**Final Project**

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Our team was tasked with tackling the SNHU Travel project utilizing an Agile methodology as opposed to the company standard waterfall methodology. We have made it to the end of the five-week development cycle and to the final Sprint Review and Retrospective. Each role was integral to the success of the transition. I, as the scrum master, planned and facilitated the scrum meetings, held the team accountable, and bridged the gap between the developer(s)/tester(s) and the product owner. The product owner communicated directly with the end-users and stakeholders and maintained the product backlog. In opposition to the waterfall methodology, this is an essential part of the process that provided the team with feedback from the users and gave the developer(s) and tester(s) the information necessary for their work. The tester(s) worked closely with the product owner to create test cases and assisted the developers to ensure the cases were being implemented properly throughout development. Finally, our developers embraced the agile methodology by implementing modular programming practices and adapting to changes as quickly and efficiently while also communicating with each other and others to ensure the product met all requirements.

User-stories are a fundamental requirement of the Scrum-agile process while they aren’t often utilized in the waterfall methodology. In Scrum-agile, the product owner was able to meet with the end-users to get an understanding of what was wanted or needed of SNHU Travel and in turn, created the user-stories which are the backbone of the product backlog. Though they are usually ever-changing as the product owner continues to meet with the end-users and stakeholders to get feedback or more information on where the product is currently compared to how it was imagined. Therefore, the Scrum-agile approach allowed the user-stories to evolve, for example, when the product was changed to focus on wellness/detox resorts due to market changes and stakeholder opinions, the user stories were updated accordingly and those changes are communicated to the rest of the team. As the product-owner met with stakeholders and users alike, the product shifted based on changing requests, priorities, etc. The scrum-agile approach allowed each team to quickly adopt these changes due to how the project was developed. The developer(s), for example, only had to change a few things on the backend to change the top five destinations list focus to wellness resorts as the code was written in an easily modifiable format.

As a Scrum Master, communication and follow-up are key as I communicated with the whole team, together, individually, and at various intervals of time. With the development team, I started out by building a roadmap in an open and collaborative environment as part of the Sprint Planning. I helped facilitate Daily Scrum meetings with the team, only stepping in to keep the meeting on track or to answer questions. I also acted as the mediator between the team and the product owner. Communication was kept open, honest, and efficient to put an emphasis on the dynamic and collaborative nature of Scrum-agile. To assist in collaboration our team decided to rely on Jira as our project management software. This single tool provided countless quality of life improvements, increased efficiency, and streamlined communication to each member of the SNHU Travel team. The Product Owner utilized it to plan and maintain the product backlog for use with the various Scrum meetings, the Scrum Master, Developer(s), and Tester(s) alike. It provided a way for the developer(s)/tester(s) to report and track bugs throughout the development process and more.

The Scrum-agile methodology can be an arduous process to implement as the differences between it and a traditional waterfall methodology are many. Especially with such a short development cycle, it was difficult at first to set up the scrum cycle while teaching the team and myself about the processes. Because of this, more work was required throughout the five-week development cycle but the process was more efficient each week as we learned the ropes and gained more familiarity. The process provided many advantages, it allowed the team to quickly change direction alongside the needs of the market and SNHU Travel’s stakeholders. It provided a solid testing strategy, resulting in a complete software indicative of the requests from its users and stakeholders. Based on these results, SNHU Travel was a perfect opportunity to utilize the Scrum-agile method, it was a short development cycle that did not require a large team, but was long enough to learn the ropes. Using the Scrum-agile method, the team was able to quickly adapt to the changes and release the product on time, which may not have been possible following a waterfall methodology.