**Sprint Review and Retrospective**

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The different roles of a Scrum-agile team are crucial during the software development lifecycle. Because of this cruciality, the SNHU Travel Project was massively successful. It all starts with the Product Owner. The Product Owner was able to define and prioritize the product backlog for the project successfully and quickly. This contributed massively to the project’s success as it helped carve out a big picture for the rest of the team and allowed them to picture what is more important and what needs to have more time and resources directed toward it. If the Product Owner had not been able to clearly define and prioritize the Product Backlog, a lot of time could have been wasted rearranging priorities multiple times. The Product Owner also clearly communicated to our Tester whenever a requirement changed, which allowed the Tester to redirect and tailor the testing towards the new requests. The Scrum Master also played a vital role in the success of this SNHU Travel Project. The Scrum Master kept the project on schedule and did it effectively all while building a team cohesion based on trust in one another. During this project, the Scrum Master laid out clear expectations for the team in regard to meetings, who will be there, and when they will be held. This allowed for nobody on the team to be left out. The Scrum Master also did a phenomenal job in facilitating the Daily Scrums for this project. The Scrum Master had a rule where every single teammate had to speak about their progress and their future. This allowed the entire team to be included and a trust developed between the team and the Scrum Master. This project could not have been successful without the entire team trusting the Scrum Master. I also had the ability to take on the role of the Tester for the team. Without a tester, there would have been no quality assurance for this SNHU Travel Project. At a point later in the development of the application, the Tester received notification of a change in requirements by the End-User and Product Owner. The Tester was able to quickly edit his user stories along with its acceptance criteria so that no time was wasted on unnecessary rework later in the project’s development. Finally, the Development Team or the Developer was the heart and soul of the Scrum-agile Team. In this specific project, the Development Team needed to stay in constant contact with the Tester and the Product Owner so that they were able to receive information regarding changes to acceptance criteria or requirements so that they could adjust in real time. This was critical in avoiding something that often happens in a waterfall project where bugs aren’t found until the very end of the development process and the team has to dig back and find out where they went wrong and fix it. This saved the project countless hours and dollars.

There are many aspects of the Scrum-agile approach that contribute to the successful completion of user stories. In this project, Sprint Planning became vital as it allowed the team to take each user story and break it down into its simplest terms so the team can focus on one goal at a time during the development. Because the Scrum-agile process has a heavy emphasis on clear communication between the entire Scrum team, the Product Owner was able to feed requirement changes to both the Tester and the Development Team in real-time which greatly minimized the potential for costly rework. Another aspect of the Scrum-agile approach that greatly contributed to the successful completion of user stories was the Daily Scrum. In the Daily Scrum, the entire team got involved in creating and evaluating the user stories. This makes for a much more cohesive development team that is efficient in completing the required user stories.

The Scum-agile approach was also extremely well-suited for interruptions and changes at any stage in the development process. The Scrum-agile approach is specifically tailored to facilitate a seamless adjustment when requirements are changed, or acceptance criteria is adjusted. In a waterfall model, one simple change late in the development stage can severely impact the entire project. Whenever the project was interrupted, the iterative nature of the Scrum-agile approach enabled us to reprioritize user stories and tasks as early as possible to easily overcome any interruptions.

Communication was vital in the SNHU Travel Project and that was demonstrated on multiple occasions. One specific occasion was when the Product Owner indicated a change in requirements in the middle of the project. The change was that the customer wanted to focus the application on a specific type of vacation when the application was already being made to accommodate all vacation types equally. As the tester, when the Product Owner brought up this requirement, I of course had some questions. After a discussion with the Product Owner, I communicated that I would change some of my test cases in order to accommodate this change by the customer. The team’s communication was also in full effect during the Daily Scrums and Sprint Reviews. During these meetings, all team members were required to communicate their progress and goals, which produced constant, effective communication throughout the entire development of the SNHU Travel Project.

The Scrum-agile tools and principles are what made this project so successful. It all started with the Product Backlog. The team was able have a definitive picture of what they were supposed to be focusing on and directing their resources to. Everything is better when it is organized and that was on full display with this project as the Product Backlog provided a clear, defined roadmap for the team to take to the completion of the project. Another tool that our team used was a velocity chart which allowed the team to measure exactly how much work was getting done in each sprint. This aided in the team predicting what the next few Sprints’ workloads would look like and gave an estimate on how many user stories would be able to be packed into that Sprint.

The effectiveness of the Scrum-agile approach for any software project depends on many factors but the SNHU Travel Project proved to be extremely efficient and effective. One of the pros of the Scrum-agile approach that we found in this project what the iterative nature of the approach. When the Product Owner brought us a change in criteria, we were able to quickly identify where the change needed to start in our very next Sprint. Another pro that we found to assist in the effectiveness of the Scrum-agile approach was the sense of empowerment and ownership that it gave the rest of the team. With each team member having a voice in every single Scrum meeting that was held, none of the team members felt inferior or as if their role was any less important than anyone else’s role. This fostered a level of comfort that ultimately contributed to successful teamwork. We also found the stakeholder involvement aspect of Scrum-agile to be extremely helpful. With the Product Owner sort of being the middleman between the developers and customers and end-users, we were able to disseminate any adjustments that needed to be made quickly. One of the negative aspects that we found in this project was the lack of predictability. While some may view that as a benefit of Scrum, it can be a drawback in some circumstances. For example, we had specific user stories and test cases drawn out to incorporate all different types of vacations equally. All of a sudden, we were given the requirement to focus on detox/wellness trips over others. While this is exactly what Scrum is supposed to help with, it’s still never a great thing when plans need to be changed in the middle of the project. Another potential drawback that we found was the lack of specific skilled roles such as a skilled Scrum Master and Product Owner. It seems that in the future, team members should try to tailor their skills on one role and avoid bouncing around in roles in order to maximize potential for the project.

Overall, I believe that the Scrum-agile approach was perfect for the SNHU Travel Project. While Scrum may not be suitable for all projects such as an extremely short project or a project that requires very specific requirements, this project did not have a specific, detailed layout at the beginning of the project which allowed for the changes that came to be seamlessly adjusted for. The SNHU Travel Project had ever-evolving requirements coupled with the need for end-user and customer involvement which is the perfect recipe for a Scrum-agile approach.