

Behind the Scenes of Sprint 1

Introduction

As we complete our project's first sprint, it is essential to look back and analyze our progress in this postmortem analysis. The objective of this project is to develop a condo management website and its companion mobile app for potential buyers, condo owners and condo management companies. The core structure of this application is an Enterprise Resource Planning (ERP) system, which encompasses various functionalities such as user profile creation, a reservation system, and a financial system.

Upon the concept's announcement, we had high expectations and were excited by the opportunity that this project represented. We believed that by being 10 people in a team, we would easily manage any type of requirements the teacher would define. However, we quickly realized the magnitude of the task when going over this first sprint's deliverables. Even after overcoming ambiguity issues, we faced obstacles regarding task management, dependency, and schedule flexibility. Furthermore, the sprint's duration was reduced by a week. This pushed us to adapt more quickly and set up our work environment as soon as possible. We also scheduled a meeting with our TA to make sure that our understanding of the requirements was accurate.

When reflecting on this sprint's outcome, we were proud of our progress but still believe that there is room for improvement. Among various achievement, our GitHub is well-organized, and we have laid a solid foundation for the software architecture through both the SAD document and the implementation. As the next sprint is approaching, we have a better understanding of the Agile refinement process and feel ready to tackle this project as a team.

What went wrong

1 – Scope Ambiguity

During this first sprint, we noticed that most of the challenges we encountered stemmed from an unclear understanding of the project scope and the requirements. The issue started when we first received the grading schemes per sprint and, due to the short and vague description of the first sprint's deliverables, some of us misunderstood the teacher and TA's expectations. This led to confusion about what needs to be achieved during this sprint and to some delay in the progress.

To address this difficulty, we scheduled a meeting with the TA as soon as possible in order to clarify the project's and the sprint's scopes. In addition, we held a team meeting to ensure that all members had the same understanding of the deliverables and knew their responsibilities. These measures definitely dissipated some of the confusion and improved our ability to plan a detailed strategy, decreasing the risk of potential scope-related issues by the same occasion.

2 – Dependency

Dependency challenges were one of the main causes of workflow disruption and delay during this first sprint. First, receiving the project requirements late decreased the sprint duration from three weeks to two weeks, forcing us to adapt and compromise in terms of time management during this iteration. Furthermore, some deliverables were dependent on other parts that were still under development, causing the responsible team members to have to wait before beginning. The impact of these challenges started showing towards the end of the sprint.

To reduce the issues created by this challenge, we each made sure to update the rest of our team members when working on our parts or when facing an issue. In addition, we improved communication between team members by having two teammates exchange in private instead of disturbing everyone with a question that concerns only one's part. By helping each other out when needed and aiming for better internal coordination, we can affirm that the overall workflow was smoother by the end of the sprint.

3 – Meeting Scheduling

In order to keep track of our progress, we needed to schedule a weekly online meeting with as many team members present as possible. However, because of the diverse school and work schedules of each member, we could not find a suitable time slot that accommodated all 10 individuals. This caused us to divide the first sprint's deliverables in a way that minimized collaboration and exchanges. The decision-making process was also affected since we had to set up polls to vote in the discord server instead of discussing and deciding synchronously.

To solve this issue, we used the when2meet scheduling tool to conduct a survey and identify the time slots where most of the team members would be available. Then, we held a meeting during that time and made sure to update the members that could not attend it. In addition, we organized smaller subgroup meetings when needed. However, we still need to establish a more structured and regular meeting schedule in order to avoid the headache of debating on this subject each week.

What went right

1 – Effective Communication Channels

As mentioned in the section above, establishing effective and convenient communication channels quickly significantly contributed to overcoming some challenges and increasing collaboration. Indeed, we set up a discord server as soon as the team was formed and defined separate channels for each sprint in addition to the channel for links (GitHub repository and Google Drive folder). Furthermore, we frequently used our Slack private channel to communicate and meet with our TA and, ultimately, ensure that everyone was on the same page.

These measures created a transparent and clear work environment, which led to greater coordination and understanding between team members. It also allowed us to voice any concern

we had quickly and openly. However, communication could still be improved by, for example, hosting in-person meetings occasionally and encourage all members to provide their inputs.

2 – Positive Team Dynamics

Since we formed this team from separate friend groups, it was essential to establish a pleasant team dynamic in order to facilitate collaboration and productivity. Fortunately, all members understood this project's magnitude and expressed commitment to its success. In addition, we talked comfortably early and, being students, we could easily relate to each other.

This created a safe space of inclusivity where debates and feedback were welcomed. In addition to overcoming obstacles more efficiently, we maintained a lighthearted dynamic that kept us from feeling overwhelmed by the amount of work that this project represented.

3 – Adaptability to Requirements

During this first sprint where the project scope and requirements were still ambiguous, all team members demonstrated remarkable adaptability through a proactive mindset and clear communication. This was possible thanks to the common goals and commitment we shared for this project.

The team's flexibility also allowed the project's progress to remain on track despite starting the first sprint a week later than expected. By quickly accommodating to the time left, we operated systematically and prioritized momentum. However, we can still improve ourselves by approaching the next sprints in a structured manner in order to reduce the likelihood of misunderstanding instructions or missing an important mistake.

Conclusion

While reflecting on the first sprint, we realized that we encountered multiple challenges that were rooted in scope ambiguity, dependency, and difficulties with scheduling meetings. Although these obstacles were to be expected, we had to adapt quickly and come up with solutions that were convenient for all 10 members of the team. By leveraging platforms like Slack and Discord, we set up effective communications channels that enabled us to update each other and collaborate without necessarily working at the same time. In addition, the positive team dynamics that we created from the start significantly helped each one of us to share ideas freely.

As for the project itself, this first sprint gave us an insight on the amount of work that comes with a system of this magnitude. For our progress to go smoothly and as we plan it, we will need to follow a structured plan and divide tasks according to each member's skills. This does not mean that we must stay rigid since the Agile approach actually embraces flexibility. Furthermore, we recognize the need for continuous refinement of all artifacts because this sprint showed us that it is feasible to develop a running prototype and test it within two weeks. By applying the lessons we learned, we will tackle future challenges being more informed and committed to developing the best product possible.