

SOEN390 - Software Engineering Team Design Project  
Team 6 - Deliverable 1

# Sprint 1 Retrospective: Reflecting on our CMS Project

Winter 2024

Done by:

Hoang Minh Khoi Pham 40162551  
Michaël Gugliandolo 40213419  
Jessey Thach 40210440  
Mahanaïm Rubin Yo 40178119  
Vanessa DiPietrantonio 40189938  
Ahmad Elmahallawy 40193418  
Clara Gagnon 40208598  
Khanh Huy Nguyen 40125396  
Jean-Nicolas Sabatini-Ouellet 40207926  
Mohamad Mounir Yassin 40198854

Professor Junqiu Yang  
Department of Computer Science and Software Engineering  
Gina Cody School of Engineering and Computer Science

Concordia University

# Table of Contents

<b>1. Introduction</b>	<b>2</b>
1.1 What went wrong	2
1.1.1 Lack of Division of Responsibilities	2
1.1.2 Absence of Setting Deadlines	3
1.1.3 Not Writing Tests with Tasks	3
1.1.4 Inconsistent Naming Conventions	3
1.1.5 Difficult to organize a meeting where every single member is present	3
1.2 What went right	4
1.2.1 Proactive Team Collaboration	4
1.2.2 Good Continuous Work	4
1.2.3 Effective Communication between Frontend and Backend Teams	4
1.2.4 Well-Conducted Team Meetings	4
1.2.5 Quick Decision-Making as a Team	5
<b>2. Conclusion</b>	<b>5</b>

# 1. Introduction

In our recent venture, we developed a Condo Management System, a digital solution designed to simplify and integrate various aspects of condominium living. Utilizing the SERN stack and incorporating Docker for deployment, our team aimed to create a seamless platform for efficient condo management. We expected to deliver a user-friendly and interconnected system that enhances the overall condo living experience. Throughout the project, the team faced both successes and challenges, and this document will highlight what worked well, areas that posed difficulties, and opportunities for improvement in the final results.

## 1.1 What went wrong

### 1.1.1 Lack of Division of Responsibilities

- **Why did it happen?** The lack of explicitly defined roles and responsibilities within the team led to confusion regarding who was accountable for specific tasks.
- **Impact:** Ambiguities in responsibilities resulted in delays and hindered overall project progress.
- **Addressing the Issue:** Initiating a structured review of team roles and responsibilities, along with individual discussions to clarify expectations.
- **What can be improved:** Implement a clear and well-documented division of responsibilities at the beginning of each project phase to avoid confusion and streamline workflow.

### 1.1.2 Absence of Setting Deadlines

- **Why did it happen?** The absence of deadlines for certain tasks led to a lack of urgency, causing delays and impacting the overall project timeline.
- **Impact:** Tasks were prolonged as team members worked without defined time constraints, affecting the sprint's efficiency.
- **Addressing the Issue:** Introducing well-defined deadlines for each task within the sprint to ensure a structured and timely workflow.
- **What can be improved:** Implement a comprehensive timeline for all tasks, fostering a proactive work environment and preventing unnecessary delays.

### 1.1.3 Not Writing Tests with Tasks

- **Why did it happen?** The team overlooked the integration of testing procedures with individual tasks, possibly due to time constraints or oversight.
- **Impact:** Insufficient test coverage led to undetected bugs and challenges in ensuring the system's reliability.

- **Addressing the Issue:** Implementing a testing-first approach, ensuring that tests are written in tandem with task completion, promoting a more robust and error-resistant codebase.
- **What can be improved:** Emphasize the importance of writing tests concurrently with task development to maintain a high standard of code quality and not accept Pull Requests without test documents.

#### 1.1.4 Inconsistent Naming Conventions

- **Why did it happen?** The absence of a standardized naming convention resulted in team members adopting different styles, leading to confusion and potential errors.
- **Impact:** Code readability suffered, making it challenging for team members to understand and collaborate effectively.
- **Addressing the Issue:** Establishing and enforcing a unified naming convention for code elements to enhance consistency and readability.
- **What can be improved:** Conduct regular code reviews, emphasizing adherence to the agreed-upon naming convention to ensure uniformity across the entire codebase

#### 1.1.5 Difficult to organize a meeting where every single member is present

**Why did it happen?** Scheduling meetings proved challenging due to varying personal commitments, and diverse schedules among team members.

**Impact:** The inability to have every member present hindered effective communication and decision-making during crucial project discussions.

**Addressing the Issue:** Implementing a collaborative scheduling tool to identify overlapping availability and streamline meeting coordination.

**What can be improved:** Establishing a standardized meeting schedule at the project's outset to accommodate diverse time zones and commitments, ensuring optimal attendance.

### 1.2 What went right

#### 1.2.1 Proactive Team Collaboration

- **Why did it happen?** The team valued collaboration for its positive impact on learning and project outcomes. We recognized that diverse contributions lead to better solutions.
- **Impact:** Improved problem-solving, knowledge sharing, and a positive team dynamic.
- **Addressing it:** Encouraged regular collaborative sessions, utilized online platforms, and emphasized the value of individual contributions.
- **Improvement:** Introduce structured team-building activities within the academic context to further strengthen collaboration.

#### 1.2.2 Good Continuous Work

- **Why did it happen?** Understanding the academic nature, we aimed for steady effort, reducing stress and ensuring a thorough understanding of course concepts.

- **Impact:** Reduced stress, improved comprehension, and a steady project progression.
- **Addressing it:** Implemented milestones, time management, and a disciplined approach to tasks.
- **Improvement:** Implement periodic self-assessments to gauge individual contributions and ensure adherence to project timelines.

### 1.2.3 Effective Communication between Frontend and Backend Teams

- **Why did it happen?** Recognizing communication's role, the team aimed for shared learning and successful project execution.
- **Impact:** Enhanced understanding, improved collaboration, and streamlined project outcomes.
- **Addressing it:** Utilized university tools, scheduled cross-disciplinary meetings, and emphasized collaborative learning.
- **Improvement:** Consider academic-focused workshops on effective communication strategies for interdisciplinary projects.

### 1.2.4 Well-Conducted Team Meetings

- **Why did it happen?** Well-structured meetings were deemed essential for shared understanding and coordination.
- **Impact:** Improved cohesion, clarity on goals, and individual accountability.
- **Addressing it:** Structured meetings with clear agendas, university tools, and documentation of key decisions.
- **Improvement:** Meet in person to make sure that everyone is active and focusing.

### 1.2.5 Quick Decision-Making as a Team

- **Why did it happen?** Swift decision-making was adopted due to academic constraints and project timelines.
- **Impact:** Minimized delays, maintained momentum, and increased overall productivity.
- **Addressing it:** Established clear decision-making protocols, empowered team members, and maintained transparent communication.
- **Improvement:** Make sure that we fully understand the requirements as soon as the sprint starts to make decisions quickly.

## 2. Conclusion

In the process of developing our Condo Management System (CMS) in sprint 1, we navigated through a dynamic landscape of successes and challenges, each contributing to our understanding of collaborative software development. Our commitment to proactive team collaboration was the basis of our achievements. By valuing diverse contributions, we fostered an environment that enriched our learning experience and produced positive outcomes for our project. This collaboration proved to help us the most at achieving effective problem-solving and maintaining a positive team dynamic.

A critical lesson learned was the importance of a continuous and steady workflow in an academic setting. Recognizing the need for a disciplined approach, we successfully reduced stress, improved comprehension, and ensured a smooth progression of project tasks. Time management strategies became essential in navigating the academic nature of our project, and showed the significance of maintaining consistency and diligence in our work.

Effective communication, both within our team and between frontend and backend teams, played a big role in streamlining project outcomes. Utilizing university-provided tools and scheduling cross-disciplinary meetings facilitated enhanced understanding and improved collaboration. However, challenges in organizing meetings highlighted the need for better coordination, prompting us to explore better solutions to ensure optimal team attendance in future projects. As we conclude sprint 1, our team will shape our approach to future projects based on our strengths and challenges throughout this experience.