**7-1 Final Project**

**SNHU Travel Project Sprint Review and Retrospective**

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**Scrum Team Roles**

Throughout Software Development Lifecycle class, I had the opportunity to learn about and act as different parts of a scrum team. During this course I was a scrum master, product owner, tester, and developer. Since I had the chance to experience how a scrum team works from different perspectives, which allowed me to learn and grow as a team member. Though I have had some experience as a member of an Agile team member, this course has given me greater insight on each specific role.

***Scrum Master***

A scrum master is an important role that needs someone that is organized and punctual. A scrum master is the person that helps keep the team on track by scheduling and participating in multiple tasks like: sprint planning, daily scrums, backlog refinement, sprint reviews, and sprint retrospectives. These are all essential sprint events that need to take place to have a successful project.

Prior to every sprint, the team consisting of the product owner, testers, developers, and myself as scrum master will meet to plan the upcoming sprint (sprint planning). This is necessary to ensure each sprint is completed efficiently and on time. During this meeting we will review the potential stories that will be part of each sprint. Priorities and revisions will be looked at during this time. With daily scrum meetings I will be able to gain insight into what has been completed, what is slated to be completed, and any obstacles that might hinder the team’s efforts. Three important questions are asked at each meeting to gain these insights: 1) What did you accomplish yesterday? 2) What are you going to accomplish today? 3) What obstacles are in your way? Throughout this project we have had mock sprint planning and daily scrums, it was during these times that we were told about changes the customer/users would like to see in the final project.

Backlog is refined throughout the entire process. The product owner will be responsible for defining and managing the product backlog with the help of the scrum master. As items are completed, they will be removed from the queue and as issues or new items present themselves, they will be added to the queue. We will also reassess the priority of the stories and reassign them if necessary.

The sprint review and retrospective take place in that order. The sprint review will be completed by the team and presented to the product owner; I will discuss this in the product owner section. The retrospective is also a team event that will take place after each sprint to review the previous sprint. We will review what went well, what went wrong, and what we could do to improve the next sprint. This is an important step that is crucial to continuous improvement and helps ensure that issues do not repeat themselves resulting in delays.

***Product Owner***

A product owner wears many hats in a sense. They have a responsibility to not only the customer but also the business and team. The product owner is the main decision maker when it comes to the project because they are also the end user advocate but also the business advocate. They understand the needs and wants of both parties and are responsible for making the decisions that best benefit both. The product owner is also a subject matter expert and communicator when it comes to the product. They will be the voice of the client/users and will be able convey the vision of the product. Though the product owner wears many hats, they need to be a step back from the team and only offer suggestions, communicate wants and needs of the client/user, and provide direction. Any more than this will lead to micromanaging which is not intuitive for an agile team. The product owner will express the product backlog items and also provide a priority order for the team. Though the product owner is providing a priority order, it is ultimately the team’s decision on what is a priority. Part of coming up with a priority order and delegating tasks, the team utilizes user stories. User stories are created from interviews with potential users to gain feedback on what they like and dislike about similar applications and what their wants and needs are. We build user stories from these wants and needs. If there are many users that have the same wants, then those items are higher on the priority order. When it comes to the end of a sprint, the team will provide a sprint review to the product owner. The product owner will review what has been completed and confirm that each item on that sprint is completed and meets the clients/user’s standards. At this point, all defects found during that sprint need to be resolved unless the product owner approves a deferment of the solution to a later sprint. Below is an example of product backlog:

A close-up of a product backlog

Description automatically generated

***Tester***

The testers are essential to ensuring that the product completed meets the criteria set forth by the product owner, client, and users. The testers utilize the user stories to create test cases which will determine if an item passes or fails a test. The test cases contain all the pass criteria and also criteria that would dictate a failure on that test case. An example of a test cast is shown below:

A screenshot of a computer

Description automatically generated

The testers will reach out to the product owner if there is any clarification needed on any given user story. Test cases are designed and used for most if not all aspects of the product to ensure a quality product is provided to the client/user. Communication is key when it comes to a successful project. Below is an example of an email that was sent to the product owner from me as the tester asking for clarification and a potential meeting to be able to have a conversation on the matters at hand.

To: Product Owner

Subject: User Story Clarifications

Dear Product Owner,

I am reaching out to you for some clarifications on the user stories that were provided to us for SNHU Travel. We are currently working on creating the test cases for this project and would like to see if we could get more details as to what the users are expecting? If there are more details of what the users would like, could you please send them over to my team at the earliest convenience? If we already have all the details provided, would it be possible to set up a meeting with my team and the users interviewed so we could get some clarification to what they would like to see and possibly ask some more detailed questions to ensure we are providing what is expected? Thank you for your help and I look forward to your response.

Thanks,

Chris King

***Developer***

On an agile team the developer or development team needs to be cross-functional and self-organized. On an agile team, the developers could be working on any aspect of the development, they need to be able to work through the backlog and create releasable items. This is different from the waterfall model where developers would be working on specific items in a specific order to achieve a finalized product. This team is provided with a list of items that need to be completed and the priority of each item on the list, but it is ultimately the team that decides what is getting worked on and when. The development team for an agile project shouldn’t be to large, normally between 3 and 9 members. As a developer on the SNHU Travel agile team, I find that communication is key to success. When changes are made to a project, it is imperative that all members of the team are updated in a timely manner to ensure that there is no unnecessary rework. Also, if there are any aspects to the project that are not clear, questions should be raised to ensure everyone is on the same page and everything goes smoothly. When changes came up during the SNHU travel project, there were a few questions that I needed to ask to have a complete understanding of the client/users needs. Some of those questions were: First, I would like the product owner to clarify any additional need/wants that the customer would like applied while we are updating the work already completed. Another question would be if there are any specific detox/wellness specifications that would need to be considered. I would also ask about the layout and design of the product, since it will now be focused on detox/wellness, the customer may want a more relaxing look.

**Effectiveness of Scrum-Agile Approach for the SNHU Travel Project**

For our SNHU Travel Project, I believe that the scrum-agile approach what the best choice. Like everything else in this world, there are always pro’s and con’s. Some of the pro’s would be quick delivery of a product, adaptability to a project, ease of collaboration, transparency, continuous improvement, and less preparation prior to the project. Since the project is broken down into sprints, it allows the teams to complete the sprints with a focused mind and knowledge that the sprint will be quick and not drawn out. Since there are multiple sprints in a project, this allows follow up from each sprint to be implemented in the next sprint. This means that if there are problems with an individual sprint, the team can adapt to ensure that issue does not come up in the next sprint. Since the project is broken up, there is less planning needed at the beginning of the project and the team can get to work quicker. Then on the other side, there are some con’s to scrum-agile approach. This is more useful for projects that you have a defined goal whereas projects with a vague goal could result in project creep. If the team is not good at keeping their project boards up to date, items could get lost in the shuffle and sprints could fall behind. It is also hard to predict a defined deadline due to the use of multiple sprints. Since these are completed in sprints, documentation is not always at the forefront and sometimes gets left behind till the end.