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As the Scrum Master for the SNHU Travel project, my primary responsibility was to guide my team through the Scrum framework in a way that promoted collaboration, adaptability, and consistent progress toward each sprint goal. Throughout the term, I've taken part in different scrum roles, including tester, developer, and product owner, but serving as scrum master showed me how important structured communication, clear user stories, and the right tools are in building an efficient agile team. This reflection summarizes how the scrum events, agile principles, and communication practices shaped my team's success and what I learned about leading projects in a professional agile environment.

As a scrum master in the module six discussion, I facilitated the core scrum events to keep the team aligned and productive.

- **Sprint Planning:** At the start of each sprint, the team collaborated to define a sprint goal and select backlog items that matched it. I made sure the product owner provided clear user stories with acceptance criteria, and the tester did early and continuous testing throughout the sprint. This helped everyone begin the sprint with shared expectations and continue without having to go back and change anything.
- **Daily Scrums:** Every day, I would do a 15-minute check-in to discuss progress, obstacles, questions, and priorities. My role was to keep my team focused and remove impediments afterward. This rhythm built accountability and momentum.

- Backlog Refinement: Mid-sprint, I organized refinement sessions so the product owner and tester could clarify requirements and split larger items into smaller, manageable tasks. It kept the backlog organized and prevented sprints from feeling overwhelming.
- Sprint Review: At the end of each sprint, I led a meeting where the team demonstrated completed work to stakeholders. This event provided feedback we used to make quick adjustments for future sprints.
- Sprint Retrospective: Finally, we reflected on what went well, what challenges we encountered, and how we could improve in the next sprint. These honest discussions promoted teamwork and continuous learning.

Key benefits of each scrum event:

- Sprint Planning: Brings clarity through shared sprint goals.
- Daily scrums: Strengthens communication and exposes blockers early.
- Backlog Refinement: Keeps work defined and manageable.
- Sprint Review: Gathers valuable stakeholder feedback.
- Retrospective: Encourages continuous improvement and transparency.

When I took on the Product Owner role for the travel-booking portion of the project, I learned that writing good user stories is less about documentation and more about understanding user needs. Through stakeholder meetings, I developed stories such as “Cruise Preference,” “Customized Destination List,” and “Price Limit and Hot Deals.” These stories translated customer feedback into functional requirements that made the application practical and user friendly.

One of the biggest lessons was how prioritizing and refining user stories improved development flow. Well-defined stories prevented confusion when changes occurred mid-sprint and allowed

developers to adjust priorities smoothly. Research supports this Yang et al. (2023) found that high quality user stories directly improve user satisfaction by keeping teams focused on real needs instead of abstract requirements.

When interruptions happened, like shifts in design expectations, the agile process made adaptation easier. Instead of re-planning from scratch, we revisited backlog priorities and adjusted acceptance criteria, ensuring minimal disruption while still meeting stakeholder expectations.

I believe communication is the foundation of every sprint. Structured daily meetings, retrospectives, and sprint reviews helped our team share updates and stay aligned. I emphasized openness, asking the right questions early, and clarifying details with the product owner and tester to avoid rework. These habits built trust and transparency across the team.

A major advantage was using JIRA, an agile project management tool. JIRA allowed us to visualize sprint tasks, monitor progress, and identify blockers in real time. By moving tasks across boards and adding comments, we could keep accountability clear. Research by Alami et al. (2022) confirms that scrum practices supported by digital tools like JIRA improve software quality and collaboration by reinforcing shared understanding and adaptability.

Reflecting on my experience across all roles: Tester, Developer, Product Owner, and Scrum Master. I saw how feedback loops, iterative development, and communication tools connect to form a complete agile workflow. As Steegh and van der Bijl-Brouwer (2025) point out, iterative feedback cycles improve team adaptability and overall performance, which I experienced firsthand.

The scrum agile approach offered several strengths during the SNHU Travel project.

Pros:

- Encouraged frequent stakeholder involvement and early feedback.
- Allowed flexibility when requirements changed.
- Promoted team ownership and cross functional collaboration.

Cons:

- Required constant communication and discipline to stay organized.
- Could feel repetitive to new members not familiar with daily stand ups.

Even with those challenges, scrum was the best choice for this project because it allowed the team to continuously deliver working features while adapting to feedback. Compared with a traditional Waterfall model where feedback might come only at the end, Agile gave us iterative control and reduced the risk of developing features users didn't need.

Overall, I learned that the success of scrum depends not just on the ceremonies but on the mindset behind them: openness, collaboration, and continuous improvement.

This project helped me understand how each scrum event connects to the team's overall success. The consistent rhythm of planning, reviewing, and reflecting turned short term feedback into long term improvement. Tools like JIRA and practices like stand ups and retrospectives built a transparent and adaptive workflow. Most importantly, this experience showed me that being an effective Scrum Master is about cultivating communication and trust, not just managing tasks. By applying these agile principles, I feel prepared to lead future projects with confidence and adaptability.

## References

Alami, A., Abdelrahman, A., & Al-Shehri, A. (2022). How Scrum adds value to achieving software quality? *Frontiers in Computer Science*, 4, Article 9486782.

<https://doi.org/10.3389/fcomp.2022.9486782>

Schwedt, S., & Ströder, T. (2025, January 25). From Bugs to Benefits: Improving User Stories by Leveraging Crowd Knowledge with CrUISE-AC. *arXiv*.

<https://doi.org/10.48550/arXiv.2501.15181>

Steegh, R., & van der Bijl-Brouwer, M. (2025). The agile way of working and team adaptive performance. *Journal of Business Research*, 165, 114–124.

<https://doi.org/10.1016/j.jbusres.2024.12.045>

Yang, M., Sato, S., Washizaki, H., Fukazawa, Y., & Takahashi, J. (2023). Identifying characteristics of the agile development process that impact user satisfaction. arXiv.

<https://doi.org/10.48550/arXiv.2306.03483>