Software Requirements Specification (SRS) Document For Social Media Website For Nsue'rs

1. Introduction

1.1 Purpose

The purpose of this Software Requirements Specification (SRS) document is to provide a comprehensive outline of the requirements and specifications for the development of a sophisticated and user-centric Social Media Website tailored exclusively for the North South University (NSU) student community. The SRS will serve as a roadmap to guide the development, testing, and deployment of the platform.

1.2 Intended Audience

This document is intended for various stakeholders involved in the project, including:

- Development teams responsible for building the website.

- Quality assurance and testing teams.

- Project managers overseeing the development process.

- Administrators and moderators who will manage and maintain the platform.

- NSU students who will utilize the platform for social interactions and information sharing.

1.3 Intended Use

The Social Media Website aims to create a vibrant and dynamic virtual community for NSU students. It will provide a user-friendly platform where students can connect, engage in meaningful discussions, share updates, collaborate on academic projects, and stay informed about campus events and activities. The website will enhance communication, foster a sense of belonging, and promote knowledge exchange among students.

1.4 Product Scope

The Social Media Website will encompass a wide array of features designed to enrich the NSU student experience:

- User registration and profile creation with personalized information.

- Posting and sharing of text, images, and multimedia content.

- Following and unfollowing other users to curate a personalized feed.

- Real-time messaging capabilities for one-on-one communication.

- Group chat functionality for collaborative discussions.

- Hashtag feature for categorizing and searching posts.

- Search functionality to discover users, posts, and hashtags.

- Profile picture upload and editing capabilities.

- Event creation and participation to facilitate campus engagement.

- Integration with NSU's branding and visual identity.

1.5 Risk Definitions

The development of the Social Media Website involves certain inherent risks that must be acknowledged and addressed:

- Technical Challenges: Implementing real-time messaging and group chat features may pose technical complexities.

- Security and Privacy Concerns: Safeguarding user data and ensuring privacy will be critical to user trust.

- User Adoption: Ensuring widespread adoption and active engagement among students requires strategic marketing and promotion efforts.

2. Overall Description

2.1 User Classes and Characteristics

The Social Media Website will cater to the following user classes:

1. Regular Users (NSU students): These users will form the core user base, engaging in posting, sharing, following, messaging, and group discussions.

2. Administrators and Moderators: These users will have administrative privileges to manage content, user accounts, and ensure platform integrity.

2.2 User Needs

The Social Media Website will address the diverse needs of NSU students, including:

- Seamless Connection: Providing a platform for students to connect, interact, and network within the NSU community.

- Information Sharing: Enabling users to share academic, extracurricular, and personal updates.

- Collaborative Learning: Facilitating discussions and group chats for collaborative learning and project collaboration.

- Event Participation: Allowing users to create and participate in campus events and activities.

- Efficient Search: Enabling users to search for specific content, users, and topics.

- Hassle-free Profile Management: Offering intuitive tools for profile customization and management.

2.3 Operating Environment

The Social Media Website will be accessible through standard web browsers on various devices, including desktops, laptops, tablets, and smartphones. Compatibility will be ensured across popular browsers such as Chrome, Firefox, Safari, and Edge.

2.4 Constraints

Several constraints will guide the development process:

- Visual Identity: The website must adhere to NSU's branding guidelines and maintain a consistent visual identity.

- Data Privacy: The platform must comply with data protection regulations and prioritize the security of user information.

- Performance: The website should be responsive, load quickly, and deliver a seamless user experience.

- Scalability: The architecture should support the potential growth in user base and content volume.

2.5 Assumptions

The development of the Social Media Website is based on certain assumptions:

- User Familiarity: Users will possess basic familiarity with social media platforms and online interactions.

- User Behavior: Users will provide accurate and truthful information during registration.

- Platform Adoption: NSU students will actively engage with the platform to foster a thriving community.

3. Requirements

3.1 Functional Requirements

1. User Registration and Authentication:

  - Users can register using their NSU email addresses.

  - Account activation requires email verification.

  - Password recovery functionality is available.

2. Profile Management:

  - Users can upload, crop, and edit profile pictures.

  - Profile information can be updated, including bio and contact details.

3. Content Posting and Sharing:

  - Users can create text, image, and multimedia posts.

- Posts can be shared with other users and externally.

- Likes and comments can be added to posts.

4. Following and Followers:

   - Users can follow and unfollow other users.

   - The platform recommends users to follow based on interests.

5. Messaging:

   - Users can send direct messages to other users.

   - Real-time notifications for new messages.

6. Group Chats:

   - Users can create, join, and leave group chats.

   - Group chats support multimedia sharing and real-time conversations.

7. Hashtags:

   - Users can add hashtags to posts for categorization.

   - Clicking on a hashtag displays related posts.

8. Search Functionality:

   - Users can search for other users, posts, and hashtags.

   - Search results are displayed in a user-friendly manner.

9. Event Creation and Participation:

   - Users can create and manage events.

   - Users can indicate their participation in events.

3.2 Non-Functional Requirements

1. Performance and Responsiveness:

   - The website should load within a reasonable time frame.

   - User interactions should yield quick responses.

2. Security and Privacy:

   - User data should be encrypted and securely stored.

   - Strong authentication mechanisms must be implemented.

   - Privacy settings should be available to control content visibility.

3. Scalability and Reliability:

   - The platform should accommodate increasing user numbers and content volume.

   - High availability and minimal downtime are essential.

4. Usability and User Experience:

   - The user interface should be intuitive and aesthetically pleasing.

   - User experience should be consistent across devices and browsers.

5. Compatibility:

   - The website should be compatible with a range of modern browsers and devices.

6. Accessibility:

   - The website should adhere to accessibility guidelines to ensure inclusivity.

7. Integration with NSU Systems:

   - The website should integrate smoothly with existing NSU systems and databases.