**SRS DOCUMENT DEVELOPMENT**

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1. Introduction

1.1 Purpose

* This document specifies the software requirements for the New User Registration System, which will facilitate account and profile creation for users seeking to enroll in online courses. This system aims to ensure unique user identification and secure access.

1.2 Document Convention

* Document headings that are *italicized* with **bold** print denotes ***high priority***.

1.3 Intended Audience and Reading Suggestions

* The Software Requirements Specification (SRS) document caters to a diverse audience, including developers, project managers, marketing staff, end users, testers, and documentation writers. Developers will concentrate on functional and non-functional requirements to guide the registration system's design and implementation. Project managers will look for project scope, objectives, and timelines, while marketing staff will utilize the introduction to align strategies with the system's capabilities. End users, including students and administrative staff, will find the user interface requirements relevant, and testers will focus on performance, safety, and security aspects to design appropriate test cases. Documentation writers will reference various sections to create user manuals and support materials.  
    
  The SRS is organized into clearly defined sections, starting with an Introduction that outlines its purpose and scope, followed by an Overall Description that provides context and high-level features. The System Features section details specific functionalities, while External Interface Requirements cover interactions with users and other systems. Nonfunctional requirements address performance, safety, and security, and additional criteria are captured in the Other Requirements section. Appendices provide supplementary information, such as a glossary and analysis models. For effective navigation, readers should begin with the Introduction, proceed to the Overall Description, and then explore System Features, External Interface Requirements, and Nonfunctional Requirements, finishing with the appendices for further insights. This structured approach ensures each reader can focus on the most relevant information.

1.4 Project Scope

* The project encompasses the development of a registration system that allows users to create accounts with unique IDs and passwords, manage profiles, and enroll in courses across three academic semesters.

1.5 References

* Wiegers, K. E. (2002). Software Requirements Specification Template. Process Impact.
* Sommerville, I. (2011). Software Engineering. Addison-Wesley.

2. Overall Description

2.1 Product Perspective

* This product is a new, self-contained registration system designed specifically for online course enrollment.

2.2 Product Features

* User registration with unique ID and password
* Profile management including personal information
* Course listings by semester
* Enrollment management with waiting list functionality

2.3 User Classes and Characteristics

* The new user registration system is designed to serve a diverse group of users, including students and prospective students who will utilize the system to create accounts, manage their profiles, and enroll in courses offered across different academic semesters. These users are typically individuals seeking to enhance their education through online learning opportunities. Additionally, the system will accommodate administrative staff and faculty members who oversee course offerings and manage student enrollments. Moreover, professionals selected to periodically test the system will also interact with it, providing valuable feedback on functionality, usability, and performance to ensure the system meets the needs of all end-users effectively. This diverse user base necessitates a user-friendly interface and robust functionality to cater to varying levels of technical expertise and user needs.

2.4 Operating Environment

* The new user registration system is designed to operate in a versatile environment that accommodates a wide range of platforms and devices to ensure accessibility and usability for all users. The software will be compatible with major operating systems, including Windows, Linux, and macOS, allowing users to access the system from their preferred desktop or laptop computers.
* Additionally, the system will have a responsive design, enabling seamless functionality on mobile devices such as smartphones and tablets. This cross-platform compatibility ensures that students and prospective students can register, manage their profiles, and enroll in courses regardless of the device they are using. The application will be web-based, leveraging modern web technologies to provide a consistent user experience across all platforms while maintaining optimal performance and security standards. This flexibility is crucial for accommodating diverse user needs and preferences, promoting widespread adoption of the registration system.

2.5 User Documentation

* The following user documentation components will be delivered alongside the new user registration system to ensure users can effectively navigate and utilize the software:
* User Manual: A comprehensive guide that provides detailed instructions on using the registration system, including step-by-step procedures for registration, profile management, and course enrollment. The manual will be available in PDF format for easy access and printing.

Online Help System: Context-sensitive help embedded within the application, offering users quick access to relevant information and troubleshooting tips as they navigate the system. This will be implemented in HTML format for accessibility through web browsers.

Tutorials: Interactive tutorials designed to guide new users through the essential features of the system. These tutorials will be available in video format and as written guides, allowing users to choose their preferred learning style.

FAQs (Frequently Asked Questions): A document that addresses common queries regarding the registration process, account management, and troubleshooting. This will be available online and regularly updated based on user feedback.

Release Notes: Documentation accompanying each software update, detailing new features, improvements, and fixes. This will ensure users are informed of changes and enhancements in the system. Release notes will be provided in a text or PDF format.

Quick Start Guide: A brief, easy-to-follow guide for users to get started with the registration system quickly. This will highlight essential features and provide a basic overview of the registration process, available in PDF format.

All user documentation will adhere to established standards for clarity, usability, and consistency, ensuring that users can easily understand and follow the provided information. Additionally, the documentation will be accessible and formatted to accommodate users with varying levels of technical expertise.

3. System Features

3.1 User Registration

3.1.1 ***Description and Priority***

* This feature allows new users to register an account. It is of High priority.

3.1.2 Stimulus/Response Sequences

* User inputs registration information.
* System checks for ID uniqueness.
* System stores user data upon successful registration.

3.1.3 Functional Requirements

* REQ-1: The system must ensure that no two users can register with the same ID.
* REQ-2: The system must validate user inputs such as name, phone, and email.

3.2 Course Enrollment

3.2.1 ***Description and Priority***

* Users can enroll in courses for the upcoming semester. This feature is of High priority.

3.2.2 Stimulus/Response Sequences

* User selects a course.
* System checks course capacity.
* If full, user is added to a waiting list.

3.2.3 Functional Requirements

* REQ-3: The system must allow users to view available courses for each semester.
* REQ-4: The system must notify users on the waiting list when a spot becomes available.

4. External Interface Requirements

4.1 User Interfaces

* The system will provide a web-based interface that is user-friendly, adhering to common design standards.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

* The system should handle up to 1000 simultaneous users without performance degradation.

5.3 Security Requirements

* User data must be encrypted and comply with privacy regulations.

6. Other Requirements

* Database requirements must ensure data integrity and facilitate scalability as user numbers grow.

Appendix A: Glossary

* User ID: A unique identifier assigned to each user.
* Enrollment: The process of registering for courses.

References:

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