Software Requirements Specification

for

Online Social Networking Site

Version 1.0 approved

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1. Introduction

The Online Social Networking Site is a dynamic and interactive digital platform that fosters social connections and facilitates seamless communication among users worldwide. Designed to cater to diverse interests and preferences, this virtual community provides a user-friendly interface for individuals to create personalized profiles, connect with friends, and share a wide range of content, including text, images, videos, and links. With an emphasis on user engagement, the platform offers real-time feeds and timelines that curate relevant content, ensuring users stay informed and connected to the latest updates from their network. Embracing the spirit of digital connectivity, the Online Social Networking Site serves as an inclusive space where users can form communities, participate in discussions, and explore shared interests, all while adhering to robust privacy and content moderation measures. Whether forging new connections or rekindling existing relationships, this social networking site aims to provide a vibrant and enriching online experience for users, fostering a sense of belonging and bringing people closer together in the digital realm.

1.1. Purpose/Objective

The purpose of this Software Requirements Specification (SRS) for the Online Social Networking Site is to provide a comprehensive and detailed blueprint for the development team, stakeholders, and designers. The SRS outlines the functional and non-functional requirements, system behavior, and architectural specifications of the social networking platform. By defining clear objectives and user-centric functionalities, the SRS aims to guide the development process, ensuring the creation of a robust, secure, and user-friendly online social networking site. Additionally, the SRS acts as a communication bridge between various project stakeholders, aligning their expectations, minimizing ambiguities, and fostering a shared understanding of the platform's features and capabilities. Through the SRS, the project team can make informed decisions, prioritize development efforts, and ultimately deliver a cutting-edge social networking site that fosters genuine connections, encourages user engagement, and creates a vibrant virtual community for its users.

1.2. Document Conventions (Definition, Acronyms, Abbreviations)

1.2.1.   Entire document must be justified

1.2.2.   Convention for main title
- Font face: Times New Roman
- Font Style: Bold
- Font Size: 18

1.2.3.   **Convention for Sub Title**
- Font face: Times New Roman
- Font Style: Bold
- Font Size: 16

1.2.4.   **Convention for Body**
- Font face: Times New Roman
- Font Size: 12

1.2.5.   **Definitions**

1.2.5.1.   **Database:** The database for the Online Social Networking Site is a centralized and organized repository that stores,

manages, and retrieves vast amounts of structured and unstructured data generated by the platform and its users. It serves as the backbone of the social networking site, responsible for efficiently storing user profiles, posts, comments, likes, connections, and other relevant information essential for seamless user interactions. The database is designed to ensure data integrity, security, and scalability, accommodating the exponential growth of user-generated content and user base. By providing quick and reliable access to data, the database empowers the social networking site with real-time content delivery, personalized user experiences, and effective search functionalities. Additionally, the database plays a pivotal role in supporting data analytics and business intelligence, enabling the platform to gain valuable insights into user behavior, preferences, and trends to enhance user engagement and continuously improve the overall user experience.

1.2.5.2. **User:** In the context of the Online Social Networking Site, a user refers to an individual who creates an account and engages with the platform to connect, communicate, and interact with others within the virtual community. Each user possesses a unique profile that typically includes personal information, such as name, profile picture, bio, and interests. Users have the ability to post content, share updates, and interact with posts from other users through likes, comments, and shares. They can also establish connections with other users, forming a network of friends, followers, or connections, depending on the platform's specific social structure. The user's role within the social networking site is pivotal, as they contribute to the dynamic and engaging environment, creating a vibrant digital community that fosters meaningful relationships, discussions, and content sharing. The platform prioritizes user experience, privacy, and security, aiming to provide a safe and enjoyable space where users can express themselves, discover shared interests, and establish connections with others across geographical boundaries.

1.2.5.3. **UI:** User Interface

1.2.5.4. **UX:** User Experience

1.2.5.5. **API:** Application Programming Interface

1.2.5.6. **SQL:** Structured Query Language

1.2.5.7. **HTTPS:** Hypertext Transfer Protocol Secure

1.2.5.8. **URL:** Uniform Resource Locator

1.3.   Scope

The scope of the Online Social Networking Site encompasses the development of a dynamic and interactive digital platform that facilitates social connections and seamless communication among users worldwide. The platform aims to create an inclusive and engaging virtual community, offering a range of functionalities to users for connecting with friends, family, and new

acquaintances. Users will be able to create personalized profiles, share diverse content, and explore shared interests through posts, comments, likes, and shares. The platform will support real-time feeds and timelines to curate relevant content, ensuring users stay informed and connected to their network. Additionally, the social networking site will prioritize user privacy and data security, providing users with the ability to control their privacy settings and manage their online presence effectively. The scope also includes implementing advanced search and discovery features, allowing users to find and connect with others based on interests and demographics. The platform will be developed with scalability in mind, accommodating potential growth in user base and content generation. The Online Social Networking Site aims to create an immersive and enriching user experience, fostering genuine connections, promoting meaningful interactions, and empowering users to build a vibrant and interactive online community.

1.4. References

- Smith, J. (Year). "Social Networking and its Impact: A Comprehensive Study." Publisher.
- "The Evolution of Social Networking Sites." (Year). Tech Magazine. URL: www.techmagazine.com/article123
- Facebook Graph API. (Year). "Developer Documentation." URL: developers.facebook.com/docs/graph-api
- Twitter API. (Year). "API Reference." URL: developer.twitter.com/en/docs/twitter-api

2. History/Background Study (Sources of Domain Knowledge)

2.1. Technical Literature

The Technical Literature for the Online Social Networking Site comprises a comprehensive collection of relevant research papers, industry reports, academic journals, and technical articles that delve into various aspects of social networking platforms, web development, user experience (UX) design, data security, and scalability. This extensive body of knowledge serves as a valuable resource for the development team, providing insights into best practices, emerging trends, and innovative technologies within the online social networking domain. The technical literature also offers valuable guidance on implementing robust data storage and management solutions, ensuring seamless integration of APIs for real-time content delivery, and optimizing user interfaces for an engaging and intuitive user experience. By referencing authoritative technical literature, the development team gains valuable domain knowledge, aligns the project with industry standards, and incorporates proven methodologies to create a high-performing and user-centric Online Social Networking Site that fosters genuine connections and enhances user engagement.

2.2. Existing Applications

These are some of the existing applications for online social networking
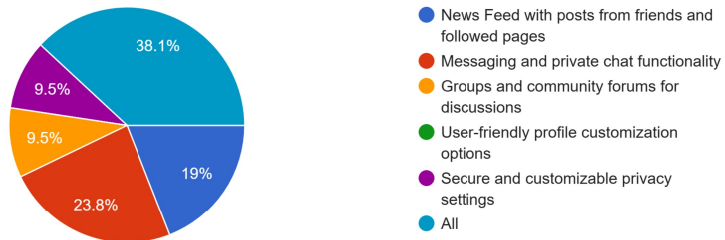
- Facebook
- Twitter
- Instagram

- LinkedIn
- TikTok
- Pinterest
- Reddit
- Snapchat
- WhatsApp
- WeChat

2.3.   Customer Surveys

Link : https://forms.gle/NgYEcdL69TJG7zr27

Which features would you like to see in the social networking site?
21 responses

- News Feed with posts from friends and followed pages
- Messaging and private chat functionality
- Groups and community forums for discussions
- User-friendly profile customization options
- Secure and customizable privacy settings
- All

How frequently do you expect to use the social networking site?
21 responses

- Daily
- Several times a week
- Once a week
- Occasionally
- Rarely or never
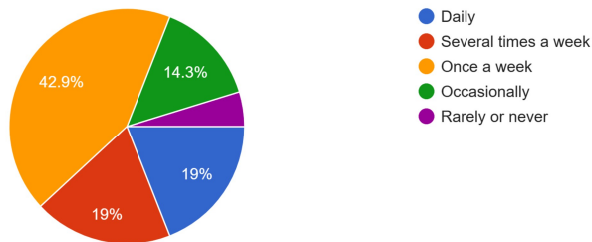
What type of content would you be most interested in sharing on the platform?
21 responses

- Text-based posts and updates
- Photos and images
- Videos and multimedia content
- Links to articles and websites
- Events and milestones
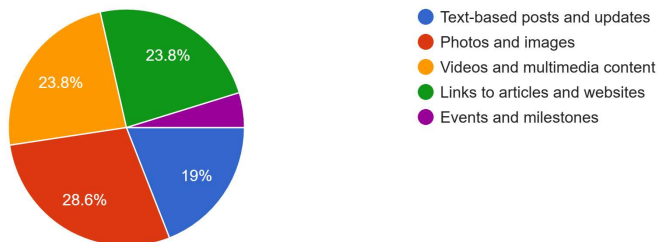
2.4.   Expert Advice

2.4.1.   **Scalability and Performance:** Seek expert advice on designing a

scalable architecture that can handle a growing user base and high traffic loads. Optimize database structures and implement caching mechanisms to ensure smooth performance even during peak usage.

2.4.2. **Data Security and Privacy:** Consult security experts to implement robust data encryption, user authentication mechanisms, and secure APIs to protect user data and privacy. Adhere to industry standards and compliance regulations to maintain user trust.

2.4.3. **User Experience (UX) Design:** Engage UX designers to create an intuitive and user-friendly interface that encourages user engagement and seamless navigation. Conduct usability testing to gather user feedback and iterate on design improvements.

2.4.4. **Mobile Responsiveness:** Seek advice on developing a responsive design that adapts to various devices and screen sizes, ensuring a consistent user experience across desktops, tablets, and mobile devices.

2.4.5. **Content Moderation:** Work with content moderation specialists to implement effective strategies for detecting and handling inappropriate or harmful content. Utilize machine learning algorithms to assist in content review and moderation.

2.4.6. **Real-time Updates and Notifications:** Consult experts to implement real-time updates and notifications to keep users informed of new interactions, messages, and activities within their network.

2.4.7. **Continuous Improvement and Feedback:** Seek expert advice on implementing feedback mechanisms, user surveys, and feedback loops to continuously improve the platform based on user input and suggestions.

2.5. Current/Future requirements

2.5.1. **User Authentication Enhancements:** Implement two-factor authentication and other advanced security measures to strengthen user account protection.

2.5.2. **Improved Privacy Settings:** Enhance privacy controls, allowing users to customize the visibility of their posts and personal information.

2.5.3. **Content Moderation AI:** Integrate advanced AI-based content moderation to proactively identify and remove harmful or inappropriate content.

2.5.4. **Real-time Live Video:** Introduce live video streaming features to enable real-time interactions and broadcasts for users.

2.5.5. **Advanced Search and Recommendations:** Improve search algorithms and recommendation systems to provide more accurate and relevant content and user suggestions.

2.5.6. **Integration with Third-Party Services:** Allow users to seamlessly connect their accounts with other popular services or platforms for enhanced functionality.

2.5.7. **Virtual Reality (VR) Integration:** Explore integrating virtual reality features to provide immersive and interactive experiences for users.

2.5.8. **Blockchain-based Identity Verification:** Implement blockchain technology for secure and decentralized user identity verification.

2.5.9. **Artificial Intelligence for Personalization:** Utilize AI to deliver

personalized content and user experiences based on individual preferences and behavior.

2.5.10. **Enhanced Privacy with Decentralization:** Explore the possibility of decentralizing user data to give users more control over their information.

2.5.11. **Augmented Reality (AR) Enhancements:** Introduce AR features to allow users to overlay digital content onto the real world through their devices.

2.5.12. **Voice and Video Calling:** Enable voice and video calling functionality within the platform for enhanced communication options.

2.5.13. **Global Expansion and Localization:** Plan for international expansion by adding support for multiple languages and localized content.

2.5.14. **Ephemeral Content:** Introduce features that allow users to share temporary or disappearing content.

3. Overall Description

3.1. Product Functions

3.1.1. Hardware Requirement

- High-performance servers to handle incoming requests and serve web pages efficiently.
- Robust servers to store and manage user data, profiles, and posts.
- Balancing hardware/software for distributing incoming traffic across multiple servers.
- Reliable and high-speed network setup for smooth communication.
- Regular backups and redundancy measures for data integrity and availability.

3.1.2. Software Requirement

- Implement a secure and reliable user authentication system to ensure that only authorized users can access the platform and their accounts.
- Develop a robust CMS to allow users to create, share, and manage their posts, comments, and interactions with others on the platform.
- Implement a real-time notification system to keep users informed about new friend requests, messages, comments, and other relevant activities within their network.
- Ensure strong privacy controls and data security measures to protect user information, posts, and interactions from unauthorized access.
- Integrate content moderation algorithms and tools to detect and handle inappropriate or harmful content, ensuring a safe and

positive user experience.

3.2. Functional Requirements

3.2.1. Sign up/ Sign in

3.2.1.1. Create new account.

Description: is a fundamental feature that enables new users to sign up and register on the Online Social Networking Site. Users can provide necessary details, such as name, email, and password, to create their unique accounts. Once the information is submitted and verified, a new account is successfully established, granting the user access to all the functionalities and interactions within the social networking platform.

- **Input:** Enter name, surname, mobile number, email address, password, date of birth, gender. Agree to terms and conditions.
- **Output:** Account created prompt is displayed and verification link is sent to mail and contact number. Error message is displayed if any filled detail is wrong.

3.2.1.2. Log in

Description: is a key functionality that allows registered users to access their accounts on the Online Social Networking Site. By entering their valid credentials, such as username/email and password, users can securely log in to their accounts, gaining full access to their profiles, posts, friend connections, and personalized content. The "Log In" feature ensures a seamless and authenticated user experience, facilitating meaningful interactions and engagement within the social networking community.

- **Input:** Email or phone number and password.
- **Output:** Open home page of user. Send email to user if log in is done from a new device.

3.2.1.2.1. Forgot password

- Input: Click forgot password.
- Output: The reset mail is sent to the user's email id.

3.2.2. Account

Description: It involves providing users with the ability to create and manage their individual accounts on the platform. Users can register by supplying essential details, such as name, email, and password, to establish their unique profiles. The account functionality also allows users to personalize their profiles, set privacy preferences, and manage account settings. By offering this feature, the platform ensures a secure and personalized user experience, enabling users to connect with others, share content, and participate actively within the online social networking community.

3.2.2.1. Profile

3.2.2.1.1. Add or update profile photo

- **Input:** Select photo. Crop to fit. Save.
- **Output:** Profile picture successfully updated prompt
- **Error:** Unable to upload or update profile photo. Please try again later.

3.2.2.1.2. Add or update cover photo.

- **Input:** Select photo. Crop to fit. Save.
- **Output:** Profile picture successfully updated prompt.
- **Error:** Failed to upload or update cover photo. Please check your internet connection and try again

3.2.2.1.3. Add or edit bio

- **Input:** User writes a short description about them.
- **Output:** Updated bio successfully.
- **Error**: Unable to add or edit bio. Please ensure the text meets the character limit and try again

3.2.2.1.4. Posts

- React to a post
  - **Input**: Click on the desired reaction — Like, LOL, Sad, Angry, Amazed.
  - **Output:** Show the reaction on post.
- Comment on post
  - **Input:** Write comment in comment box and click post.
  - **Output:** Comment is displayed in the comments section and comment count is increased.
- Share a post
  - **Input:** Click share option and select where to share – profile, direct message to someone or external.
  - **Output:** Share to the desired selection

3.2.2.2. Display

Description— User can edit their display preferences like theme.

- **Input**: Select theme.
- **Output:** Theme applied.

3.2.2.3. Log out

Description— User can edit their privacy settings, change password or email, check login activity.

- **Input:** Select log out option.
- **Output:** Successfully logged out message.

3.2.2.4. Delete/Deactivate account

- **Input**: Select delete/deactivate account option. For deactivation, user inputs the time.
- **Output:** Performs the respective operation after confirmation through mail

3.2.3.　　Feed

Description: The feed is a dynamic content stream that displays a chronological arrangement of posts, updates, and activities from users and pages that a user follows or is connected to. It serves as the central hub for users to view and engage with the latest content shared by their network.

- **Input**
  - User ID or authentication token to identify the logged-in user and fetch their personalized feed.
  - Preferences for content filtering, such as sorting by most recent or most popular posts.
- **Output**
  - A user-specific feed displaying a series of posts and activities from followed users, friends, or pages.
  - Each post may include text, images, videos, or links, along with information about the user who posted it and the time of posting.
  - Interaction options, such as like, comment, and share buttons, allowing users to engage with the content.
- **Error**
  - If the user ID or authentication token is invalid or missing, an error message will be displayed: "Error: Authentication failed. Please log in again."
  - In case of network issues or server problems, a message may appear: "Error: Unable to load feed. Please check your internet connection and try again."
  - If no posts are available for the user's feed due to a lack of connections or content, an error message might state: "No posts found. Connect with friends or follow pages to see their updates on your feed."

3.2.4.　　Messaging

Description: Messaging is a core feature that enables users to send and receive private messages within the Online Social Networking Site. It facilitates real-time communication between users, fostering private discussions, sharing content, and strengthening connections.

- **Input**
  - User ID or authentication token to identify the sender and receiver of the message.
  - Message content, which can include text, images, emojis, or attachments.
  - Recipient's user ID or username to direct the message to the intended user.
- **Output**
  - A threaded conversation view displaying the exchanged messages between the sender and recipient.
  - Real-time updates and notifications for new messages received.
  - Timestamps indicating the time of each message.
- **Error**

- o If the user ID or authentication token is invalid or missing, an error message will be displayed: "Error: Authentication failed. Please log in again."
- o When attempting to send a message to a non-existent user or an invalid recipient, the error message may state: "Error: Recipient not found. Please check the username and try again."
- o If there are network issues or server problems, a message might appear: "Error: Unable to send message. Please check your internet connection and try again."
- o In cases where a message cannot be delivered due to recipient's privacy settings or blocking, the error message may read: "Error: Message delivery failed. The recipient may have restricted messaging or blocked the sender."

3.2.5. Create post

Description: The "Create Post" feature allows users to compose and share their thoughts, media content, and updates with their network on the Online Social Networking Site. By creating posts, users can engage their audience, express themselves, and initiate discussions around various topics of interest.

- **Input**
  - o Post Content: Textual input for composing the content of the post, including the main message or description.
  - o Media Attachments: Option to include multimedia elements, such as images, videos, or documents, to enrich the post content.
- **Output**
  - o New Post Display: The user's newly created post is showcased in their profile's timeline and followers' feeds.
  - o Interaction Options: Users can see engagement metrics on their post, such as the number of likes, comments, and shares.
- **Error**
  - o Missing Content: If the user attempts to create a post without adding any text content, an error message may appear: "Error: Please enter some content before posting."
  - o File Upload Failure: In case of an issue with media file attachments, such as unsupported file formats or upload errors, an error message might state: "Error: Failed to upload the attached media. Please try again."

3.2.6. Profile of other users

Description: This feature allows users to view the public profile pages of other users within the Online Social Networking Site. By accessing these profiles, users can gain insights into the activities, posts, and shared content of other users.

- **Input**
  - o User ID or Username: Input to identify the specific user whose profile is being viewed.
- **Output**

- o Public Profile Page: Displaying information about the selected user, including their name, profile picture, bio, and recent posts.
- o Post Interactions: Users can view and interact with the other user's posts by liking, commenting, or sharing them.
- **Error**
- o User Not Found: If the entered user ID or username does not exist or is not publicly accessible, an error message may appear: "Error: Profile not found. Please check the username and try again."

3.2.7. Search

Description: The "Search" feature enables users to discover other users, pages, groups, and content within the Online Social Networking Site. By entering specific keywords or queries, users can find relevant results that match their interests and preferences.

- **Input**
- o Search Query: Input field where users can enter keywords or phrases to search for specific users, pages, groups, or content.
- **Output**
- o Search Results: Displaying a list of relevant users, pages, groups, or content that match the entered search query.
- o Pagination: If there are numerous search results, the output may include pagination to navigate through multiple result pages.
- **Error**
- o No Results Found: If the search query does not match any existing users, pages, groups, or content, an error message may appear: "No results found. Please try a different search query."

3.2.8. Block User

Description: The "Block User" feature allows users to prevent interactions and communication with specific individuals within the Online Social Networking Site. By blocking a user, the account owner can avoid receiving messages, notifications, and content from the blocked user.

- **Input**
- o User ID or Username: Input to identify the user to be blocked.
- **Output**
- o Blocked User Confirmation: After blocking a user, the output confirms that the user has been successfully blocked, and interactions with the blocked user will be restricted.
- **Error**
- o Invalid User: If the entered user ID or username does not exist or is not valid, an error message may appear: "Error: User not found. Please check the username and try again."
- o The "Block User" functionality empowers users to manage their interactions and privacy, creating a safer and more comfortable experience on the social networking platform.

3.3. Non-Functional Requirements

3.3.1. Correctness Requirement

- **Accurate Data Storage and Retrieval:** The Online Social Networking Site shall ensure the accuracy of data storage and retrieval operations, minimizing data inconsistencies, duplicates, or data loss. User-generated content, user profiles, and interactions should be reliably saved and accurately presented to users across different platforms and devices.

- **Error Handling and Validation:** The platform shall implement robust error handling and data validation mechanisms to prevent erroneous input and maintain data integrity. It should display informative error messages to guide users in correcting any input errors during account creation, post creation, or other interactions.

- **Reliable Content Moderation:** The content moderation system shall be effective and accurate in detecting and handling inappropriate or harmful content. It should minimize false positives and negatives, ensuring that legitimate content is not mistakenly flagged or inappropriate content goes undetected.

3.3.2. Portability requirement

The Portability Requirement for the Online Social Networking Site focuses on ensuring the platform's flexibility and ease of migration across different environments and devices. The system shall be designed and developed to be portable, allowing smooth deployment and operation on various operating systems, web browsers, and hardware configurations. Emphasizing adherence to industry standards and best practices, the Online Social Networking Site should be compatible with multiple platforms, enabling users to access the platform seamlessly from desktop computers, laptops, tablets, and smartphones.

Furthermore, the Portability Requirement encompasses considerations for future scalability and adaptability. The platform should be built with a modular and component-based architecture to facilitate easy updates, enhancements, and integration with emerging technologies. Compatibility with different screen sizes and resolutions ensures a consistent user experience across devices, promoting user engagement and accessibility.

By meeting the Portability Requirement, the Online Social Networking Site can reach a broader audience and adapt to evolving technological landscapes, ultimately positioning itself as a versatile and user-friendly platform in the dynamic world of online social networking.

3.3.3. Efficiency Requirement

- **Response Time and Performance:** The Online Social Networking Site shall strive for optimal response times and efficient performance, ensuring quick page loading, content delivery, and minimal latency for user interactions. The platform should be capable of handling a large number of concurrent users without significant degradation in response times.

- **Resource Utilization:** The system shall be designed to efficiently

utilize computing resources, such as CPU, memory, and network bandwidth, to minimize resource contention and enhance overall system stability. Efficient resource management is crucial for accommodating increased user activity and traffic spikes.

- **Caching and Content Delivery:** Implementing intelligent caching mechanisms and content delivery networks (CDNs) shall enhance the efficiency of content retrieval and reduce server load. Frequently accessed data, images, and other static content should be cached to reduce repetitive data retrieval and improve overall performance.

3.3.4. Usability Requirement

- **Intuitive User Interface:** The Online Social Networking Site shall have an intuitive and user-friendly interface, ensuring that users can easily navigate and access various features without the need for extensive guidance or training. Clear and consistent design elements, such as navigation menus, buttons, and icons, should promote a seamless user experience.

- **Accessibility and Inclusivity:** The platform shall be designed with accessibility in mind, adhering to web accessibility standards to accommodate users with disabilities. Features like keyboard navigation, alternative text for images, and sufficient color contrast contribute to a more inclusive and user-friendly experience.

- **Personalization and Customization:** The Online Social Networking Site shall offer personalization options, allowing users to customize their profiles, content preferences, and notification settings. By empowering users to tailor their experience, the platform can enhance user engagement and satisfaction.

3.3.5. Reusability Requirement

- **Modular Code Architecture:** The Online Social Networking Site shall be developed with a modular code architecture, allowing developers to create reusable components and modules. This design approach facilitates easier maintenance, updates, and the incorporation of new features, promoting code reusability across the platform.

- **API and Integration Support:** The platform shall provide well-documented and standardized APIs (Application Programming Interfaces) to enable seamless integration with external applications, services, and third-party platforms. By offering API support, developers can build complementary applications that interact with the social networking site, enhancing overall system reusability and interoperability.

3.3.6. Reliability Requirement

- **High Availability and Redundancy:** The Online Social

Networking Site shall be designed with high availability in mind, incorporating redundancy measures to ensure continuous operation even in the event of hardware failures or system issues. Implementing failover mechanisms and backup systems guarantees minimal downtime and data loss.

- **Error Handling and Recovery:** The platform shall have robust error handling and recovery mechanisms to gracefully handle unexpected errors and exceptions. The system should be able to recover from errors without affecting the overall functionality and user experience, minimizing the impact on users' interactions and content.

3.3.7. Maintainability Requirement

The Maintainability Requirement for the Online Social Networking Site focuses on creating a system that is easy to maintain, modify, and enhance over time. To achieve this, the platform shall be developed with clean, well-documented, and organized code that follows coding best practices and standards. A modular and component-based architecture shall be adopted to facilitate easier updates and modifications to specific features without affecting the entire system.

3.4. User Characteristics

The application does not require any specific computer knowledge to use it except the developers and administrators of it. Standard users are thought to be from any gender and any nationality but the age restriction is 18+ for females and 22+ for males, who can use just a computer's browser. On the other hand, administrators and potential developers need a high level of expertise to understand web technologies.

3.5. Design & Implementation Constraints

Any update regarding the article will have to be recorded and the correct information must be updated and all the cost calculations must be done as soon as possible. The backup of all the data must be done on a hard disk. There are not so many strong firewalls so proper antivirus scans must be done before use. There is no provision for saving incomplete data.

3.6. Assumptions & Dependencies

3.6.1. Assumptions

- **Internet Connectivity:** It is assumed that users accessing the Online Social Networking Site will have a reliable internet connection to interact with the platform.
- **Device Compatibility:** The platform assumes users will access the site using modern web browsers and devices, such as laptops, desktops, smartphones, and tablets.
- **User Authentication:** Users are assumed to provide accurate and valid information during the registration process to create their accounts.
- **Privacy Settings:** Users are responsible for configuring their privacy settings and controlling the visibility of their posts and personal information.
- **Content Moderation:** It is assumed that users will adhere to community guidelines, and content moderation mechanisms will

handle any inappropriate or harmful content.

3.6.2.   **Dependencies**

- **Database Management System:** The proper functioning of the Online Social Networking Site depends on the availability and performance of the selected database management system for storing user data and content.
- **Web Server and Hosting:** The platform relies on a stable and secure web server environment and hosting infrastructure to ensure uninterrupted access and response times.
- **API Integration:** The successful integration of external APIs, such as those for social media sharing or third-party services, depends on the availability and compatibility of the respective APIs.
- **Third-Party Services:** If the platform utilizes third-party services for analytics, payment processing, or other functionalities, their proper functioning and API compatibility are essential for seamless operations.
- **Security Measures:** The platform's security measures, including encryption protocols and firewall configurations, are crucial for safeguarding user data and protecting against potential security breaches.

4. Interface Requirements

4.1.   User Interfaces

The program offers a decent graphical interface for the user that can be run on the device by a user, performing the necessary tasks such as posting, reviewing, sharing. a. Login Page b. Home Page c. Page to display connection requests, suggestions, notifications, etc.

4.2.   Hardware Interfaces

The system must run over the internet, all the hardware shall be required to connect to the internet. a. WAN - LAN Network b. Ethernet Cross-Cable c. Modem

4.3.   Software Interfaces

The system is on the server so it requires any scripting language PHP, VBScript etc. The system requires a Database also to store any transaction of the system like MYSQL, etc. system also requires DNS (Domain Name Space) for the naming of the internet. At the last user needs a web browser to interact with the system.

4.4. Communication Interfaces

As a whole social networking website, we will be a completely stand-alone system that lets other platforms connect, fetch and transform data at certain levels. The platform will provide APIs and tools for third-party developers to let them create high-level integrated plugins and programs. The main communication interface with the other platforms will be the application Platform. However, this integration and its level will be set by the user, who wants to integrate their accounts and information with other websites.

5. Conclusion

In conclusion, this Software Requirements Specification (SRS) outlines the essential functionalities and non-functional requirements for the development of the Online Social Networking Site. The SRS provides a comprehensive overview of the platform's objectives, user interactions, system architecture, and performance expectations.

By defining clear and precise requirements, this document serves as a vital foundation for the development team, guiding them in creating a feature-rich, secure, and user-friendly online social networking platform. The emphasis on usability, security, performance, and scalability ensures a positive user experience and fosters a vibrant and engaged online community.

As the Online Social Networking Site evolves and expands, this SRS will serve as a reference for assessing adherence to initial requirements and accommodating future enhancements. Regular updates and collaboration between stakeholders and the development team will ensure the platform remains dynamic, responsive, and capable of meeting the ever-changing needs of its users.

Overall, the successful implementation of this SRS will lead to a cutting-edge social networking site that connects people, fosters meaningful interactions, and empowers users to share experiences and build lasting connections in the digital realm.