**Final Retrospective**

**CS-250 SNHU**

**Robert Sanford**

Throughout this term we have focused on the various roles within a Scrum team and how they work together and independently to successfully complete projects. The project we worked on this term was building a new website for fictional travel agency called SNHU Travel. The company wanted to update their website to be trendier and more competitive in the market as well as attract new customers.

The role I took on was that of a Scrum Master. As the Scrum Master I was responsible for making sure that everyone involved in the project adhered to and understood Scrum theories, practices, and rules. The Scrum Master was also tasked with maximizing value of the work produced by the Scrum team and acted as a servant leader for the team as well. Part of this included facilitating Scrum events such as daily sprint meetings in which I would ask each team member what they would be working on that day, what they accomplished the previous day, and if there are any impediments to their progress. These meetings played a significant role in the progress of this project, as it was the time for everyone involved to “get on the same page” and to address any obstacles they were facing at the time. As a Scrum Master, I also served the product owner by finding different techniques for backlog management, and communicating what the backlog should look like to the Scrum team.

The development team was instrumental in the success of this project. By prioritizing all the various user stories according to their importance, along with other factors, they were able to efficiently produce clear, working code for the new SNHU Travel website. Using the pair programming technique was remarkably effective as it was easier to catch mistakes and fix bugs prior to the code being tested. This also assisted with the morale of the team as it created a sense of comradery between the developers who were working on similar tasks and available to help each other. As for the Testers, their role in this project was particularly important as well. We decided to go with a test-driven development approach. We first established what criteria the code would need to meet, and then developed it accordingly. This gave the development team a clear picture of what needed to be done and the code needed to accomplish. This approach also cut down on redundant code and allowed the team to focus on the user stories we were addressing. Also, by producing just enough code to pass the tests we avoided wasting time on creating code that was not going to be needed.

Using an agile approach in this project helped tremendously in completing each user story, and the project itself, successfully. By breaking down the whole project into smaller user stories using story points we were able to work and focus on each one according to its importance, thus creating a more efficient work environment and process. Using story points allowed the team to plan their work accordingly, estimate the amount of time required for each story, and enabled them to make sure they had enough time to complete all their tasks. Also, the use of discussion boards was very useful in communicating ideas as well as obstacles each team member was facing.

There was also a time when the client decided to change what it was, they wanted to include in the website. SNHU Travel decided towards the end of the project that they wanted to include more “heatlh and wellness” vacation packages on the site, which was not part of the original requirements. Being that we decided on the agile approach to this project, accommodating this new requirement was very much possible. Because the development team and testers were coding just enough to pass the tests and addressing the user stories according to the story points, adjusting to this new requirement was less of a problem than it could have been had we taken a Waterfall approach to this project. With Waterfall, accommodating this new requirement would have been exceedingly difficult because it came towards the end of the project. It would have been near impossible to incorporate something as significant as this if the plan and code did not include any room for changes of this nature. Using an agile approach accounts for changes and allows new requirements to be met without as much interuption.

In all, using the Scrum-agile approach to the SNHU Travel project was very effective in my opinion. Had we used the waterfall method, it would have been much more difficult to incorporate the changes that the client required towards the end of the project. The Scrum-agile approach also keeps the whole team engaged throughout the project, as opposed to everyone having a big workload and rarely interacting. This also kept the team on the same page and communicating with each other, which would also seem to increase efficiency.

Charles G. Cobb. (2015). *The Project Manager’s Guide to Mastering Agile : Principles and Practices for an Adaptive Approach*. Wile