**Software Development Lifecycle: Final Project**

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My Scrum-agile team, in their various roles, all worked to contribute to the success of the SNHU Travel project. First, the Product Owner worked with the stakeholders to determine the details and scope of the project, created user stories with acceptance criteria, and passed them over to the other members. Later in the project, the stakeholders decided they wanted to focus on health and wellness travel packages, rather than the original idea of trendy packages. To adjust to this change, the Product Owner met with the team to discuss the change, what work already done could be used with the change, and asked what could be accomplished during the current sprint with the change. Afterward, the Product Owner then modified user stories and the backlog to make accommodations. The tester contributed by creating test cases based on the user stories submitted by the Product Owner. These were worked on in tandem with the developers, where the test cases in some instances served as guidelines for development. The developers took charge of developing the software according to the user stories given along with acceptance criteria. If there was an uncertainty on implementing a feature, the development team would speak with the Product Owner for clarification, and if the Product Owner was unsure, they would then reach out to the stakeholders to learn what was necessary for that feature. Lastly, the Scrum Master worked as a go-between for the different members of the team. The Scrum Master would host the Scrum Events, guiding the team through discussions.

A Scrum-agile approach to the SDLC helped each of the user stories come to completion by building an adaptable environment for the changing needs of the project. For example, when the tester learned that the travel packages would be in a slideshow format rather than a list format, he was able to edit his test cases on-the-fly to meet this need. In a traditional setting such a change may have either not been allowed mid project by upper management or, if not caught early on, it may be left as-is as the project approaches completion. A wider-reaching example of this is when the project was shifted from selling trendy travel packages to health and wellness packages. While the first instance involved only the tester to be adaptive, this change involved flexibility on behalf of the whole team, managing the backlog, updating salvageable work, and removing now defunct features, with a speed that traditional project management does not have.

The Scrum-agile approach supported project completion when the project was faced with a change in direction by allowing the team to quickly take measures to adapt to the given situation. As touched on above, the team first had a meeting to discuss the change of plans for the project, where they discussed what could and could not get done by the end of the current sprint. The Product Owner adjusted the backlog and user stories to accommodate the new change, while the tester updated their test cases to meet the new requirements. Meanwhile, the developers went through the project, removing what was no longer necessary but keeping and updating features that could still be used in the project’s new direction. In doing so, the team would still be able to meet their original deadline for the end of the sprint, though it would be with less work completed than originally planned. This allowed the team to meet the customer’s request more quickly than a traditional setting would allow, making the changes as they come, rather than pushing them into another phase, or simply not implementing the request at all.

Communication with the team was done most effectively via both in-person communication and through email. In person proved effective through the various meetings held, such as the Daily Scrum where work for the day was discussed, and especially so in special meeting such as when the Product Owner met with the rest of the team to discuss the change in direction for the project. This allowed for a place where questions from other team members could quickly be answered, and any confusion could be cleared before it became a problem. Email proved a great supplement to this in the cases where questions may arise only after the meeting. For instance, when the tester needed to develop test cases dealing with the layout of program, they were able to quickly reach out to the Product Owner for clarification, and the Product Owner in turn was able to quickly send out a mock-up of the desired look. This allowed for work to be completed efficiently without the need of going back and forth between office spaces or even waiting until the next meeting to discuss the issue.

The best organizational tool that helped the team be successful was the use of a Kanban style board in the meeting area. This allowed everyone to see clearly what work was complete, what was being worked on, and what had not been started. Further, one could see who was responsible for working on each feature. This helped the team stay organized in their own way and allowed the process to be transparent, as the board was not only visible at all times but was updated during the Daily Scrum as team members discussed work done the day before and work to do that day.

Overall, a Scrum-agile approach was the best solution for the SNHU Travel project. The structure of the approach allowed the team to quickly switch gears when the project changed, much more quickly than in a traditional setting. Were the project to use a standard waterfall approach, the change in the project would have caused serious issues, either causing the project to be delayed, to have features omitted, or the project could have been scrapped entirely, as what was being made was no longer the product the client wanted. That said, with the longer planning period involved in waterfall approaches, it is possible the client may have been able to express interest in the health and wellness packages before development began, avoiding the situation entirely. That said, one cannot hope for large changes like that to happen at the most convenient of times, especially in a business setting. While the waterfall method has the potential to be more efficient, the Scrum-agile method has a more reliable way of dealing with changes as they come, especially given a project that is with a client that monitors a fluctuating market. While traditional approaches have their place, with the given project, the Scrum-agile approach was an effective plan for the SNHU Travel project.