**Software Development Lifecycle Final Project**

**Sprint Review and Retrospective**

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CS-250: Software Development Lifecycle

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October 26, 2024

Our team at ChadaTech was tasked with developing an application for SNHU Travel. As part of this development process, our team transitioned from using the traditional Waterfall method to the more agile Scrum methodology to understand how Scrum may be beneficial to this organization moving forward. A Sprint Review and Retrospective is an important part of the Scrum/Agile process where the team analyzes the work completed during a sprint and each role on the team gets the ability to apply and receive feedback. The purpose of this review is to analyze how Scrum influenced the success of the SNHU Travel Project through the use of user stories, communication, and managing interruptions. Additionally, this retrospective will also assess the tools and organizational methods that support the team's work and evaluate the overall effectiveness of adopting Agile principles to this travel project.

Each role in a Scrum team carries distinct responsibilities. Each of these roles are important for the Scrum team to ultimately meet their objective and stay agile. As the Scrum Master for my team, it was my job to ensure that the Scrum framework is understood and followed as team members as they transitioned from waterfall to agile. I worked to implement continuous collaboration between employees, creating a cross functional team with expertise shared across the entire development team. I also worked to implement and organize development sprints in order to drive small and incremental progress for the software project to ensure we are always finishing the work we start. In addition to my role on the team, the Product Owner is another instrumental piece of the Scrum team. The Product Owner’s job is to prioritize user stories based in the business needs and feedback from the client, ultimately helping shape and define the software project. By maintaining an up-to-date backlog, the Product Owner can ensure the team stays focused on the most important tasks and streamline the development process. Finally, it is the Development Team’s job to complete the work for the defined user stories. This team should collaborate closely with one another to pass along skills, and troubleshoot unfamiliar code, while additionally participating in daily stand-ups and communicating blockers to the Scrum Master. Each roles contributions are essential and support a fast moving and dynamic workflow, where each team member is aligned with the software project’s deliverables.

Completing user stories is a central objective in any Scrum project, as each story defines a specific feature or improvement that will be delivered to a user. The Agile approach emphasizes breaking down complex projects into smaller, more manageable tasks that gives the development enough time to polish each user story. In the SNHU Travel Project, each story was prioritized based on its impact to the user experience when shopping for a vacation. Tasks such as recommending a user a vacation based on their previous travel history were given a higher priority because of the importance of this feature to the client, while on the other hand, tasks like setting a travel preference were marked as low priority due to the feature being considered a "nice to have" but not part of the core functionality of the application. The completion of these user stories ensures that the team stays aligned and progress continues through each sprint.

The flexible nature of Agile allows the entire team to respond effectively when unexpected issues or new priorities emerge. In Scrum, project interruptions are managed by adjusting the sprint backlog and reassessing priorities as necessary, ensuring that the team remains aligned with the project’s objectives. Daily stand-ups, sprint reviews, and sprint retrospectives provide regular opportunities to address changes or unforeseen interruptions, allowing the team to adapt without disrupting the project’s overall progress. This adaptability supports the steady completion of user stories and ensures that delays are handled gracefully.

Throughout the SNHU Travel Project, communication primarily would take place in daily Scrum meetings. These meetings provided a consistent platform for team members to share updates and address challenges. In response to my teammates, I attempted to emphasize the importance of these daily Scrums to maintain alignment on the software project’s goals. I also encouraged proactive strategies for handling urgent client requests and opened up the discussion on when these important requests should be shared with the team. While communication was limited, these exchanges highlight the value of regular check-ins to maintain focus and adaptability.

A well-structured workflow relies on effective tools and a clear process, both of which are important to the Scrum framework. In the SNHU Travel project, tools like the product backlog and Scrum boards provide the team with visibility into task priorities and overall progress on the project. In a Scrum team, organizational tools like JIRA and Azure boards help the team to track user stories, manage sprint tasks, and visualize the organizational workflow to make it easier for teams to stay aligned and updated on their responsibilities. Scrum events like sprint planning, reviews, and retrospectives provided structure and opportunities for continued development to the development team. The planning ensured that everyone understood the priorities and focus areas for each sprint, while reviews and retrospectives allowed the team to reflect on successes and identify areas for improvement.

The Scrum-Agile approach presented both pros and cons throughout the SNHU Travel Project. One of the benefits of the Scrum framework is its flexibility, which allows a team to respond quickly to new requirements and adjust priorities without disrupting the overall progress. Additionally, the emphasis on teamwork and regular communication helps to build a highly collaborative environment where developers can work together effectively. However, there are some parts of the agile approach that may be challenging for some teams. The need for consistent team communication and frequent meetings requires time and commitment from all members of the development team. The Scrum Master must find a way to facilitate these meetings without becoming overbearing and overwhelming for the entire team. Additionally, Agile’s focus on being adaptable can led to shifting priorities that required the team to revisit and revise work already marked as complete, potentially impacting efficiency.

Overall, I believe the Scrum-Agile approach proved to be an effective choice for the SNHU Travel Project. The flexibility it offers, and the iterative structure allowed the team to incorporate feedback and make necessary adjustments, ultimately resulting in a product that better met the client’s needs. While the Waterfall approach might have provided a more rigid structure, it would likely have limited the team’s ability to respond to changes and could have hindered the project’s success. It is because of this that I believe Agile was the best approach for this project.