

SRS Document Development

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Purpose

The purpose of this product is to build a registration system that will allow user to register for online courses that happen through different periods of semesters. Along with that will be allowing users to cancel enrollment from classes they no longer wish to take while also allowing users to see all the classes currently available and that have open slots.

Intended Audience

This document will be relevant to any that may be involved with this development project as these requirements will help define what should be achieved during the creation of this project. To further explain this, it was mentioned that an SRS document can be relevant to those that are “developers, testers, and project managers. It could also include stakeholders in other departments, including leadership teams, sales, and marketing” (Krüger, 2018). Customers and those behind the development and engineering of the project will all be the main audience for this document.

Intended Use

The use behind this software requirements specification form is to lay out the feature and goals that this software application should achieve. Anything that should be in the project and are main points that the customer wants, should be included in this document as “Once the requirements have been analyzed and reviewed, it is prudent to put them into the software requirements specification (SRS) document” (Tsui, Karam, & Bernal, 2018, p. 126). This all will be used as a guide for developers while creating the project and for stakeholders or customers. This in the end will be important due to that fact this document will hold value to stakeholder

since it will help them understand where the software is heading, similar to what was mentioned in one article “Software requirements documentation assists stakeholders to have profound understanding of the software requirements and the resulting design” (Chikh & Alajmi, 2014, p. 1). That said, the intended use will be for clarification of the requirements that the software application should exhibit.

Scope

The product scope is to create a system that will let users see a list of classes that are available and ones they are enrolled in, while allows them to register or drop out of classes that they want to enroll in or cancel enrollment from.

Overall Description

User Needs

Users will need to be able to register in the system and make changes. They will need to be able to log in and be presented the option of being able to view courses that have space available or courses they are enrolled in. From there they should be able to enroll in new courses that fall into one of the three semesters offered or they should be able to cancel enrollment from courses they are currently enrolled in.

Assumptions and Dependencies

There are certain factors that call for assumptions to be made and that will be how this will be development that targets the use of a web browser, and with that comes the dependency that user will be using a already created software such as Google Chrome, Safari, Firefox, or Internet Explorer. A second assumption will be that stakeholder are good with the requirements in this document and that no changes will need to be made to the gathered requirements, any

changes here will completely affect the current project once it moves into later stages of the development life cycle.

External Interface Requirements

User Interfaces

The user interface will be fairly basic with a selection of buttons that allow the user to access different pages upon logging into through the registration page or login page. Then there will be basic list that shows information relevant to the user which will contain buttons that will allow the user to perform certain actions with the system.

Hardware Interfaces

Hardware components that will be used with the system will be dependent on the device that the user is using which can be any device that supports a web browser. That device can use its inputs to interact with the website registration system through thinks like mouse and keyboard or through a touch interface. The software itself will need to be hosted on a server that will allow for data to be saved and sent using HTTP following a TCP/IP protocol.

Software Interfaces

This software will make use of the browser that the user is using which will be hosted on one of the many different types of operating systems. Along with that will be where the software is being hosted which is on web hosting service of some type that will contain a database that will store the information from the website and be used to form queries to pull that information when needed.

Communications Interfaces

Communication interfaces required will be a internet connection that can send and receive HTTP request through a web browser. This will be how the website sends and receives information to the clients machines and back to the database and hosted server.

System Features

System Feature 1

Description and Priority <High>

- User's will be able to create an account that will consist of a email, user id, password, address, phone number, and data of birth.

Stimulus/Response Sequences

- A user will be prompted to log in or register, in which they can enter the required information and click the submit button, which will then lead to the page to redirect prompting a successful registration/login, or mention an error.

Functional Requirement

- REQ-1: This feature a successful loading of the webpage.

System Feature 2

Description and Priority <High>

- User Id's will be unique and will be actively checked upon account registration that a user doesn't already have a user id that one is trying to register with.

Stimulus/Response Sequences

- This is a feature that a user won't notice but rather a non-functional requirement.

Functional Requirement

- REQ-1: User must attempt to register for an account.

System Feature 3

Description and Priority <Low>

- User's will be able to see their profile with the information they signed up with.

Stimulus/Response Sequences

- After logging in a user will have the choice to click on the profile tab in where they can view all their profile information.

Functional Requirement

- REQ-1: A user must be logged in.

System Feature 4

Description and Priority <High>

- User's will be able to use the user id and password they registered with to log into the system.

Stimulus/Response Sequences

- After registration, a user can now attempt to input their user id and password into the login fields and click login, which if the information matches, they will successfully log in.

Functional Requirement

- REQ-1: A user must be logged out.
- REQ-2: A user must have an account.

System Feature 5

Description and Priority <High>

- User's that are logged in can view a list of all courses that are available for enrollment regardless of the semester they are currently in.

Stimulus/Response Sequences

- After logging in a user will have the choice to click on classes they are enrolled in, or view the available classes possible. After clicking on the link to available classes, they will be presented a list with the relevant information, which is all the classes available in the three different semesters.

Functional Requirement

- REQ-1: A user must be logged in.

System Feature 6

Description and Priority <High>

- User's may enroll into a course upon their selection, and if the course has space they will successfully enroll, if there isn't space a user can enroll to a waiting list.

Stimulus/Response Sequences

- After logging and being on the page with all the available courses, a user will be present the option of enrolling into the class, after clicking on the button to enroll, two things can happen. They either will be presented text saying they are now actively enrolled, or they will be offered to go on the waiting list.

Functional Requirement

- REQ-1: A user must be logged in.
- REQ-2: Must be on the available classes page.

System Feature 7

Description and Priority <Medium>

- Courses will be able to assign the number of slots available accordingly which can be different from course to course.

Stimulus/Response Sequences

- Course administrators will be able to define the amount of students available for a course which will be preprogrammed into the database and website.

Functional Requirement

- REQ-1: None.

System Feature 8

Description and Priority <Medium>

- User's can cancel enrollment from any course, and the system should then allow for the slot to open up, or offer the first user on the waiting list the option of enrolling for that semester that now has a open slot.

Stimulus/Response Sequences

- After logging a user can click on the classes they are enrolled in link which they can then click a button to cancel enrollment. Upon successful cancelation, the system should automatically notify the first user on the waiting list which is more of a non-functional requirement.

Functional Requirement

- REQ-1: A user must be logged in.
- REQ-2: Must be on the currently enrolled page:
- REQ-3: Must have users on waiting list.

Nonfunctional Requirments

The website should load in a quick manner, but is also dependent on the speed of the clients connection. Some of the non-functional requirements were listed in part of the systems features. That is for one, user id's should be compared to those in the database whenever registration is attempted. No duplicated user id's or emails should be in the database. If there is a waiting list for a course's enrollment, whenever a slot opens, there should be the option for the first user on the waiting list to enroll into that class. Database queries will need to happen through the use of the website for things like registration, logins, list of classes available, and classes a user is enrolled in.

References

- Chikh, A., & Alajmi, H. (2014, January 17–19). Towards a dynamic software requirements specification [Paper presentation]. 2014 World Congress on Computer Applications and Information Systems (WCCAIS), Hammamet, Tunisia.
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- Krüger, N. (2018, October 23). *How to write a software requirements specification (SRS document)*. Perforce.
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