**Final Project: Retrospective**

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**Abstract**

This paper reflects the material learned from the beginning of the course to this present day, as a summary included for the final project. Many scenarios were given to showcase the tasks of each role and how they are resolved. With agile methodologies being utilized, each role is given tasks to work as a team, which utilizes the principles and tools to further progress into the project. I discuss how the experience will help in how I analyze and be successful in this career field.

***Roles of the Scrum Team***

In this course we analyzed the tasks of each role within the Scrum Team which includes the product owner, scrum master, developer, and tester. By taking the time to experience each role separately, I was able to gain an understanding of the entirety of the roles. Each role utilizes agile methodology by collaborating and being open. The project is completed with the best quality in mind as well as time optimization. Understanding and learning agile methodology allows for better communication throughout the project for any future experiences.

***Scrum Master***

The first role experienced in the course is the role of a scrum master. It addressed many tasks which pushed the team keep progressing into the project. The role of a scrum master includes supporting and facilitating daily standups, backlog grooming, sprint planning, and sprint retrospective meetings. All the activities allow for the team to communicate effectively.

The tasks given to us as the Scrum master included creating an agenda for the project. It was important to understand the agile methodology of the sprints. The sprint meetings allowed for openness and respect towards each team member. By sharing challenges, suggestions and even notes on improvements, it helped each member progress in their role. Overall, the scrum master’s task is to relay any information or updates to the team while supporting and ensuring the goals are acknowledged.

***Product Owner***

The next role experienced in the course is the role of a product owner. The role of a product owner is to maximize the value of the project and setting the work for the development team. The product owner deals with making decisions based on time-efficiency and product quality. The product owner clearly identifies the tasks and ideology for the product which follows the client’s requirements. The product owner will determine the amount of time needed for each task in each role. The product owner works closely with the scrum master to ensure time-efficiency and updates on information.

In the task given for product owner, we created user stories and analyzed the script for the meeting that was given with the scrum master. The task included developing an application for traveling, where the users asked for requirements such as filtering, price limits, and results based on previous travel experience. With these user stories, the product owner gains information on the expectations and desired features by having a variety of perspectives. The more user stories given, the better the product will be.

***Completion of User Stories***

Using the Scrum-agile approach to the SDLC helped with the completion of the user stories by actively interacting with the developers and testers. In the sprint meeting from the scrum-agile team animation, the product owner discussed with the developer, scrum master and tester on the requirements for the product. The scrum master also communicated with the product owner on timeline. The tester emailed the product owner for more details on the user stories which helped complete the product.

***Tester***

The next role experienced in the course is the role of a tester. The tester is responsible for supporting the development team, testing the product, and determining if the product cases pass or fail. The tester communicates and gets involved in the process of the design to ensure the application does the required functions. As the testing is being conducted, the tester is expected to investigate the product for failures and share them with the team. The user cases created by the product owner were tested by the testers and results are given once the acceptable criteria are checked.

As the testers utilize the user stories, they may also communicate with the product owner for more details regarding certain user stories. The role as a tester gave us an assignment to communicate with the product owner to gather more information on the user stories, the email is shown below:

To: Christy

Subject: User Story Clarifications

Dear Christy,

I read your user stories and am currently developing the test cases with the features required to establish if it passes or fails. I am requesting details to define the test cases. I would like to know the following information below:

User Story One

• Do all the “Top 5” destinations need to be listed on the same page or separately?

• Should the list start from #1 to #5 or vice versa?

• Where should the image be displayed? Will the description be under or next to it?

User Story Two

• If it’s based on previous travel experience, does it use the last experience or the last two?

• Do the “Top 5” destinations display from most relative to previous experience from #1 to #5 or from #5 to #1?

User Story Three

• Does the destination type display in a drop-down menu or list?

• It is based on profile settings and destination type?

Thanks,

Anthony (Tester)

By gathering information, it keeps the process more active and gives every team member the opportunity to be open about their challenges. The user stories provided by the product owner are always being updated with new details. As the user stories get relayed throughout the team, the developer utilizes them to make the product function.

***Developer***

The next role we experienced within the course was the role of a developer. Developers are responsible for designing, testing, making requirements, and communicating with the product owners on their progress to meet the client’s needs. Developers must be flexible and focus on the process to keep the software updated. Changes made by the developers to the software will be relayed to the product owner and client in case any other modifications need to be made.

As we experienced the developer role, some changes were made such as when the product owner changed the requirements. The existing code was required to be modified to fit the new requirements which in this case were for the SNHU travel management wanting to add detox or wellness vacations as the big travel sector. In keeping the same deadline, we had to deprioritize other stories in the product backlog and instead focus more on what the new requirements use.

***Changes In Project Direction***

The code was modified after researching new vacations that met the requirements that were established. All the changes were relayed to all the other teams to ensure the completion of the product. Agile methodology allowed the developer to adapt to the new requirements, unlike using a waterfall model. When accessing the tasks and actively progressing in the project, the ideal method used when anticipating changes in the future would be the agile methodology. In this case, as it was unexpected, it worked to our advantage by letting us modify the current code, giving the tester the opportunity to test the new user cases, and adapting for the scrum master. Using the waterfall method would not work in this case due to not allowing the team to take a step back and modify the product for the new requirements. The modification was expected due to focused and popular vacation spots that change within the season such as trends which came the client asked for new requirements.

***Organizational Tools & Communication***

In the software development lifecycle, there are several phases that allow the process to continue as we mentioned above. It first begins with the scrum master which allowed me to understand the importance of the role along with the others. To effectively communicate with the team, we mocked a role in the discussion board. The topic was to determine how we can be successful in our roles by working together. My role was scrum master in which I responded with creating meetings every morning. Sprints that would be at a convenient time for everyone, to accommodate everyone’s request. Also, by accepting feedback or suggestions after the meetings gives every team member the opportunity to have their ideas implemented for future meetings or challenges.

Another example would be to elaborate on the product backlog that informed the team on the user stories and their priorities as shown below:

![Table

Description automatically generated]()

![Graphical user interface, text, application, email

Description automatically generated]()

Utilizing the product backlog tool allowed for the user stories to stay organized and prioritized due to client requirements. The user stories were categorized in size and importance which helped determine which tasks need to be completed or acknowledged in order. This allowed for the tasks to be completed according to their importance towards the product requirements. The purpose of the user stories is to create a feature that is ideal or convenient for the user during use which adds quality to the product.

We also utilized test cases where we wrote the expected results to pass or fail the product. The revised test case is shown below:

![Graphical user interface, text, application

Description automatically generated]()

![Table

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The expected results are then tested by the tester to determine if they pass or fail. The pass or fail measures are shown in the above table. These tools allowed for the team to be successful in the creation of the product while maintaining its quality. All the team members were able to interact with each other and gather information to support their tasks. Communication also helped during the role of a developer, as I emailed the product owner and the tester to address missing information, as shown below:

To: Product Owner & Tester

We are implementing agile methodology to further improve and accomplish our product. Using agile methodology allows us to successfully complete the product in a timely manner, as well as perfect the product.

Product Owner, I am requesting you to actively practice the following:

• Provide requirements for the product

• Provide expected results from testing the product

• Provide a timeline of the tasks

• Provide feedback to the completed tasks

• Provide information for changes in product features

These are required to ensure the successful completion of the product.

Testers, communicate and work with developers to facilitate any changes in the product.

The service of the testers will be required to confirm expected results. Please provide written reports with errors, faulty components, or improvement suggestions for the development team.

Best Regards,

Anthony (Developer)

***Effectiveness of Scrum-agile Approach***

By using the Scrum-agile approach for the SNHU project we were able to complete the product while maintaining its quality. Some pros would include having the ability to reanalyze or visit steps again to modify the product, testing can be adjusted to new requirements, and overall openness. The cons of using Scrum-agile include hard to manage deadlines, requires a focused team, and possible quality issues if changes are made right before the deadline. Within this course we utilized the agile approach when dealing with the changes made to the product such as when the vacation spots were changed to wellness or detox locations. In using the agile approach, it allowed for us to quickly reanalyze the priorities and go back to developing the product with the new requirements. Scrum-agile is the recommended approach for the SNHU Travel Project due to a deadline being set and the team focusing on completion within that timeframe; also, if expecting modifications such as trending vacation spots.