**CS 250 Final Project**

**Sprint Review and Retrospective**

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# Introduction

The SNHU Travel project represented ChadaTech’s first attempt to transition from the Waterfall model into an Agile approach. This Sprint Review and Retrospective evaluates how Agile roles, principles, and practices shaped the outcome of this project. The purpose of this reflection is to analyze how well the Scrum framework supported team collaboration, managed changing requirements, and produced incremental value for stakeholders. By identifying what worked well and where challenges arose, this reflection also provides recommendations for ChadaTech’s future Agile projects.

Unlike Waterfall, which often struggles with late requirement changes and lacks iterative feedback loops, Agile emphasizes flexibility, continuous communication, and short development cycles. These characteristics were crucial to the success of the SNHU Travel project, where client needs evolved during development. This paper will specifically analyze how roles, user stories, interruptions, communication, organizational tools, and process evaluation contributed to the overall project outcome.

# Applying Roles

In the Scrum framework, each role plays an essential part in ensuring project success. The Product Owner prioritized and refined backlog items, ensuring the Development Team worked on features that delivered the highest value. For example, the Product Owner ensured that user registration and trip search were prioritized early in development because they represented critical features for customer adoption.

The Scrum Master acted as a servant leader, coaching the team on Agile principles and removing obstacles. When conflicts arose around the interpretation of acceptance criteria, the Scrum Master facilitated discussions that kept the team aligned. Meanwhile, the Development Team self-organized to produce working increments, demonstrating ownership and accountability. Finally, stakeholders provided timely feedback, which allowed for course corrections that strengthened the final product.

# Completing User Stories

User stories were the backbone of the project. Instead of lengthy requirement documents, the team worked with concise, user-centered descriptions of features. For instance, the story 'As a traveler, I want to search for trips by destination so I can compare options' allowed the team to focus narrowly on one piece of functionality. This story was developed, tested, and demonstrated to stakeholders, who then provided feedback on filtering options and search speed.

This iterative cycle made it possible to deliver small, working increments of software. Each story was linked to acceptance criteria, which gave the Development Team clarity on when a feature could be considered 'done.' By focusing on one user story at a time, the team reduced risk and avoided the overwhelming scope creep that can occur in Waterfall projects.

# Handling Interruptions

Interruptions in software development are inevitable. During this project, the team faced unexpected changes in client preferences. For example, stakeholders requested that the booking confirmation page include real-time price updates, which was not part of the initial backlog. The Product Owner quickly reprioritized tasks so the team could address this requirement in the following sprint. This demonstrated Agile’s strength in managing evolving requirements without derailing progress.

In contrast, a Waterfall approach would have required going back to the requirements phase and revising multiple downstream documents. The Agile approach allowed the team to adapt with minimal disruption, keeping the project on track while still meeting client needs.

# Communication

Communication was a major contributor to project success. Daily standups helped the team remain aligned on goals, progress, and obstacles. These short meetings encouraged accountability, as each member reported on their work and identified blockers. The Scrum Master used this information to coordinate solutions and reduce bottlenecks.

Beyond standups, sprint reviews created opportunities for stakeholders to evaluate progress and suggest improvements. Retrospectives gave the team a safe space to reflect on collaboration, tools, and workflow. This culture of open communication strengthened trust among team members, resulting in a more motivated and productive group.

# Organizational Tools

The team’s use of Scrum tools supported clarity and organization throughout development. The Scrum board visually tracked tasks as they moved from 'To Do' to 'In Progress' and 'Done.' This transparency helped both the Development Team and stakeholders monitor progress at a glance.

In addition, backlog refinement sessions ensured the Product Owner and Development Team shared a common understanding of upcoming work. Tools such as burndown charts and sprint velocity metrics also provided valuable insights into productivity trends, which informed sprint planning. These organizational practices kept the team focused and aligned on delivering value incrementally.

# Evaluating Agile Process

The Scrum-Agile process demonstrated numerous strengths during the SNHU Travel project. Its flexibility allowed the team to embrace changes and integrate them into upcoming sprints. Continuous stakeholder involvement ensured that the product remained aligned with user needs. The frequent delivery of working software built confidence among stakeholders and provided opportunities for early feedback.

However, Agile also had challenges. It required discipline in maintaining sprint ceremonies and avoiding scope creep. Estimating timelines was more difficult than in a Waterfall project, since requirements shifted frequently. Nonetheless, Agile’s benefits outweighed the drawbacks. Compared to Waterfall’s rigid, sequential process, Scrum’s iterative approach was far better suited for this project’s dynamic environment.

# Conclusion

The Sprint Review and Retrospective for the SNHU Travel project showed how Agile supported collaboration, adaptability, and incremental delivery. The roles of the Scrum team, combined with the use of user stories, communication practices, and organizational tools, created a development process that responded effectively to change. Although Agile introduced some challenges, particularly in maintaining discipline and predictability, it proved the best methodology for this project. ChadaTech should continue expanding Agile practices to future projects, as they offer the flexibility and stakeholder alignment needed in today’s fast-changing software landscape.

# References

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