**Final Project**

SNHU CS-250-J7340

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18 February 2023

In the following paper, I will discuss how Scrum-Agile methods were used in the SNHU Travel project and throughout the semester.

The assignment where the roles for my Scrum-agile team really shined was the discussion for module six. We had three members of our team comment on the best way that a company could transition from a traditional waterfall style to an agile method. The Scrum Master emphasized that we should implement the following practices Daily Scrum meetings, Sprints, Sprint overviews, and a greater focus on customer demands as well as team communication. He then explained the importance of each practice and how it will increase the efficiency and effectiveness of the team. The Developer mentioned the “Two-Pizza Rule” and the importance of small teams and their effect on communication. She later talked about short iterations of sprints lasting one to four weeks each and the impact of this on team flexibility to the ever-changing needs of the customer. The tester in this scenario talked about Scrum meetings, their importance, and why they are held daily in the morning as well as why they are kept to a maximum of fifteen minutes. He emphasized the greater communication issues that this meeting breached. Each team member then commented on the others team members' discussion posts with feedback and critiques. All team members agreed with the idea of fifteen-minute scrum meetings as well as abiding by the “Two-Pizza Rule” keeping Scrum Teams a suitable size. One topic that was criticized and later changed was that the length of sprints should be a minimum of two weeks long as shorter sprints would not allow for enough progress to be made for it to be effective.

The Scrum-agile approach to the Software Development Lifecycle proved to be the best method to take on the user stories for the SNHU Travel Project. I believe one aspect of the Scrum-agile approach that helped this project was tackling the smaller-sized tasks like profile settings or an adjustable price limit for viewing vacation packages. These features are easily developed, implemented, and tested and a Scrum-agile approach led to a quick turnaround from nothing to a product with working and tested features. Even with larger tasks such as generating the top five list curated for the user based on previously visited locations, the Scrum-agile model reigns superior over other waterfall models. With a waterfall model, a developer may not realize a large deficiency until the team is in the testing phase. This issue can lead to large setbacks due to the team starting from the top of the waterfall model again. An Agile model is designed to be designed, developed, and tested repeatedly which allows it to be very flexible to change and unforeseen circumstances. An unexpected change was introduced in module five when the client asked for a change to the requirements. The client asked for the types of travel to be focused on Wellness and Detox vacation packages rather than all vacation packages. When the product owner briefed the team, the Tester quickly shifted focus and updated the project test cases, and the developer identified features that will need to be reimplemented. Then the product owner was able to deprioritize other stories in the backlog to focus on the changes all while not shifting the timeline.

While the tools used in real-life day-to-day Scrum-agile settings are abundant I did not use nearly as many tools. However, I did use a couple commonplace software tools to achieve relative success within this course. The first tool I used that I submitted all my paperwork through is Microsoft 365 Word. This software allowed me to easily utilize the templates provided to quickly and efficiently write the required documentation for this class. The second software I believe was instrumental to my success is Eclipse which allowed me to open projects edit them and then repackage the revised product to then later submit to Brightspace for grading. However, many tools are not software but concepts, for example, the daily scrum meetings allow for guaranteed communication between team members as well as every member being on the same page. This closely aligns with the Plan portion of the agile methodology.

The number of pros associated with Scrum-agile models far outweigh the cons. The first positive aspect of Agile I would like to mention would be the flexible nature of the process allowing the time to change direction on the fly. This flexibility is due to the small sprint timelines and daily planning. The second positive aspect that I witnessed is the quick and effective communication that occurs within Scrum. Having a daily face-to-face meeting allows members to align themselves to carry out common goals and plan to aid their teammates. The third pro that I would like to highlight is the small team size. A small team size allows team members to build relations and reward the team with greater cohesion and workplace morale. The con I would like to highlight would be scaling project sizes within Agile. If the team Is tasked with a project that would take a long time to finish and would require several Scrum Teams to facilitate its needs the benefits of Scrum start to deteriorate. The biggest pro for Scrum is the extremely effective communication, however if multiple teams are implemented, communication of this degree couldn't be supported.

Overall, I believe that a Scrum-Agile approach is the most effective way to conquer the SNHU Travel project for the following reason. The project is small and can be easily processed in short sprint iterations by a single team.