

Project Charter

Version 1.8

Residence Room Availability System

October 6th, 2023

Document History

Version	When	Who	What
1.0	October 12th	Merrick and Amir	Document Initialization and Outline
1.1	October 12th	Merrick	Document additions, formatting, tables, imports, and Section 3
1.2	October 12th	Amir	Added the Executive Summary
1.3	October 13th	Amir	Added the sections Need, Scope, and Stakeholders
1.4	October 13th	Aaron	Added Objectives, Milestones, Deliverables
1.5	October 13th	Myles	Added Gantt Chart + Risk Matrix & Mitigation Steps
1.6	October 13th	Amir	Edited the glossary and team organization sections + Added cost & source of funding section
1.7	October 13th	Merrick	Work Breakdown Structure and small edits
1.8	October 13th	Sebastian	Changes to Risks and Work Breakdown diagram
1.8	October 13th	Sebastian	Grammar edits and formatting

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3. Project Approval

1. Overview

i. Executive Summary & Context

The UVic Residence room availability checking/booking System project is a strategic initiative aimed at redefining the on-campus housing reservation process for University of Victoria (UVic) students. The existing system's limitations make this change crucial.

The project's main objective is to introduce a modern system that empowers students to reserve on-campus housing year-round. The new system enables students to search for room availability by building, floor, and apply filters based on specific preferences. This not only addresses the current system's deficiencies but also improves the overall student experience, ensuring greater flexibility and satisfaction with on-campus housing. In essence, this project aims to provide UVic students with a more accessible, flexible, and tailored solution for securing on-campus accommodations.

ii. Need

The current housing application process for UVic residence has limitations. Students are only permitted to apply for rooms until a specific due date, regardless of room availability. After applying, they face extensive waiting periods, often taking several months, before receiving room offers. This prolonged process prompts many applicants to explore alternative housing options and commit to external lease agreements.

Implementing a new system to address these challenges promises mutual benefits for both students and the university. Such a system would grant students increased flexibility, while the university stands to gain enhanced student satisfaction and improved housing allocation efficiency.

iii. Scope

The system this project is about, specifically intends to improve the on campus housing application process for UVic's on campus residence; therefore, all the deliverables of this project will only be considering UVic's student residence as the main client and nothing in this project aims to change anything about any other application processes for other types of housing (other on campus housings in other universities, hotels, etc.) The project's primary aim is to optimize the experience for UVic's student residence applicants, ensuring a more efficient and user-friendly application process.

iv. Stakeholders

The people who affect and/or are affected by the results of this project are mainly the following:

- Students at UVic who intend to reside in the on campus housing
- UVic residence staff
- Anyone associated with UVic student residence. (maintenance personnel, external service providers, and cleaning staff)

v. Costs & Source of Funding

The funding necessary for the implementation of this system will be internally sourced from UVic itself.

A significant portion of the anticipated costs will be directed toward hosting expenses for the final website and security services. Fortunately, UVic, being a well-established university, possesses prior experience in managing similar hosting costs. Furthermore, the university already maintains hosting and database infrastructure for its existing Residence application system. As a result, these specific expenses should not present significant budgetary challenges, benefiting from UVic's existing expertise and infrastructure in this domain.

vi. Objectives

No.	Goals	Objectives	Business Outcomes
1.	Accessible to students with ease	<ul style="list-style-type: none"> • Booking Interface Enhancement: Design a user-friendly booking interface that enables students to check room availability, make reservations, and receive booking confirmations easily. • Elimination of Application Wait Times: The new system makes the application results available much faster, enhancing user satisfaction. • Enhanced Accessibility: Ensure constant access to the application page for potential applicants. This flexibility allows students to apply and receive room offers at any time, even during a semester. • Detailed Room Information Provision: Offer students comprehensive room details before application. Unlike the current system, the new system allows students to choose specific buildings, floors, and rooms, providing them with essential information. 	<ul style="list-style-type: none"> • Increased Usage and Efficient booking: Expected increase in our client's traffic to room booking. • Higher User satisfaction: Expected increase of user satisfaction.
2.	Efficient booking	<ul style="list-style-type: none"> • Efficient Room Management: Implement a dynamic database to simplify room management for the client. This dynamic database will continuously update room-related information, simplifying room availability monitoring for residence services staff. • Enhanced Accessibility: Ensure constant access to the application page for potential applicants. 	<ul style="list-style-type: none"> • Increased Revenue generated from student housing: The implementation of the new system streamlines the room allocation process for students, resulting in higher occupancy rates within the UVic residence. As a direct outcome, this contributes to a substantial increase in UVic's residence revenue.
3.	Security and ease of maintenance	<ul style="list-style-type: none"> • Reduced Administrative Intervention: The new system allows students to manage their applications independently, minimizing the need for constant communication with residence services staff. Administrative involvement will only be required for significant 	<ul style="list-style-type: none"> • Easy to Maintain System: The new system is expected to require less intervention for administrators leaving the students and system to be independent.

		<p>changes(e.g. changing a room).</p> <ul style="list-style-type: none"> • Strong Data Security: Prioritize data security by implementing encryption, secure data storage, and strict compliance with data privacy regulations. The system will ensure the protection of user information and regulatory compliance. 	
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vii. Glossary

UVic: University of Victoria. The name of the University for which this product is intended to be created for.

Residence: The residence buildings which exist on the outside of campus and make up the student housing buildings for students. The residency consists of 8 residence neighborhoods, which include 1-6 buildings consisting of dormitories and a few apartments, and 1 neighbor of cluster housing.

UI: User Interface. A method for the user to control the application.

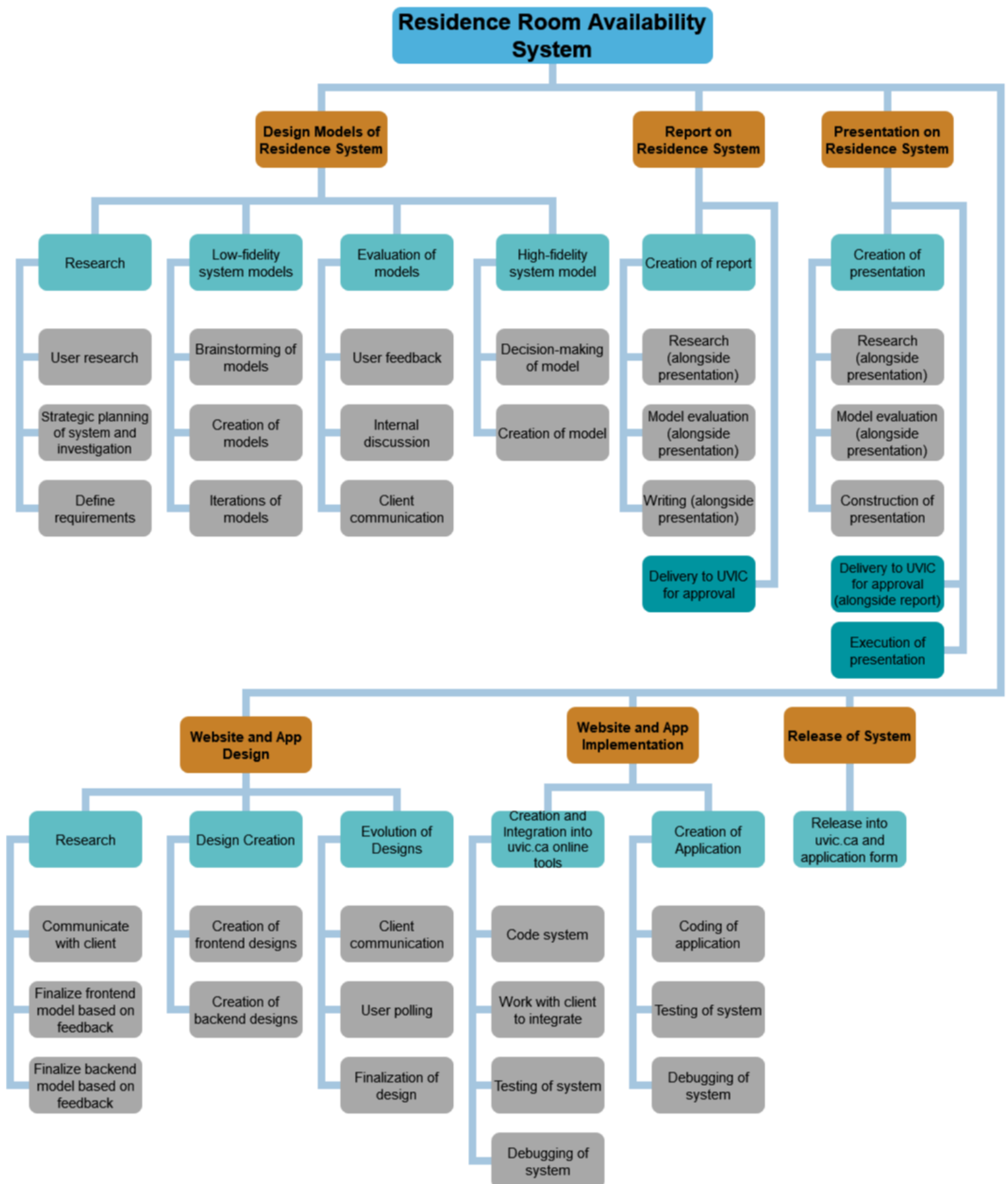
Dynamic Database: A database system that can change or evolve over time to accommodate constant changes in data.

2. Project Approach

i. Team Organization and Roles

The project team consists of two primary groups: 'Clients' and 'Analysts,' with a collaborative approach to their roles. The 'Clients' group, including **Amir Negahdarsaber** and **Merrick McLean**, will oversee communication with UVic residence staff, facilitating requirements sharing with other team members during each project phase. They will also actively engage in system testing to ensure it aligns with UVic's expectations. On the other hand, the 'Analysts' group, comprising **Aaron Quan**, **Myles Petersen**, and **Sebastian Booth**, will take the lead in system implementation. Importantly, this team operates under a flat structure, with no individual member holding authoritative control over the others. This collaborative approach ensures efficient project management, where clients guide the process, and analysts drive system development.

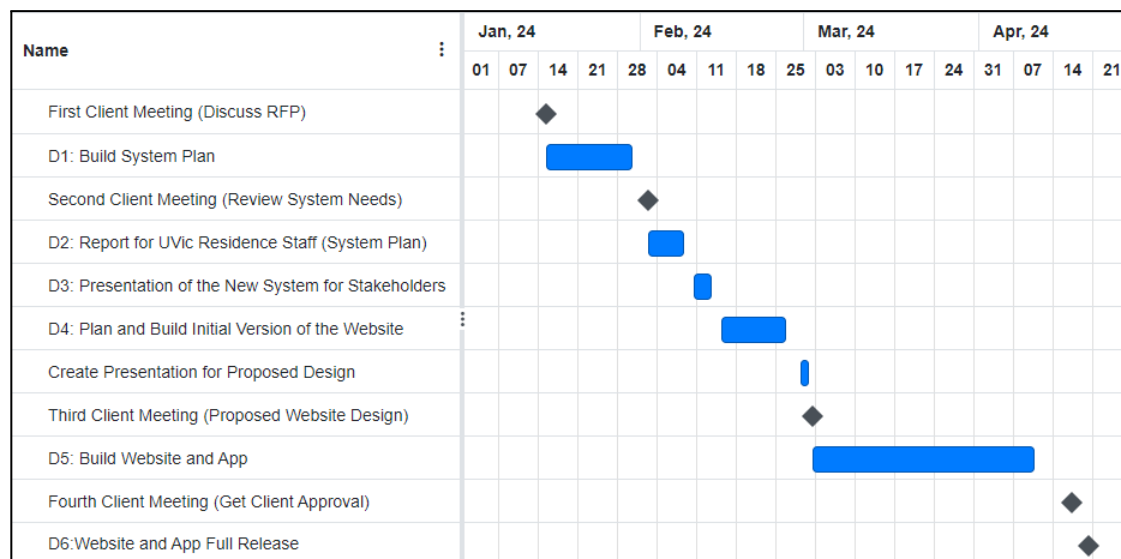
ii. Work Breakdown Structure



iii. Milestones

Project Milestone	Description	Expected Date
1. First Client Meeting	First meeting with client for the RFP.	2024-01-15
2. Deliverable 1 completion	Completion of planning the system needed for RFP.	2024-02-01
3. Second Client Meeting	Review the system together to confirm the needs.	2024-02-02
4. Deliverable 2 completion	Report done with uvic residence staff to agree upon the system plan.	2024-02-09
5. Deliverable 3 completion	A presentation and advertisement of the new system planned to stakeholders.	2024-02-14
6. Deliverable 4 completion	The developers have an idea of the design of the website and have planned out how to make it.	2024-02-28
7. Third Client Meeting	Proposed website design presentation to the client.	2024-03-02
8. Project Deliverable 5 completion	The website and app should be completed.	2024-04-15
9. Fourth Client Meeting	Client approval of the system.	2024-04-17
10. Project Deliverable 6 completion	The website and app have been released and are now in use.	2024-04-20

iv. Gantt Chart



Based upon *iii. Milestones*, with more details for deliverables 1-6 (D#) under *v. Deliverables*.

v. *Deliverables*

Project Deliverable 1: Design Models of Residence System	
Stakeholder(s):	Uvic Residence staff
Description:	Designs for the new system we are going to implement should be made.
Acceptance Criteria:	The design must fulfill all of the objectives.
Due Date:	2024-02-01
Project Deliverable 2: Report on Residence System	
Stakeholder(s):	Uvic Residence staff
Description:	A report containing the finalized designs for the new system such that it can be presented to Uvic.
Acceptance Criteria:	Must be approved by the stakeholders.
Due Date:	2024-03-29
Project Deliverable 3: Presentation on Residence System	
Stakeholder(s):	Uvic Residence staff, students
Description:	A presentation and advertisement of the new system planned to stakeholders.
Acceptance Criteria:	Approval of the stakeholders.
Due Date:	2024-02-14
Project Deliverable 4: Website and App Design	
Stakeholder(s):	Uvic Residence staff
Description:	A design of front and backend of both a website and app
Acceptance Criteria:	The developers have an idea of the design of the website and have planned out how to make it.
Due Date:	2024-03-02
Project Deliverable 5: Website and App Implementation	
Stakeholder(s):	Uvic Residence staff, students
Description:	The development teams should have finalized the website and app both back and front end.
Acceptance	The security and user interface is properly set up in a way that

Criteria:	fulfills the required objectives.
Due Date:	2024-04-15
Project Deliverable 6: Release of System	
Stakeholder(s):	Students and Uvic
Description:	The release of the new website and app that students can use to apply for residency.
Acceptance Criteria:	Both Students and Uvic are able to make use of the system
Due Date:	2024-04-25

vi. *Risks*

	Low Impact	Medium Impact	High Impact
Low Probability	<ul style="list-style-type: none"> Scope Creep 		
Medium Probability		<ul style="list-style-type: none"> Technical Challenges 	<ul style="list-style-type: none"> Security Vulnerabilities
High Probability			

Overall Risk Level	Low	Medium	High
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Steps to Mitigate Risks:


- **Scope Creep** — We can avoid scope creep by setting and communicating defined scope boundaries between the clients and the analysts prior to building each step of the website and app. Clearly defining the central system features, and separating additional features, would allow for a streamlined initial development process that could be followed with CI/CD for additional implementations.
- **Security Vulnerabilities** — As the website will integrate with UVic's pre-existing systems, we must implement security at the same level as the rest of UVic's systems to ensure that no student data ever becomes compromised. We can achieve this through consulting with UVic and their cybersecurity team throughout the creation of the website, to ensure that it complies with UVic's security standards. For ensured information security, third party penetration testers could be contracted for security reports on the finished system.
- **Technical Challenges** — Throughout the project, technical challenges may arise. Although we cannot eliminate this outright, we can mitigate these challenges through careful planning and system design and by incorporating additional time into our project timeline to deal with unexpected issues. Thus greatly reducing the likelihood of missing our deadlines.


3. Approval


The team members signing off on this charter are as follows:


Myles Petersen


Sebastian Booth


Aaron Quan


Amir Negahdarsaber


Merrick McLean