During the development phase of the SNHU Travel project, our team adopted a new Agile methodology framework to establish a more efficient and productive environment, resulting in the creation of a higher-quality product. By embracing this framework, each scrum team member played a unique and vital role in contributing to the project's success, with each role serving as a crucial piece of the overall puzzle. This collaborative approach helped achieve our goals and fostered a sense of ownership and accountability among team members, ultimately leading to a successful outcome for the project.

**Scrum Roles:**

1. **Product Owner**

In the SNHU travel application, the product owner plays a key role. The product owner is responsible for effective communication, significantly contributing to our success. According to a 2020 journal on the Product Owner's role, it was stated that the Product Owner role is primarily a communication role (Unger-Windeler, 2020). This observation was evident in the SNHU Project as the Product Owner defined precise requirements and priorities to ensure that the team focused on features that added the most value to the SNHU Travel Project. The Product Owner achieved this through communication with users, stakeholders, the scrum team, and other involved parties. Throughout the development of the Travel application, the Product Owner conducted interviews with users to understand their stories, details, and requirements and created clear and precise acceptance criteria to help the team deliver high-quality features on time. Additionally, the product owner communicated with testers to ensure the product met all requirements. Communication proved to be a vital component of the project, as another person the Product Owner communicated with heavily was the Scrum Master.

1. **Scrum Master**

The Scrum Master plays a critical role in the success of the SNHU Travel project, utilizing Agile principles. The Scrum Master ensures the whole team is aware and excited about the new Agile methods. The Scrum Master also ensured that the Product Owner understood the product backlog and backlog grooming and held regular meetings to support this. In addition, the Scrum Master played a vital role in the project's success by overseeing daily stand-ups, resolving obstacles, and ensuring adherence to Scrum principles to keep the team on course. After creating the User Stories, the Scrum Master orchestrates sprint planning sessions to map out how the team will achieve its sprint objectives, ultimately leading to productive sprints and daily stand-ups that provide the development team with the necessary resources at the right time, resulting in a successful product outcome. The Scrum Master leads by example, embracing a servant leadership approach by offering maximum support and removing any impediments to progress. This ultimately created a high-quality environment that fostered success within the development team. "He/she is not expected to provide a significant amount of direction to the team as a project manager would; the team is supposed to be self-organizing and empowered" (Cobb, 2015, p.37). The Scrum Master empowered the development team throughout the SNHU Travel project to ensure the developers had the tools to succeed.

1. **Development Team**

The Development team, a pivotal part of the Scrum team, played a crucial role in the success of the SNHU Travel project. Comprising developers and a tester, this team actively collaborated on user stories, leveraging their expertise to address technical challenges and deliver high-quality outcomes. The developers were responsible for implementing the ticket features and maintained open communication with the Product Owner and tester to ensure clarity in user stories. Upon completion of a feature, the developers promptly informed the tester, enabling swift testing and feedback, which ultimately contributed to the project's success. Additionally, the tester and product owner proactively communicated any changes in project details via email, contributing to an agile and adaptable project environment.

**User Stories:**

Utilizing a Scrum-Agile approach in the software development lifecycle significantly contributed to the completion of user stories. The team could deliver value at the end of each sprint by breaking down requirements into smaller, manageable user stories based on user feedback. Continuous feedback facilitated the tester and product owner's validation of new features, allowing for early adjustments to ensure they met user expectations. The team's adaptability enabled the completion of user stories as priorities shifted, with the ability to reprioritize the backlog during sprint planning and focus efforts on the most crucial user stories.

**Handling Interruptions:**

“It is apparent that deciding on a development methodology is one of the major influences on the resulting product. It is said that Agile methods are very successful in software development rather than traditional methods…” (Aurisch & Barkat, 2021, p.817). Agile methods outperform traditional methods due to their inherent flexibility. Agile, stemming from "agility," emphasizes adaptability and the ability to swiftly manage interruptions or changes. Agile practices like sprint planning and backlog grooming enabled us to adjust to evolving requirements promptly. For instance, during the SNHU Travel project, a mid-development shift in focus to detox/wellness locations was effectively managed using the agile approach, allowing for the swift implementation of new requirements. This also fostered effective communication, necessitating clarifying questions with the product owner regarding the new wireframe.

**Communication:**

Effective communication is crucial for the success of any project, especially in Agile practices. During the development of the SNHU Travel project within the Scrum Team, Agile principles such as daily stand-up meetings helped keep everyone informed about progress, challenges, and upcoming tasks, fostering collaboration and accountability. Sprint Reviews provided a platform for stakeholders and product owners to give feedback, ensuring continuous improvement and alignment with business objectives. The team also used tools like Jira, which facilitated communication. Additionally, internal collaboration was necessary to iron out details during development. For example, I sent an email to the Product Owner and tester to clarify questions about the implementation of a new feature. This approach effectively encouraged collaboration, as it was straight to the point and ended with an encouragement for a quick response.

Hi Jennifer, CC: Tester

It was great seeing you yesterday at the meeting. I have a follow-up question about ticket 475, "Updating travel destination to wellness destinations." While updating the destination, I noticed that the blue background color makes it difficult to read the words. Can the background be changed to a lighter color? Additionally, is it okay to update the title to reflect the new changes? Please get back to me with the answers to these questions. It would be fantastic and would help speed up the development process. I appreciate any help you can provide. If you need anything else, please let me know.

Sincerely,

Landon Phillips

**Organizational Tools:**

Looking back at the success of the SNHU Travel project, one recurring theme that remains important is effective communication. The team's adherence to Scrum-Agile principles has also been instrumental in their success by helping them stay organized. Utilizing tools like Jira, a tracking software, has allowed the team to monitor sprint progress, manage tasks, and visualize sprint goals. Scrum events such as Sprint Planning, Daily Stand-Ups, Sprint Reviews, and Sprint Retrospectives have provided structure and enabled the team to reflect, adapt, and continuously improve.

**Evaluating Agile Process:**

When analyzing the Scrum-Agile approach, we can see clear pros and cons. Using a Scrum-Agile approach allowed for adaptability, which easily accommodated changes in requirements. It also allowed for transparency and encouraged communication, providing clear visibility into the process and potential issues. Another advantage is that the SNHU Travel project received functional software early and regularly due to the incremental deliveries of the sprints. Some drawbacks of the Agile approach include the learning curve and the need to make adjustments to new roles and processes. Another challenge could be the difficulty in projecting project estimations due to it being a new process. After examining the Scrum-Agile approach, I found it was well-suited for the SNHU Travel development project because of the iterative development that allowed the team to refine features based on feedback.

In conclusion, the Scrum-Agile methodology has effectively delivered value to SNHU Travel through collaboration, flexibility, and iterative development. Despite encountering some challenges, the overall benefits of agility and responsiveness have outweighed them, making Scrum-Agile the preferred approach for future projects at ChadaTech. This review and retrospective form a solid foundation for ChadaTech's wider adoption of Scrum-Agile, illustrating its potential to enhance product quality, team cohesion, and client satisfaction across all development efforts.

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