**CS 250 7-1 Project: Sprint Review and Retrospective**

**By David Shelt**

**Southern New Hampshire University**

**Demonstrate how the various roles on your Scrum-agile Team specifically contributed to the success of the SNHU Travel project.**

The roles of every team member made the SNHU Travel project a success, and this was due to using agile methodology. Here, we will start with the Product Owner. The Product Owner acted as a liaison between the client and the rest of the Scrum-agile team. The Product Owner was able to gather feedback from SNHU Travel as far as to what they were looking for in a competitive product to offer to customers. From there, the Product Owner was able to gather these requirements and able to convert them into user stories and then put them onto the Scrum board in order of priority. The user stories with the highest priority would be on the top of the board, and the user stories with the lowest priority would be on the bottom of the board. We learned from this project, that sometimes the demands of the customers can change. By keeping in constant contact with the client and/or stakeholders, the Product Owner is able to know of any new requirements that the client needs and is therefore able to communicate those updated requirements to the client. For example, when SNHU Travel decided that they now wanted to focus on providing their customers with vacation packages that were more focused on detox and wellness, the Product Owner was then able to promptly convey the new requirements to the rest of the Scrum team, and the team was then able to update the software in a timely manner. The Product Owner here made a new user story and then updated the priorities of the user stories on the Scrum board, which is another role that the Product Owner played.

Next, we will move on to the role that the Scrum Master played in this project. When I think of the Scrum Master, I always think of the navigator of a ship who helps the rest of the crew know in which direction they are heading and the best way to get to the destination. The Scrum Master helps keep the Scrum Team organized and on the right path of achieving all their goals in a timely and successful manner. For example, the Scrum Master heads a daily meeting every day that last 15 minutes where each member of the team states what they accomplished the previous day, what they plan to accomplish that current day, and also address any challenges they are experiencing. The Scrum Master leads by example in these meetings by going first. These meetings help track the progress of the overall project and how close the team is to completing the project or the certain Sprint they are working on. The Scrum master works to make sure everything in the project runs smoothly and helps the rest of the team if there are certain challenges that cannot be fixed by an individual team member. Also, the Scrum Master works together with the Product Owner to help keep track of the progress of the project. One other role of the Scrum Master was to set the policies for the team during the product. This included how the members of the team were to conduct themselves and what times they were to show up for certain meetings. When I was a Scrum Master in an earlier module, I set these policies by creating a charter for the team. For the SNHU Travel Project, the Scrum Master was able to help all members of the team stay on track to complete the project successfully.

The next role in the SNHU Travel project was that of the developer, which was a very vital role in the Scrum-agile team. The developer created the code in the java language that in turn created the design of the interface of the software, along with whatever was outputted from the code. When working as the developer For the SNHU Travel project, I created the top five destinations list by creating a brief description and also a photo of each vacation destination. I also made the layout by making the colors of the background and border to make the slideshow look professional. When the needs of SNHU changed, I then went back to the code and made a list of the top five detox and wellness destinations and slightly changed the layout and colors of the interface to satisfy the updated requirements from SNHU Travel.

The final role of the team in the SNHU Travel Project was that of tester. The tester is the team member who works with the developer to set the pass and fail measures for the product. The tester takes the code written by the developer once any bit of code is sufficient to be tested and makes sure the software if functional up to that point. The tester will communicate with the developer when the code is successful, and where there are areas of improvement. The tester also works with the Product Owner on the user stories to help successfully create the pass and fail measures for every project based on the user requirements. If there are multiple projects being worked on for multiple clients, then the tester will work with the Product Owner to set similar pass and fail measures for all the projects, along with knowing which ones are different.

**Describe how a Scrum-agile approach to the SDLC helped each of the user stories come to completion.**

By taking on a Scrum-agile approach, the user stories were ablet o be completed in a timely manner because of constant communication within the Scrum team, along with the constant communication during the project between the Product Owner and the client and/or stakeholders. When we created the user stories in module three after meeting with our clients at SNHU Travel, we were able to prioritize the user stories that where the most importance of the customer, such as having a Top Five Destinations list, and which ones were not as important, such as the option to see only cruise packages. From there with each Sprint, we could complete the user stories with the higher priorities first, and those of less importance last, as well as readjust the user stories if needed. There were Daily Scrum meetings to update us on our progress and if any new challenges arose, along with Sprint Reviews between the Scrum Team and the stakeholders. This helped us to get their feedback as to what they were satisfied with up to that point, and what could be changed or enhanced. The Scrum Board was also helping in knowing which user stories still needed to be completed, which ones were in the process of being completed, and which stories have been completed for that Sprint. The Product Owner also helping with the backlog of user stories was also helpful.

**Describe how a Scrum-agile approach supported project completion when the project was interrupted and changed direction**.

The Product Owner keeping in contact with the clients helped us know of any changes in the business needs of the clients, which what happened when SNHU Travel wanted to focus on detox and wellness packages. By having this constant communication, the team as able to regroup, readjust the priorities of the user stories on the Scrum board, and meet these new requirements and complete the Sprint and project on time. By the team communicating with each other through daily Scrum meetings, we were able to know where we stood on our progress for each Sprint and the project overall. We were also able to help other team members out who were facing challenges. At one point in their career, another team member may have experienced the same problem and then overcame that challenge. This is where Scrum-agile helps because the team member who may have experienced that challenge in the past and overcame it may be able to help that other team member who is currently experiencing that same challenge. This helps to not delay the deployment of the project and helps ensure a timely and successful project that will satisfy all the client’s needs.

**Demonstrate your ability to communicate effectively with your team by providing samples of your communication**.

In modules four and five, I was asked in both journal assignments to write emails as the tester and the developer. As the tester, I wrote an email to the Product Owner in order to find out the requirements the customers are expecting in order to set the proper pass and fail measures. In my journal, I also asked for feedback from the Product Owner in regard to the software that has been developed so far. This helped for myself as the tester readjust my pass and fail measures for the next Sprint.

As the developer, I wrote an email to the Product Owner and Tester asking what the client is expecting of their product so I could know how to properly develop the software. I also requested to know of the user stories and any new ones that would come up so I could know if I needed to redevelop the code in a timely manner, along with requesting to be aware of any deadlines and for lines of communication to be always open.

In module six, I was part of a team and played the role of the tester. As the tester, I asked the product owner to inform me of the user requirements up front so I could set my pass and fail measures, along with asking for input that the client had after each Sprint Review. I also asked to be informed of any changes in the user requirements so I would know if and when to update my pass and fail measures. In addition, I also requested to meet with the Product Owner to go over the projects of other clients we have to find any similar pass fail measures in order to be more time efficient and more helpful to my team. I wrote to the developer to ask for any code as to as it became sufficient for testing in order to find any bugs and to make sure the code was working properly up to that point. I then wrote to the Scrum Tester to see if we could have a meeting as an entire team so the other members of the team could better understand my role and know the things I am looking for as a tester in each Sprint. By keeping these communications with the entire Scrum Team, this helped to ensure that SNHU received a quality product in a timely manner.

**Evaluate the organizational tools and Scrum-agile principles that helped your team be successful**.

One important Scrum-agile principle was helped the team be successful was welcoming changing requirements, even when it happened in the late stages of product completion. This was important when SNHU Travel decided to change its focus to offering detox and wellness destination packages. While the team may have seemed stressed when watching the PowerPoint presentation, all it took was a little bit of change from the developer in order to meet client satisfaction. The team proved to be flexible by using Scrum-agile methodology.

Another principle was constantly communication with the client through the project by having Sprint Reviews and giving the client continuous delivery in the process. SNHU Travel was able to give constant feedback during every Sprint Review and that feedback helped to tell the team where they were strong in the project and where there could be improvements.

One tool that was powerful during the Scrum-agile process was the Scrum Board. Every day, the team was able to see the product backlog, or the to-do list, what user stories were currently in progress of being completed, and which user stories have been completed. Therefore, the team was able to see their progress on a daily basis. Speaking of daily basis and Scrum boards, the Daily Scrum meeting helped the team meet daily to go over the accomplishments of the previous day, what planned to be accomplished the current day, and if there were any challenges the team members were facing.

One tool I also forgot to mention was the Sprint planning that was at the start of the project. Here, the Scrum team was able to develop the user stories based on the requirements of the client, and then prioritize those user stories in the product backlog on the Scrum board.

**Assess the effectiveness of the Scrum-agile approach for the SNHU Travel project**.

For the project, one of the pros of using the Scrum-agile process is that it is best suitable for a large and complex project. At the beginning of the project, there were quite a few of requirements that SNHU Travel had. These requirements included having a Top 5 destinations list based on the customers previous vacations or browsing history, a list of the hottest deals, and the ability to choose only certain types of vacations, such as only cruise packages.

Another pro is that through the Sprint Review, the clients or stakeholders become collaborators in a way because they can view what has been completed during the project and can give feedback to what could be changed. This helps because the client does not have to wait until the end of the project to see the work. They can see the work as it is being completed, much like SNHU Travel was able to see the slideshows that were developed for the vacation packages and offer input after. Whereas if we were using the waterfall approach, then the client would have to wait until the project was completed before they could see what the product looks like. This leads into another pro which is flexibility. When SNHU Travel decided to change its business focus, the team was still able to get the project completed in a timely manner.

The con of using Scrum-agile that there is no precise date or cost to provide to the client. There would be troublesome if the client needed the project to be completed under a certain budget and in a short window of time, especially if the client had many changing requirements during the project. It is also not a simple process to convert from other methodologies to Scrum. There will always be bumps in the road in transitioning methods in all forms of business, not just software development. So, if this were the first project using Scrum-agile methodology, then there could have been problems in the communication and in the deployment of the product.

Since there was a changing requirement during the project, and we were able to work in small teams, which is the two-pizza rule, we were able to complete the project in a time efficient manner by using Sprints. This resulted with a product on time at an efficient cost for SNHU Travel by using the Scrum-agile approach over the waterfall approach. Therefore, for this project, using a Scrum-agile approach over a waterfall approach was the best method to use.