Software Requirements Specification

For

School Course Catalog

Version 1.0 approved

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Revision History

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| **Name** | **Date** | **Reason For Changes** | **Version** |
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# Introduction

## Purpose

The purpose of this project is to deliver an easy to use and intuitive online enrollment portal for a college course.

## Document Conventions

This document contains headers for each major topic, listed in subheadings for each detailed subject. The primary font is arial using 11pt for body, 18pt bold for headers, 14pt for sub headers. Page is single spaced and contains padding at the start of each page.

## Intended Audience and Reading Suggestions

The intended readers for this document are developers, project managers, testers, and documentation writers. This form is organized to detail the requirements of the project, the scope, features, and other nonfunctional requirements.

## Project Scope

The project being created is a web application with the intention of solving the issue for stdents enrolling into online courses. This project will involve unique access, databases to track courses, courses filterable by need and allowing for notifications when a slot is available in an otherwise full course.

## References

# Overall Description

## Product Perspective

The product being developed is a standalone product, not being integrated into any existing system.

## Product Features

* Login and registration with unique ID redundancy
* Main portal that shows actively enrolled courses, greetings, currently on wait list courses, profile settings
* Online course database that shows currently enrolled count
* Courses sorted by semester with additional filters
* Wait list for full courses with email notifications
* Cancel enrollment

## User Classes and Characteristics

End users – Devices vary based on how they want to access the portal. Both mobile and desktop supported for the program

Support staff – Standard computers with no technical level of experience. These individuals have access to assist end users with any issues with light admin tasks.

Admin – Standard computers that are used for second level permissions or escalations on situations that can arise from the support staff.

## Operating Environment

The operating environment for this project is within any standard HTML5 supported browser.

## Design and Implementation Constraints

No known design or implementation constraints

## User Documentation

Public documentation for assistance with the program, internal documentation for support staff.

## Assumptions and Dependencies

No known assumptions or dependencies in this project.

# System Features

## Registration for login

3.1.1 Description and Priority

Registration system for students to sign up with unique IDs and a password. High priority.

3.1.2 Stimulus/Response Sequences

User logs in -> Register now -> Enter information -> Checks if unique ID entered is already in use -> Communicate with database -> Return fail if in use, otherwise account created successfully.

3.1.3 Functional Requirements

REQ-1: Error when an ID is in use.

REQ-2: Collect Name, email, address, phone, and date of birth

REQ-3: Allow for password creation, with confirming the PW.

## Course catalog adder

3.2.1 Description and Priority

The function to add courses to a cart. High priority

3.2.2 Stimulus/Response Sequences

Authentication check -> Fetch courses from database -> Student adds to cart -> Checkout courses selected -> System checks availability -> subscribes, pends, or fails enrollment.

3.2.3 Functional Requirements

REQ-1: Capture course count

REQ-2: Prevent duplication

REQ-3: Proper auth for the student

REQ-4: Proper handling of course status

## Wait list

3.3.1 Description and Priority

A wait list function for courses that are full. High priority.

3.3.2 Stimulus/Response Sequences

Student selects full course -> Adds to list -> List checks authentication -> Prompts for email notification

3.3.3 Functional Requirements

REQ-1: Allows for subscriptions on only full courses

REQ-2: Communicates with email notifications

## Email notification

3.4.1 Description and Priority

An email notification system tied to the wait listed items for individual students. High Priority

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3.4.2 Stimulus/Response Sequences

Course has availability -> Webhook triggers -> Emails to appropriately subscribed parties

3.4.3 Functional Requirements

REQ-1: Webhooks respond to stimulus of a wait list opening.

REQ-2: Email successfully sends

REQ-3: Display which course is available

## Login

3.6.1 Description and Priority

The ability to login to the course catalogue. High Priority.

3.6.2 Stimulus/Response Sequences

Student navigates to any part of the website not logged in -> System checks cookies -> Directs to login screen if not authenticated -> Student enters information -> System checks database for validation -> If correct, allows access to desired page -> If fail, redirect to login stating it failed.

3.6.3 Functional Requirements

REQ-1: Validation on entered info

REQ-2: Prompt when fail

REQ-3: Redirect when valid

REQ-4: Prevents un-authorized access

# External Interface Requirements

## User Interfaces

GUI interfaces for the catalog that is mobile friendly, properly formatted for multiple screen ratios.

## Hardware Interfaces

Any monitor or visual display devices for the web application

## Software Interfaces

Connects with a MySQL database to store and access login information and course data.

## Communications Interfaces

HTTPS and Email.

# Other Nonfunctional Requirements

## Performance Requirements

The software must run smoothly and efficiently, there cannot be any latency between requests. The data that each student presents must be accurate and not allow for over enrollment in a course.

## Safety Requirements

No safety requirements known

## Security Requirements

Two factor authentication, hashing for passcodes, and HTTPS for the webpage.

## Software Quality Attributes

Key focus on the following quality attributes: Maintainability, availability, reliability, testability and usability. Some of these will go hand in hand.

# Other Requirements

Appendix A: Glossary

No terms needed to be defined in the SRS form.

Appendix B: Analysis Models

No current analysis models present on this project.

Appendix C: Issues List

TBD