

**University of Victoria
Victoria, BC**



Request for Proposal

Version 1.0

Centralized UVic Study Room Booking System

September 23, 2022

Document History

Version	When	Who	What
1.0	Sept. 19, 2022	Randeep, Lore, Mary	Initial Drafting
1.1	Sept. 20, 2022	Randeep, Lore, Mary	Defining & Refining Concepts
1.2	Sept. 21, 2022	Randeep, Lore, Mary	Editing
1.3	Sept. 23, 2022	Randeep, Lore, Mary	Final Edits

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1. Problem Description / Expression of Need

As a university student, the need for a quiet place to study is essential. Currently, the University of Victoria (UVic) does not have a proper centralized study space booking system. The existing system lacks unification across buildings and some do not offer the capability to filter room searches according to the individual's needs. This causes stress, inconvenience, and wasted time amongst students. Furthermore, these issues affect the perception of the university for current and future students. To mitigate such problems, UVic is exploring the notion of a centralized web application to allow students to book a study space in a convenient manner in which personal preferences and needs are met (e.g., type of building, time of availability, size of the room, type of facility). This RFP further describes UVic's need for such a system.

UVic facts and figures:

- Approximately 22,000 students enrolled
- 137 buildings
 - 10 of which are bookable by students

2. Project Objectives

- **Centralization & Consistency:** Making the UVic booking system centralized by merging several booking systems in place onto one web application. This would save time for students through a consolidated platform.
- **Real-time Feedback:** Available listings are readily displayed. This would avoid redundancies as students would primarily see unoccupied listings.
- **Improved User Experience (i.e., Filtering & Accessibility):** Allow users to filter listings according to their preference and needs. This would ease the process of finding a space to book.
- **Improved User Interface (UI):** Interface elements are easy to access, consistent, and purposeful in page layout and typography
- **Optimize for scalability:** Collection and analysis of the existing web traffic for system maintenance and future infrastructure upgrades

3. Current System(s)

Currently, there are systems in operation available to UVic students where they may book their own study rooms, work spaces or studios. These are each

diverted into three main categories:

- **The Library Web App:** In this webapp users may sort by the locations within both the McPherson Library and the Law Library to see the study rooms within those locations and whether a calendar determines their availability for the next 7 days. Within this webapp you may as well book these study rooms after signing in with your NetLink ID. The issues with this system are found in its UI which makes users search around themselves for available times, and does not offer any description of the rooms, or a way for users to filter through them
- **Computer Lab Systems:** From within the UVic website is offered an in depth view at the computer labs and project rooms available to students. There is a list of each room, their current availability, and once the room is clicked on, the user is shown images of the room and detailed description of the facilities and softwares available for use within the room after it is clicked on. From this main list of offered rooms, users may as well filter based upon room features and room type. UVic offers two methods of booking these spaces determined by their generalized room type.
 - **Project Rooms:** Student project rooms are private, bookable study rooms with facilities and features which can range from basic to hyper specific, the latter being, for example, the virtual reality studio available in the BEC. After finding the link to book one of these rooms given within the UVic website, the user is brought to a Microsoft Bookings form where the user may book any of the student project rooms given their availability
 - **Teaching Lab/Drop In:** These drop in spaces are open student areas as well as teaching rooms for staff. After choosing a study space of interest, via the service Sassafras, the students are shown a map of the room, the individual work spaces within it, and their availability. They may then book specific work areas within the shared study room, or simply drop in and hope no one has taken it. To book these rooms, you need to sign in with your Netlink ID, however upon each attempt of our group to sign in, the system malfunctioned
- **Department Based Study Spaces:** Specialized departments at UVic have study rooms based upon the needs of the students within their program. More research will need to be done to determine each of the departments with study rooms available for students, and the current systems they operate with. However, an example of this can be found within the Music department and the various practice rooms and recital halls they offer to

their students. The system these rooms currently use for booking is Google Calendar for availability tracking with an online form for the actual booking.

4. Intended Users of the System

The intended users of this system are UVic Students looking for space to study alone, or with fellow students. Our system hopes to centralize booking and allow for all information on campus study rooms to be accessible without the student having to navigate throughout the various sections of the UVic website. Students are users with low time and low attention spans, and if information is not readily accessible to them, they may grow discouraged and not search further. Our system hopes to navigate this through focusing directly on the needs of UVic students and through a clean and direct user interface, get the information they need.

5. Known Interactions within or outside the Client Organization

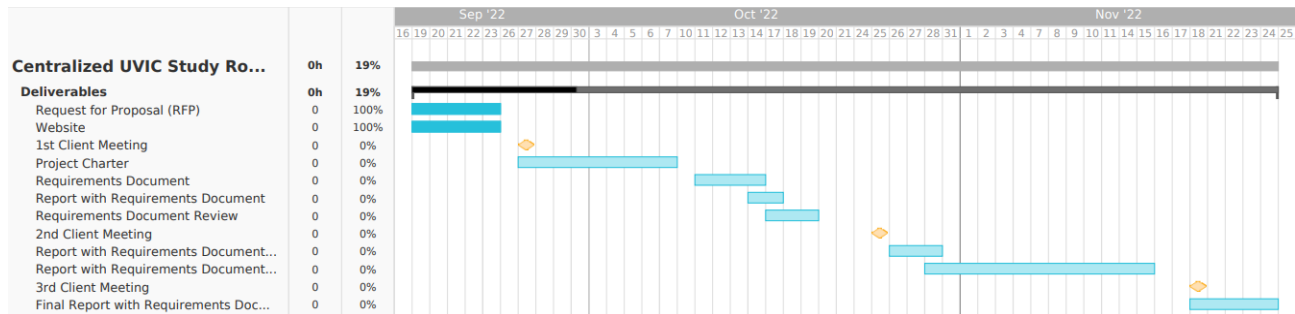
Known Interactions	Description
SASSAFRAS IT Asset Management	Displays room layouts in terms of location, capacity, and computer availability. This system tracks the computers with software currently in use
UVic Web App	Allows booking of study rooms in the McPherson Library/Mearns Centre (by floors) and Priestly Law Library (by study rooms vs online class rooms)
Google Calendar	Shows occupied music room bookings in calendar format
Outlook Office: Microsoft Bookings	Allows booking of student spaces such as: <ul style="list-style-type: none">• Student project rooms in BEC• Large student project room in BEC• Group study table in CLE• Virtual reality studio in BEC• Digital media studio in HSD

6. Known Constraints to the Solution

Dimension	Constraint
Time	Start: September 21, 2022 Finish: November 23, 2022
Schedule	Presentation must be ready for the period of November 25, 2022 - December 12, 2022
Cost	The budget for the implementation of UVic's centralized web application will range from \$15,000-\$150,000 (Rovnaya , 2022)
Existing systems	Transferring data between existing systems may cause a risk of leakage or losing important data
Sasssafras Transfer	For paid services like Sassafras, which exist outside the bounds of UVic, they typically provide their services through keys, or data limits. As we are currently unsure which method Sassafras uses, our desire to integrate their data into our system may impede upon the UVic data limit, if there is one, and lead to more costs for this project.
Agreement of Existing Systems to Participate	While the actual transference of data may cause to losses, this transfer first requires each of the existing systems to agree to give up their data. Requiring others outside of our group to dedicate time and effort to this project is something we can not rely on. As such, we may need to explore methods of retrieving data from these services we can not achieve direct access to.
Ignorance to Existing Study Rooms	Due to the way information is dispersed on the UVic website, it is difficult to give a concrete guarantee that every bookable space at UVic is accounted for by our team. This will result in us possibly not being able to achieve our goal of having a centralized system for every bookable student spaces
Changes to Study Rooms	As we are working outside of the UVic administration, we will not be privy to the same informational updates as members of their staff are. As such, information regarding changes to study rooms may not reach us, this will provide students with outdated information which may negatively effect their ability to study as planned

7. Project Schedule

Gantt Chart of Deliverables



Deliverable	Due Date
Request for Proposal (RFP)	Sept 23th, 2022 at 5pm
Website	Sept 23th, 2022 at 5pm
1st Client Meeting	Sept 27th, 2022
Project Charter	Oct 7th, 2022 at 5pm
Requirements Document	Oct 14th, 2022 at 5pm
Report with Requirements Document	Oct 17th, 2022 at 5pm
Requirements Document Review	Oct 19th, 2022 at 5pm
2nd Client Meeting	Oct 25th, 2022
Report with Requirements Document and Use Cases	Oct 28th, 2022 at 5pm
Report with Requirements Document and Use Cases and Domain Models	Nov 15th, 2022 at 5pm
3rd Client Meeting	Nov 18th, 2022
Final Report with Requirements Document and Use Cases and Domain Models and UI Models	Nov 24th, 2022 at 5pm

8. Project Team

Analysts	Contact info	Clients	Contact info
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9. Glossary of Terms

Web Application: an application software that runs in a web browser and is stored on a remote server

Student: part-time or full-time student enrolled within the University of Victoria pursuing education in the undergraduate, graduate, and post-graduate level

Centralization: the merging of several of UVic's existing study space booking systems onto one web application

Preference and needs (of users): varies from the type of building, time of availability, size of the room, and the type of facility (i.e., does the room have projectors, TVs, webcams?) the user is seeking to book a study room

User Interface: Screen elements such as input controls (buttons, text fields, list boxes), navigational components (search field, icons, slider), information components (tooltips, notifications, message boxes), and containers (accordion)

Typography: how fonts are styled in terms of size, alignment, color, and spacing

BEC (Campus Building): Business and economics building

CLE (Campus Building): Clearihue building

HSD (Campus Building): Human and social development building