

Introduction to Systems Analysis, CSC 375

Requirements Document

Project Title	Workplace Management System
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Group #	17

Type of Requirements	Requirements		
Business Requirements	1	Requirement	The system should provide a search functions for users to lookup workplaces
		User Story	As a UVic student, I want to see which building has the most number of free workplaces and decide which study place I want to reserve next.
	2	Requirement	The system should allow users to reserve available workplaces
		User Story:	As a UVic student, I want to reserve a quiet empty workplace to study for upcoming midterms. I can also notify my friends if they want to be included in this session.
	3	Requirement	The system should update the availability of workplaces in real time
		User story	When I as a UVic student reserve a workplace for 2 hours, no one else can reserve the same workplace during that period of time. In addition, I want to check every 30 minutes to see if any other workplaces are available
Business Rules	1	Rule	Only UVic students and staff can access the system through SSO login
		User story	As a non-UVic student or staff member, I cannot access the system to make reservations unless the reservation is done through the separate UVic library online reservation system.
	2	Rule	Users cannot reserve a workplace that creates time conflict.
		User story	As a UVic student, I see that a workplace is reserved until 2:00 PM on Wednesday. On that day, the available reservation options are after 2:00 PM unless the previous reservation is canceled.
User Requirements	1	Requirement	The system provides various choices of workplaces for reservations

		User story	As a UVic student, I want to explore possible study spaces when the UVic libraries are at maximum capacity
	2	Requirement	Users can view the capacity and available equipment of a workplace before reserving it
		User story	As a UVic computer science student, I want to find a workplace that has access to specific software.
	3	Requirement	Users can anonymously review the workplaces they have reserved
		User story	As a UVic student who has reserved Clearihue D125 for an hour, I can leave a review for the room about what I like and dislike
Functional Requirements	1	Requirement	The system directs users to the login page for SSO verification
		User story	As a UVic student, I can login into the system easily with a valid netlink ID
	2	Requirement	A search feature in the system allows users to search specific workplaces through predefined keywords
		User story	As a UVic student, I want to find a study space on the 2nd floor of Clearihue and input keyword such as Cleaihue and 2nd floor, which shows available workplace that fits the description
	3	Requirement	A standalone feature in the system requires users' actions to perform reservations for users
		User story	As a UVic student, I need to locate an available workplace, input the correct time range and the number of people to successfully reserve it.
	4	Requirement	The system can send users reminders about their upcoming reservations
		User story	As a UVic student who has made a reservation, I receive a notification 30 minutes before the session begins
	5	Requirement	The system has a separate section which enables users for review
		User story	As a UVic student, I am directed to a new page to leave an optional review when the session has ended. I can comment it either now or later
Non-Functional Requirements	1	Requirement	The search feature should return a result in 10 seconds after proper inputs
		User story	As a UVic student, I want to see the availability of workplaces as soon as possible.
	2	Requirement	The system should handle 15000 users without significant performance deterioration
		User story	As a UVic student, I want to be able to smoothly make reservations during midterms and final exams season.

Use Cases:

CASE 1	
Name	Search for study spaces
Participating Actors	UVic Student
Goals	Find available study spaces that meet criteria
Triggers	UVic student wants to find a study space
Pre-Condition	UVic student is logged into system
Post-Condition	UVic student views details of spaces matching criteria
Basic Flow	<ul style="list-style-type: none">• UVic student selects search option• UVic student enters search criteria• System displays list of matching spaces• UVic student views details of spaces
Alternate Flows	<ul style="list-style-type: none">• Search by building instead of criteria• No matching spaces found
Exceptions	None
Qualities	Usability, Performance

CASE 2	
Name	Book a study session
Participating Actors	UVic Student
Goals	Reserve a study space for a block of time
Triggers	UVic student wants to book a space
Pre-Condition	Student is logged in and has searched
Post-Condition	Booking is confirmed and scheduled
Basic Flow	<ul style="list-style-type: none">• UVic Student views availability calendar• UVic Student selects open time slot• System allows booking after checking• UVic Student confirms booking• Confirmation sent to student
Alternate Flows	<ul style="list-style-type: none">• Booking for a group• No availability• Extending a booking
Exceptions	Booking conflict
Qualities	Accuracy, Availability

CASE 3	
Name	Check-in for study session
Participating Actors	UVic Student
Goals	Mark arrival and start of booked session
Triggers	Upcoming booked session
Pre-Condition	UVic Student has booked a session
Post-Condition	UVic Student is checked in and session starts
Basic Flow	<ul style="list-style-type: none"> • UVic Student opens app and is prompted to check-in • UVic Student confirms check-in • System marks student checked-in
Alternate Flows	<ul style="list-style-type: none"> • Unable to check-in • Checking in from wrong location
Exceptions	Technical issues with check-in
Qualities	Accuracy, Usability