**Final Project**

**Sprint Review and Retrospective**

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CS-250

Over the course of eight weeks, we adopted the roles within the Scrum team to produce a new website to satisfy the client at SNHU Travel. These were the product owner, Scrum master, developer, and tester. When adopting an agile approach to software development, it is vital that all of the different roles work as a cohesive unit in order to achieve optimal results and adapt to change. The client presented us with a task to revamp their website to cater to their unique clientele, who wish to book vacations based on their specific interests, as well as providing them with personalized content. Throughout this project, we will review how each role of the Scrum team functioned to produce on-time, completed project, while navigating any changes that may arise during the process.

First, we will examine the role of the product owner. The product owner essentially supervised the entire project, while acting as a liaison between the team and the client. They kept an eye on the product backlog, which was the collection of user stories that we determined based on their level of importance. The product backlog was established in the beginning of the project and set the schedule for the upcoming sprints. When required, they would adjust when needed to keep the project on schedule. When the client requested a change in direction in after the project had been started, the product owner called the team to a meeting in order to prepare for the adjustment.

The next role we will examine is that of the Scrum master. This role is not one of particular authority, however, it is more in line of a mentor and peer. They are tasked with keeping the team on schedule, as well as establishing the Scrum framework. They are to facilitate concerns or impediments that may arise during the course of the project. Throughout the project, the Scrum master would hold daily 15-minute standups in order to address and concerns that are hindering the project, as well as reflecting on the past weeks sprint. The Scrum master is also responsible for adhering to the philosophy of Scrum-agile and help to act in accordance. This is all done by taking a hands-off approach, which helped to instill good morale within the team, knowing that their work only needs to be scrutinized if the developers or testers request it.

The role of the developer is the engine of the team. They are responsible for adhering to the user stories in the product backlog and creating workable code in a timely fashion. During the daily standups, the developers must be honest when dealing with any impediments or dealing with time constraints. By having a honest, face to face conversation, they can work through the problems that they may encounter, as well as providing the product owner with the information needed so they can adjust the backlog if needed.

Finally, the role of the tester acts as the second set of eyes for the developer. As the name implies, they would test the developer’s code to ensure that it worked as intended, and if they found any bugs, a bug report would be submitted for the developer to review and revise their code. For this project, the tester was also in communication with the product owner when reviewing the revised the test cases. They drafted an email asking for clarification with specific questions so there would be little doubt what was required.

Throughout the SDLC, each phase is completed on a weekly basis so that the team can produce functional code, as well as address any bugs that they may encounter. As previously mentioned, the team utilized user stories to build the product backlog and help them stay on track to complete the stories in order of importance. This way, they can stay agile in their approach by adjust their schedule accordingly, if need be. For this project, we established the priority, as well as the task and reason.

When the project was interrupted with a change request from the client, the team utilized the Scrum-agile approach by holding a meeting headed by the product owner. Based on research that SNHU Travel found, they wanted to change the slideshow to focus on detox and wellness vacations. This set a new priority for the team, and the schedule was updated. The tester updated the test cases, and the developers reviewed that current status of their features to adjust their schedule to meet the request.

We were able to create a culture of effective communication by establishing a line of constant communication between all team members. When we started this project, the developer had reached out to the Scrum master and product owner asking to create a dedicated teams chat, or slack channel in order to cover anything that was tabled at the standup or help reduce redundancy during the standups if the problem is trivial.

A key component of agile is organization. One way to stay organized and to visually conceptualize the tasks within the project is to use a Kanban board. The Kanban board is a three-column table that lists the tasks in order of “to be done,” “in progress,” and “done.” This helps the team keep track of the flow of the project, as well as getting a boost in morale when they are able to move a task to the done column. Although that is just one useful tool, to stay organized, we also utilized a product called Azure. Azure is an interactive and customizable tool that is used to keep track of user stories, track any impediments, review the bug logs, and view the Kanban board.

As we look back on the SNHU Travel project and evaluate our efforts, we can begin to qualify the effectiveness of the Scrum-agile approach. The agile process is centered entirely on client satisfaction. Having the Product owner be in constant contact with the client, by being transparent with the team’s progress, as well as transparent with the team regarding the wishes of the client, it removes any sense of concern that the either party will be disappointed at the end. This is in direct contrast with the waterfall method, which ultimately does not test or submit the final project until the very end. It also creates a family mentality between everyone working on the team. By having everyone involved during each step of the process, the team members gain a greater sense of worth, which directly affects morale. One issue that is unavoidable is change. Since one of the core principles of agile is needing to be adaptable to change, it can be a negative aspect to those who may work better with those who need a set schedule from beginning to end. Despite this setback, I believe that the Scrum-agile approach for the SNHU Travel development project was the best-case scenario for completing an exceptional product, on time.