**Week 1 Assignment Part 2**

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**1. Introduction**

**1.1 SRS Purpose**

This SRS specifies the requirements for the development of a student portal system. It describes what the student portal will do and how it will be expected to perform, as well as describes its functionality (Kruger & Lane, 2023, para. 3).

**1.2 Product Scope**

The primary objective is to create a new student portal system where students can see their class progression and enroll or cancel classes. By focusing on dynamic navigation, class categorization, real-time seat numbers, and user data, the system can help users quickly and accurately enroll in classes.

**1.3 Intended Audience**

This SRS is written so that anyone with a general understanding of this project and its goals should be able to comprehend its literature and descriptions.

**1.4 Document Conventions**

This document is written in Times New Roman 12pt font. Each section header is bolded, and requirements are in no particular order of importance.

**1.5 References and Acknowledgements**

Facebook. (2010, April 16). System Requirements. <https://www.facebook.com/notes/vindictus/system-requirements/115300138496393/>

Kruger, G., & Lane, C. (January 17, 2023). How to Write an SRS Document (Software Requirements Specification Document). Perforce. <https://www.perforce.com/blog/alm/how-write-software-requirements-specification-srs-document>

**2. Overall Description**

**2.1 Product Perspective**

The student portal is an independent system that manages students’ registration, profiles, and course enrollments.

**2.2 Product Functionality**

Some of the system's general functions are but are not limited to New user registration, profile creation and management, user login, course listing and enrollment, wait list availability, enrollment cancelation, and notification messages.

**2.3 Users and Characteristics**

Students: register for an account, create a profile, view available courses, enroll in courses, and resign from courses

Admins: manage user accounts, reset passwords, adjust available classes, adjust class sizes

**2.4 Operating Environment**

The system will be web-based and should function on all current web browsers. The minimum and recommended requirements of physical devices will be matched to those of Facebook to ensure the proper functions even on the most minimal of devices (Facebook, 2010).

Minimum Requirements  
CPU: Single Core 2.4 GHZ  
RAM: 512 MB  
Graphics Card: Nvidia GeForce 5xxx series or equivalent  
Operating System: Windows XP  
Hard Drive: 5 Gigabytes  
Network: Broadband Recommended  
  
Recommended Requirements  
CPU: Duo Core or higher  
RAM: 1 GB  
Graphics Card: Nvidia GeForce 7xxx series or equivalent  
Operating System: Windows XP or higher  
Hard Drive: 6 Gigabytes or more  
Network: Broadband Recommended

**2.5 Design and Implementation Constraints**

If the system needs social security numbers from students (as part of the key information in student profiles), then advanced security measures will need to be put in place to ensure the students’ data is adequately protected. User IDs and passwords should be securely stored using at least one layer of hashing, and more can be applied as needed. Scalability may present limitations depending on how many students the stakeholder believes will be on the system simultaneously.

**2.6 User Documentation**

Documentation on how to use the site will be created at the end of testing but before release. The documentation will be available to all system users in the form of a knowledge base that can be found by an on-screen help button.

**2.7 Assumptions and Dependencies**

Student internet access and basic computer literacy would be necessary to navigate the system. Students must use one of the four main browsers: IE, Edge, Chrome, and Firefox. The website working correcting depends on its ability to connect and stay connected to the database.

**3. Specific Requirements**

**3.1 External Interface Requirements**

The system should be accessible from a desktop or mobile device with an internet connection. The system will use and support HTTPS for a secure connection to the database. The system must connect to an email service to send notification messages.

**3.2 Functional Requirements**

* User registration: Validate ID uniqueness, allow to register with appropriate information
* Profile management: Users can change their profile information
* User login: Must validate user ID and password when logging in and use sessions on every page to ensure it is still the same user logged on
* Course listing: Should display all available courses after filter criteria are selected
* Course enrollment: The user must be able to enroll in a course and receive notification of enrollment, then the system should update its internal counter of how many students are enrolled
* Waitlist management: When a course fills up, there should be an option to be placed on the waiting list, and a notification should be sent to students when they are placed on the waiting list and when there is a spot available
* Course cancelation: Students should be allowed to cancel a course up to a specific time before the class starts and be notified of the cancellation by message notification.