**7-1 Final Project Submission: Sprint Review and Retrospective**

Southern New Hampshire University

CS-250 Software Development Lifecycle

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June 17th, 2023

**Demonstrating Various Roles of the Scrum-agile Team**

**Various roles that contribute to the success of the SNHU Travel Project include the Scrum Master, Product Owner, Developer, and Tester. A Scrum Master is the gatekeeper facilitating all communication and collaboration of the Scrum team, stakeholders, and other employees to ensure that Scrum theory, practice, and rules are understood. The role of the Scrum Master contributed to the project's success by facilitating scrum events that allowed the progress of the SNHU Travel project to stay organized with each scope and development. Product Owners are responsible for optimizing the product's value and overseeing all development team's tasks. The Product Owner contributed to the project's success by maintaining a proper product backlog, such as when the project shifted direction, and allowed the team to be up to date with expectations and workflow. The developer must always take responsibility for estimating, planning, and managing the project's progress. The developer's role contributed to the project's success by ensuring a response was provided to move forward. While coding, the developer constantly communicated with the Product Owner and tester to confirm Product Vision was on the right track. Lastly, a tester is responsible for code development by providing honest feedback to enhance product quality. The tester's role contributed to the project's success by thoroughly conducting examinations of the product's quality. By working closely with the Product Owner, the tester obtained insight into what must be achieved to deliver a successful project. Without understanding the roles of the Scrum Master, Product Owner, Developer, and Tester, the SNHU Travel Project would not have been as successful.**

**Scrum-agile approach to the Software Development Lifecycle (SDLC)**

The Scrum-agile approach to the Software Development Lifecycle (SDLC) helped the user story by increasing visibility during the development process. As the SDLC outlines the tasks to build the user stories, it is beneficial during the design phase because it helps to identify the user personas of the desired outcome by portraying accurate information that provides a better understanding of what the users want, why they want it, and how they will use the software for the SNHU Travel project. As the user stories are implemented, the SDLC helps to determine the functionalities that need to be developed. The developer can create code that will let the users perform their business tasks by including the required functionalities. Furthermore, the Scrum-agile approach to the rapid development cycle helps address issues before they become significant problems. For example, during the interview, customers requested travel vacations based on their budgets. If the product excludes customer feedback, it can lead to business failure due to loss of customer loyalty.

**Shifting Directions with the Support of Scrum-Agile Approach**

When the project was interrupted and changed direction, the Scrum-agile approach supported the project completion by refining the Product Backlog. Since the Product Backlog was designed to accommodate changes the customer wanted, the Product Owner was able to shift the priorities to focus on detox and wellness destinations and updated the backlog to provide what is relevant. Cleaning the Product Backlog reduced the risks of being messy and lacking cohesive qualities that can overwhelm the team. Having the Product Backlog accurately reflects the project's status allows the team to stay updated and have a clear outcome of the goal to ensure the remaining time is utilized wisely. With the support of the Scrum-agile approach, the team understood what needed to be delivered first.

**Effective Communication**

**Communication is the key to understanding, solving problems, and learning new things to build one’s career. Below is a sample email from the developer to the Product Owner and tester for inform them of their needs to move forward with the new development plan:**

*Subject: 5/31 – Requesting Additional Information for New Plan – SNHU Travel Booking*

*Greetings Product Owner and tester,*

*As you know, we are moving forward to agile methodology, which has success in superior quality product development, better control, and can improve project predictability. I look forward to working together to strive for continuous improvement while building team morale. To overcome a few project constraints, I’ll need the following information below:*

*Product owner:*

*Please provide a full scenario of the goals and features of the product.*

* + *Specify what are the important dates and deadlines that need to be met.*
  + *Explain what the Product Roadmap for the appropriate design, development, tests, and implementation is.*
  + *Please kindly provide me the feedback from other stakeholders and end users.*

*Tester:*

*We will be requesting your services during the testing phase and expect full documentation of the results. In the meantime, I hope to work closely with you to determine all ambiguities on my end to fix any areas that could be resolved prior to testing.*

*Regards,*

*Developer*

The developer executed a well-thought-out e-mail by defining what was requested, formatting a clear and easy-to-read format with bullet points, and why the specified requests were needed to continue improving. Besides using the body e-mail, the developer optimized the subject line explaining why the e-mail was sent and convincing the reader to open the e-mail. Combining these elements allows the developer to keep the e-mail in a professional tone to avoid misunderstandings, reflecting a safe and positive work environment and encouraging collaboration of valued team members.

**Beneficial Organizational Tools and Scrum-agile Principles**

Various organization tools and Scum-agile principles helped the team be more successful: timeboxing, collaboration, and Jira. One of the most critical principles used was timeboxing because of its benefits in time management. Timeboxing helped to define the amount of time provided in each task, such as user stories and journal writing, which helped to prevent procrastination within the SNHU Travel Project. As being one the core pillars of scrum principles, collaboration allowed the team to have a close relationship and awareness of what everyone is working on. Before the SNHU Travel Project shift occurred, the tester frequently worked relentlessly with the Product Owner to ensure all demands were met to deliver the final test cases by asking valuable questions to clarify what is expected of the user stories. Utilizing Jira software, the team was able to mobilize without any hassle of tracking issues and allowing the team to synchronize their data for enhanced viability. By accessing different arrays of agile tools, such as the Kanban and Scrum boards, the team could continuously align their visualized workflows to improve throughout the project's progression. Without timeboxing, collaboration, and Jira, the team would have missed communications that could have led to the downfall of the SNHU Travel Project.

**Assessing Scrum-agile approach for the SNHU Travel project**

As with all methods, the Scrum-agile approach had benefits such as the ability to change and working well for fast-moving development projects but included risks such as scope creep. Since agile is a collective concept with various techniques, it allows for immediately adapting to new conditions. With Sprints making the project more manageable, the agile methodology kept the team focused and allowed the team to respond to adaptability and flexibility within the five-week duration of the project. With the Scrum Master being aware of all the provided resources and maintaining a constant development team, the team’s velocity was increased to sustain continuous improvement for the fast-moving development project. The consistent definition of done across each task enabled the team to better time management and focus more on better quality delivery. Although sometimes scope creep is inevitable, it’s bound to occur, whether it’s due to a customer’s or shareholder’s change of vision. When the shift to a detox and wellness travel booking happened, the team was notified the due date would stay the same, which hindered the progression. Luckily, due to a good understanding of agile, the team could recover quickly and continue delivering high-quality software. Reflecting on the complexity of the SNHU Travel development project, the Scrum-agile approach was the best approach due to its flexibility, organizational synergy, and adaptability.