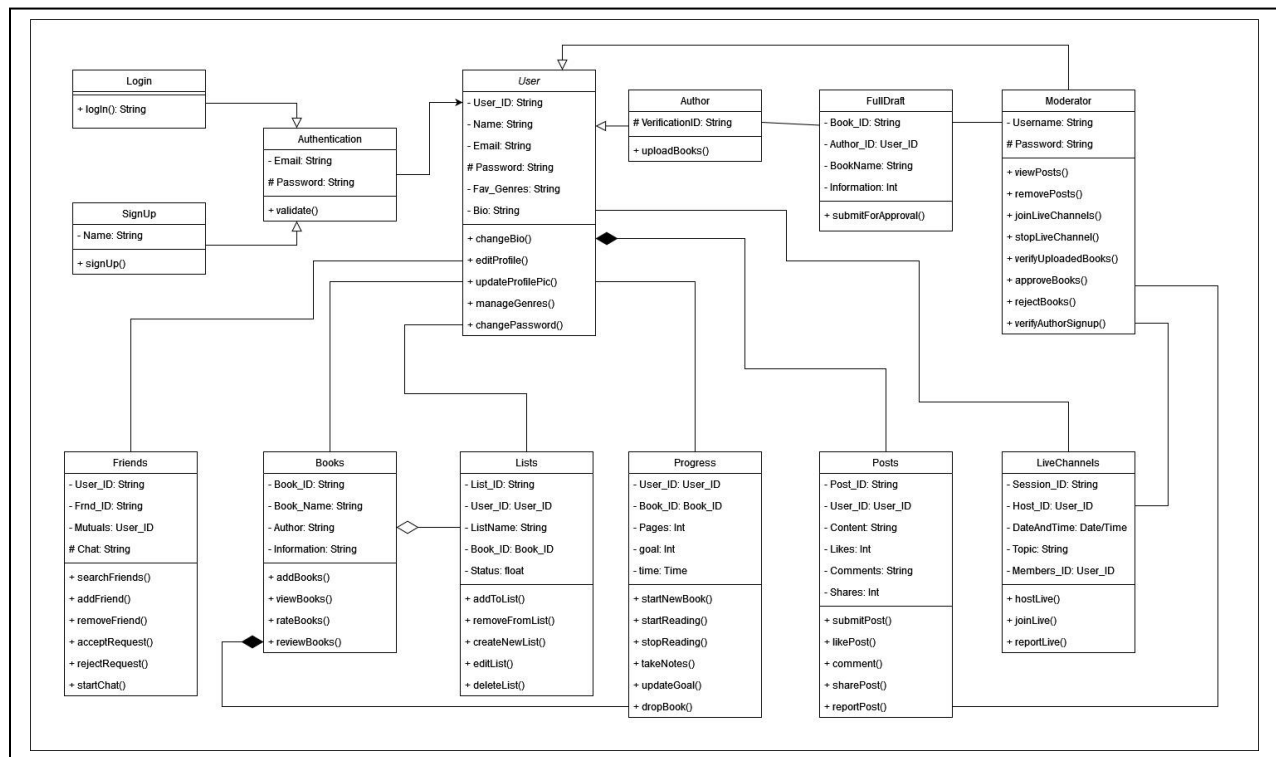


Figure 5.3: Class Diagram of the system

5.3 Information Viewpoint

Informational view point of the system is represented using Entity Relation Diagram. Here the ERD showcases different entities of Readinook, their main attributes and relations with each other.

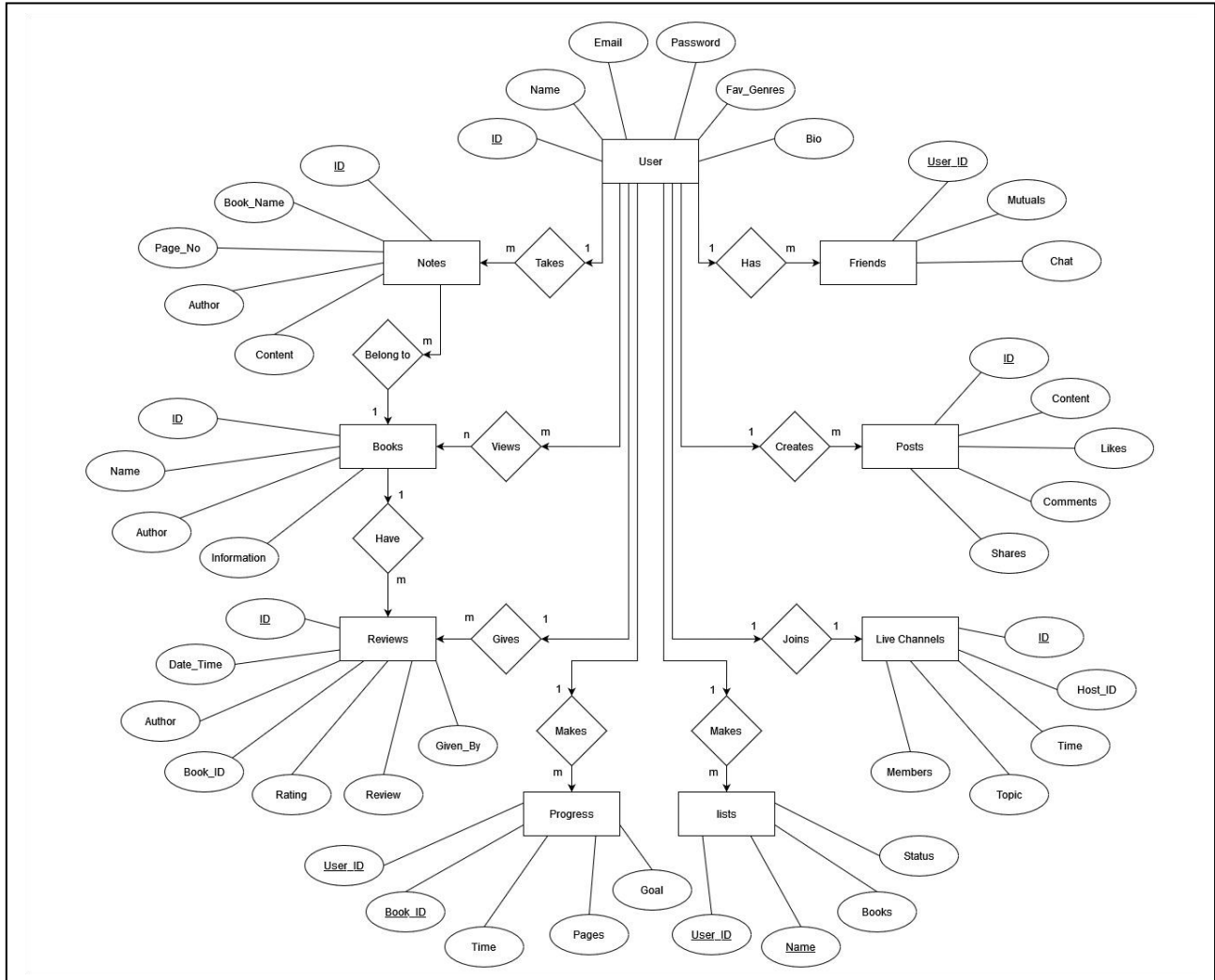


Figure 5.4: Entity Relation Diagram of the system

5.4 Interaction Viewpoint

Interaction viewpoint displays a dynamic aspect of the system. It shows how entities interact with each other leading to step-by-step action. Following are the Sequence diagrams for the implemented modules, encapsulating interactions between different entities.

5.4.1 Sequence Diagram for Signup Module

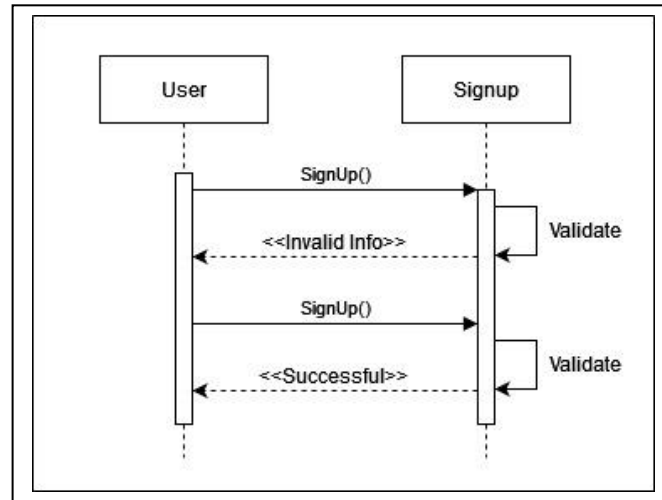


Figure 5.5.1: Sequence Diagram of Signup Module

5.4.2 Sequence Diagram for Login Module

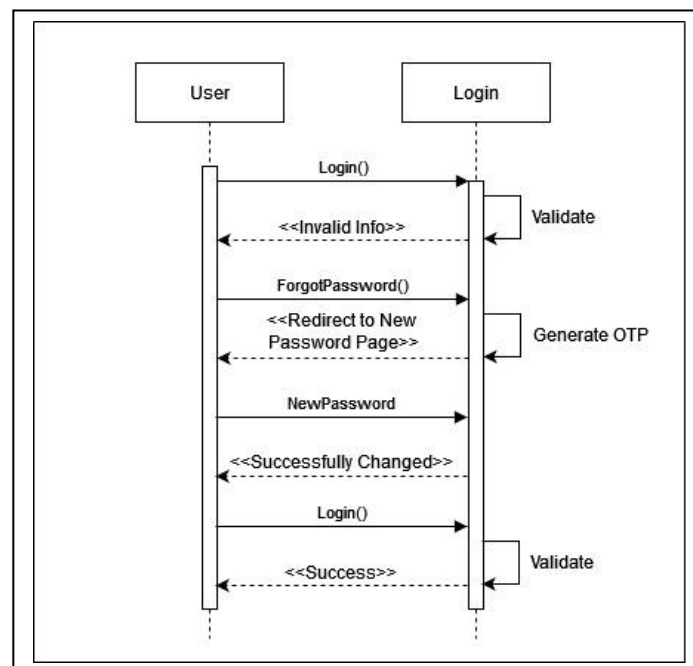


Figure 5.5.2: Sequence Diagram of Login Module

5.4.3 Sequence Diagram for Friends Module

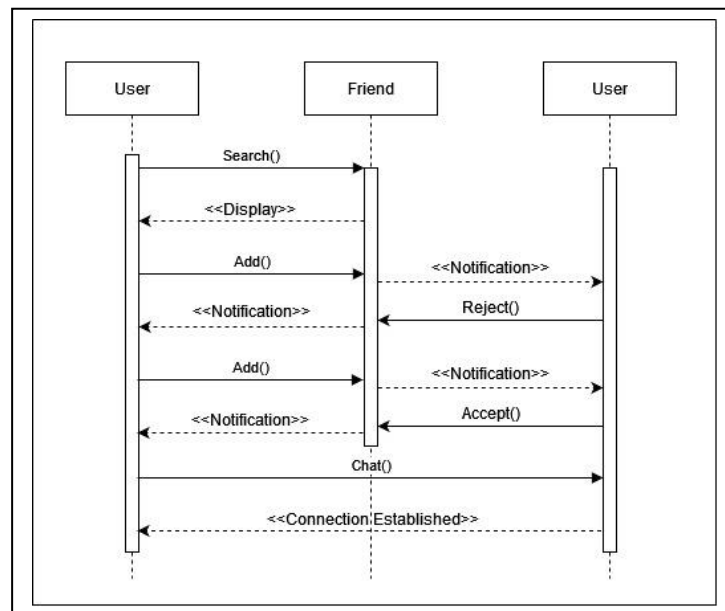


Figure 5.5.3: Sequence Diagram of Friends Module

5.4.4 Sequence Diagram for Posts Module

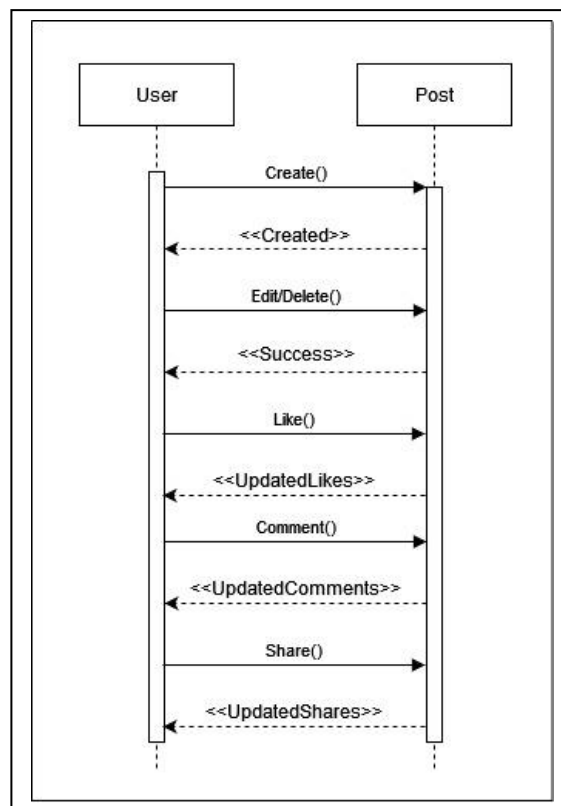


Figure 5.5.4: Sequence Diagram of Posts Module

5.6 Algorithm Viewpoint

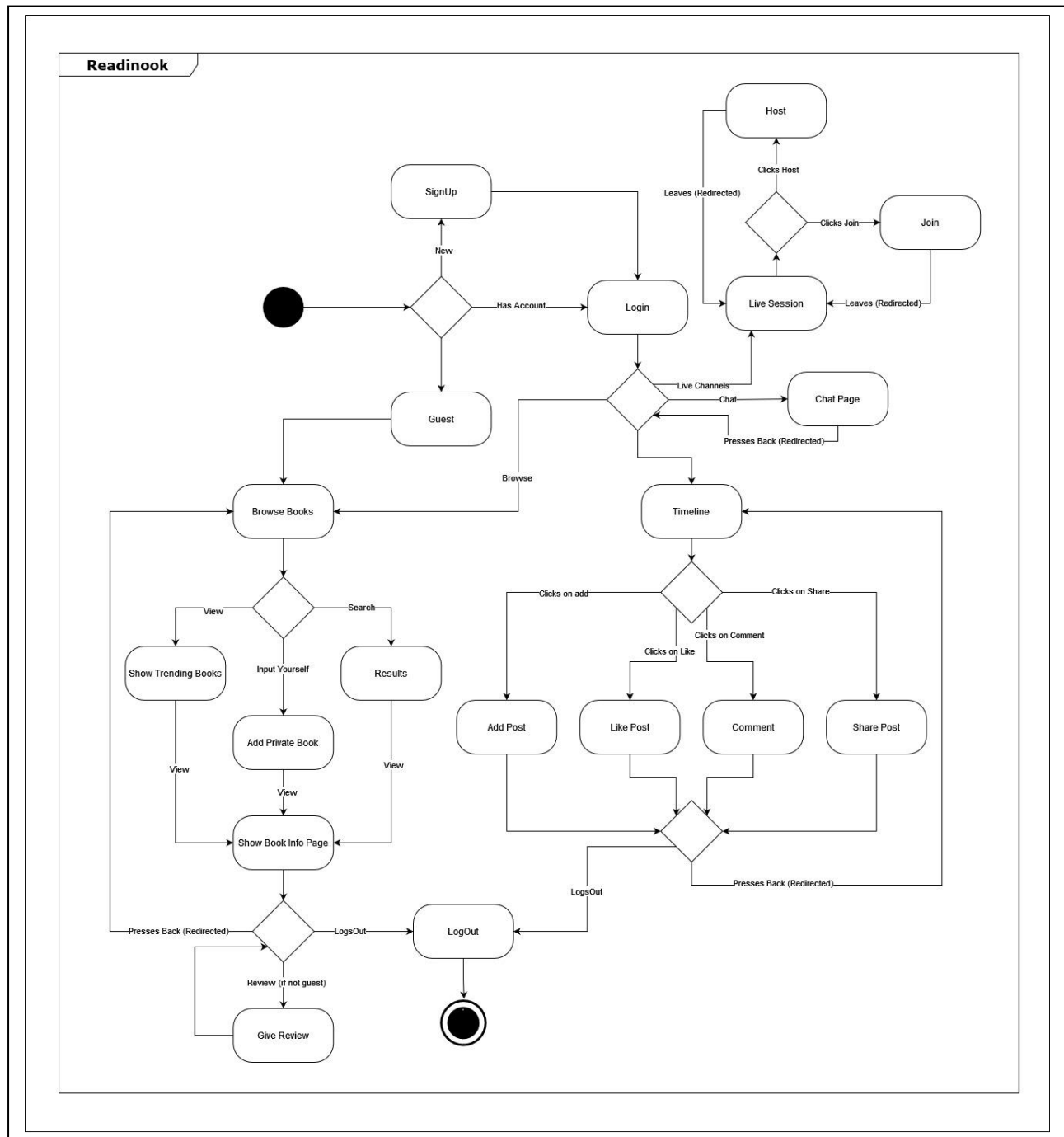


Figure 5.7: Activity Diagram of the System