**CS250 Final Project Sprint Review and Retrospective**

As the Scrum Master for the SNHU Travel project, I am responsible for facilitating the Scrum process and ensuring that the team follows the Scrum principles and values. In this retrospective, I will summarize, analyze, and draw conclusions on the work completed during the course of the development. Specifically, I will address how the various roles on the Scrum-agile team contributed to the success of the project, how a Scrum-agile approach to the SDLC helped each of the user stories come to completion, how a Scrum-agile approach supported project completion when the project was interrupted or changed direction, and how effective communication principles and organizational tools contributed to the success of the project. Finally, I will assess the effectiveness of the Scrum-agile approach for the SNHU Travel project and determine whether or not it was the best approach.

Each member of the Scrum team played a crucial role in the success of the SNHU Travel project. As the Scrum Master, I facilitated the Scrum process by scheduling and facilitating daily stand-up meetings, sprint planning meetings, sprint review meetings, and sprint retrospective meetings. I also ensured that the team followed the Scrum principles and values, such as transparency, inspection, and adaptation.

The Product Owner was responsible for creating and maintaining the product backlog and ensuring that the team delivered business value in each sprint. The Product Owner worked closely with the stakeholders to understand their needs and priorities and communicated those needs to the team. The Product Owner was also instrumental in organizing end-user feedback used in the development of user stories.

The Development Team consisted of multiple developers who were responsible for designing, developing, testing, and deploying the application. Each developer had a unique set of skills and expertise that contributed to the success of the project. This multifaceted team was vital as each of their individual skill sets attributed to our Product Goal. While diverse knowledge and experience are paramount, the impact of cooperation and collaboration throughout this team cannot be overstated. The Agile Scrum approach requires early intervention of testing and quality control to ensure a sound and adaptable product, which the development team understood fully through effective communication.

The Scrum Master, Product Owner, and Development Team worked collaboratively to ensure that the user stories were completed within the sprint timebox. For example, during the first sprint, the Development Team worked on creating the user interface and implementing the profile login functionality, while the Product Owner prioritized the user stories based on business value and worked with the Scrum Master to ensure that the team was on track to meet the sprint goal.

The Scrum-agile approach to the SDLC helped each expected element come to completion by breaking the development process down into sprints. Each sprint had a clear goal and an organized product backlog that needed to be completed within the sprint timebox. The Product Owner was responsible for prioritizing the user stories based on business value and communicating those priorities to the team. The Development Team was responsible for designing, developing, testing, and deploying the application, and the Scrum Master was responsible for facilitating the Scrum process and ensuring that the team followed the Scrum principles and values.

For example, during the first sprint, the team completed the profile login functionality and the Top 5 Destinations List, which was a crucial component of the application. The team worked collaboratively to ensure that the user interface was user-friendly and met the stakeholder's needs. The team also tested the login functionality to ensure that it was secure and met the stakeholder's requirements. Finally, the browsing functionality was personalized to the users’ preferences and requirements.

The Scrum-agile approach supported project completion when the project was interrupted and changed direction. For example, during the second sprint, the stakeholders requested a change in the application's design and functionality. The Product Owner communicated the change to the team, and the team worked collaboratively to incorporate the change into the application. The team also worked closely with the stakeholders to ensure that the change met their needs and requirements.

Effective communication was crucial to the success of the SNHU Travel project. As the Scrum Master, I facilitated daily stand-up meetings, sprint planning meetings, sprint reviews, and retrospectives. During these meetings, I ensured that everyone had an opportunity to speak and that each team member was aware of the project's status. I encouraged open communication and listened to everyone's concerns and ideas, even if they were not directly related to the task at hand.

I also utilized various communication tools to ensure effective collaboration among team members. We used Slack as our primary mode of communication, which allowed team members to easily ask questions, share progress updates, and provide feedback. I made sure to respond promptly to messages and encouraged team members to communicate with each other as much as possible.

Overall, I believe that the team’s effective communication and use of communication tools played a crucial role in the success of the SNHU Travel project. By promoting open communication, encouraging collaboration, and using effective tools, we helped to ensure that the project ran smoothly and that all team members were aware of the project's progress at all times.

Another key principle of the Scrum framework is transparency. In order for the team to work collaboratively and effectively, everyone needs to be aware of the current status of the project, including progress, obstacles, and any changes that occur. During our daily stand-up meetings, we shared updates on the work that had been completed, any obstacles that were encountered, and plans for the day. This allowed us to identify any issues early on and make adjustments as needed. In addition, we used a shared project management tool that allowed everyone to see the current status of each user story, including who was assigned to it, what stage it was in, and any notes or comments. This helped us stay on track and ensure that nothing fell through the cracks.

The Scrum approach also emphasizes continuous improvement. Throughout the project, we held retrospectives after each sprint to reflect on what went well, what could be improved, and what changes we wanted to make going forward. One example of this was when we noticed that our daily stand-up meetings were taking longer than they should. We discussed the issue during our retrospective and decided to implement a time limit for each team member's update. This helped us keep the meetings focused and allowed us to make better use of our time.

Effective communication is essential for any successful project, and the Scrum framework places a strong emphasis on collaboration and communication. As the Scrum Master, I made sure to facilitate regular communication between team members, both during our daily stand-up meetings and through our shared project management tool. I also encouraged open communication and made it clear that everyone's input was valuable. This helped to build trust and foster a sense of ownership and commitment among the team.

In terms of the organizational tools that helped our team be successful, I found that the shared project management tool Smartsheet was particularly effective. It allowed us to track the progress of each user story and make sure that nothing fell through the cracks. We also used a visual board to track our progress during each sprint, which helped us stay focused and motivated.

I believe that the Scrum-agile approach was highly effective for the SNHU Travel project. One of the main benefits of the Scrum framework is its flexibility, which allowed us to adapt to changes in the project scope and direction. For example, when we discovered that one of our user stories was no longer feasible, we were able to quickly pivot and focus on other areas. In addition, the regular retrospectives allowed us to reflect on our progress and make adjustments as needed, which helped us stay on track and ensure that we were delivering a high-quality product.

However, there were also some challenges associated with the Scrum-agile approach. One of the main drawbacks was the need for constant communication and collaboration, which could be challenging when team members were working remotely or had conflicting schedules. In addition, the Scrum framework places a strong emphasis on self-organization, which can be difficult for teams that are used to more hierarchical structures.

In conclusion, I believe that the Scrum-agile approach was the best approach for the SNHU Travel development project. It allowed us to work collaboratively, adapt to changes in the project scope, and deliver a high-quality product on time and within budget. While there were some challenges associated with the approach, these were outweighed by the benefits, and I would recommend the Scrum-agile approach for future projects at ChadaTech.