**Sprint Review and Retrospective**

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CS250 Software Development Lifecycle

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Over the course of this project I was tasked with taking on the roles of the various members that make up a Scrum Team: Scrum Master, Product Owner, Tester, and Developer. I was assigned each role at various stages of the development lifecycle, and by experiencing the development of the project from the different perspectives that each role fulfills I gained a better understanding of the software development lifecycle using the Agile approach.

The first role that I was placed in was that of the Scrum Master. The Scrum Master is effectively the team lead and as such acts as a facilitator as well as a mediator between those within and outside the team. The major duties of the Scrum Master are to plan and execute the various events of Scrum ceremonies within the development lifecycle which include; Sprint Planning, Daily Scrums, Backlog Refinement, and Sprint Review and Retrospective. By conducting Spring planning and Daily Scrum meetings the team can discuss what aspects of the project they are currently working on, what tasks may need to be prioritized, and any issues that may be impeding progress. During this time any problem-solving and troubleshooting can be conducted to ensure development flows in a steady and timely manner.While taking the role of Scrum Master during this course I was asked to complete a team charter for this project. The team charter contained the mission statement for the project, an outline of the project criteria, as well as guidelines for how the daily meetings would be conducted and how team members are expected to behave. Completing this charter was particularly useful to understanding how the Scrum meetings are conducted and what topics should be discussed.

The second role I experienced was the Product Owner. The main role of a Product Owner is that of an intermediary between the customer and the development team and is there to provided direction to the team. The Product Owner is in constant contact with the customers and client and relays information on the customers wants and needs to the development team by defining User Stories. User Stories provide the development team with an outline of features tailored to the end user that need to be implemented into the software. With the needs of the end user in mind, the development team can discuss and plan the importance of specific elements that need to be implemented into the software. While in the role of Product Owner I completed a set of user stories based on interviews with users that would be passed along to the development team for implementation and testing. There were particularly useful in deciding what elements should be worked on and in what order.

The third role that took was that of the Tester. My job as a Tester was to review the user stories presented by the Product Owner and produce test cases that would meet the pass/fail requirements. Having detailed instructions on the needs and wants of the end user is imperative to successful testing as development of the project evolves. For this assignment I was tasked with reviewing user stories and revising them into test cases that better suited the need of the user. This was helpful as it provided and understanding of how the goals of a project can shift as new information is presented.

The fourth and final role I experienced in this course what that of the Developer. The foremost role of a developer within a Scrum team is to build and design the software required for the project. The work of a developer can change drastically throughout the development process, and as such, communication with the Product Owner, testers, and other members of the team is crucial. During this week I was presented with a scenario where the requirements for the project shifted and as the developer changes need to be made to meet these new requirements. By applying Agile principles and with effective communication the changes were made quickly and work on the project could continue to flow without issue.

Throughout this course I was placed in each role of a Scrum team and got to experience the software development lifecycle from different perspectives as the project progresses. By utilizing the Scrum-agile approach to software development I gained a better understanding of the development process and how effective implementation of user stories direct a project from concept to completion. Creating user stories as a Product Owner and then revising those user stories as a Tester was crucial to my understanding of how work on a project can flow and evolve and the process to meet those challenges. At a point during this course the scope of the project shifted to providing users with vacation destinations that had a stronger focus on health and wellness and because of the agile methodology this change was made promptly.

By experiencing all the roles of a Scrum team I was able to understand the importance of communication within the agile approach to software development. During the course we were presented with several scenarios where we would communicate with other members of the team. There was a discussion exercise with peers on transitioning from Waterfall to Agile, as well as emails to the Product Owner as a developer or tester to discuss updates to user stories as the needs of the user changed. Outlines of Scrum planning and the daily Scrum meetings also demonstrated the importance of communication to the effectiveness of the Agile approach.

While it has its pros and cons, overall I believe that the Scrum-agile approach was the most effective choice for the SNHU Travel project we completed in this course. The strength of the agile approach is communication. Having a constant stream of communication between the Product Owner and their information from the user to the development team is a boon to productive development. While I do believe that an agile approach is extremely effective it does have its drawbacks. In a group, individual’s opinions on how a project should be worked can vary and can impede the progress.