**Module 7 Final Project**

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1.Demonstrate how the various roles on your Scrum-Agile Team specifically contributed to the success of a project. Use specific examples from your experiences.

All the roles in the agile scrum team contributed to the success of the project. The product owner was the visionary and developed a clear vision for the SNHU Travel software requirements. The product owner conducted customer interviews that gathered specific feedback for essential features needed in our SNHU Travel software. For example, our customers expressed a need for a feature that would generate a list of top destinations based on the user's budget. The product owner then took the feedback and prioritized it in the backlog by breaking it down into actionable steps for the scrum team. This step allowed the team to envision what was needed to meet our client's expectations and ensure the software exceeded user needs. The scrum master was the coach and created a safe space for team members to discuss roadblocks openly. The scrum master ensured that all Scrum events were executed flawlessly and that the team remained focused and collaborative. For example, during sprint planning the scrum master clearly outlined the sprint goals and objectives. This structure helped the team understand their priorities and allowed them to break down tasks into manageable steps. The developer was crucial in turning our team's idea into functional features. By collaborating closely with the product owner and tester they translated user stories and acceptance criteria into functional software. For instance, when the product owner prioritized a feature for generating a list of each user’s top destinations based on preference and recent vacations, the developer worked on the necessary features and user interface to ensure this feature was done first and was functional. The tester had a huge role in developing test cases for all features. The tester used the acceptance criteria and desired outcomes from user stories to create detailed and focused test cases. For example, there was a feature needed to allow users to set their travel preferences. The tester used the user stories with projected outcomes to develop a test case that outlined the steps required to validate this feature. These test cases developed by the tester helped ensure that each aspect of the travel preferences feature functioned as intended. Which ultimately allowed us to build a fully functional and safe travel software that met our client’s expectations.

**2.** Describe how a Scrum-Agile approach to the software development life cycle (SDLC) helped user stories come to completion. Use specific examples from your experiences.

The scrum agile approach made the user story development process easier by allowing everyone to collaborate to identify any potential challenges early on. The collaboration helped to create user stories that best solved the client's needs. For example, when the product owner conducted the customer interviews we were able to write user stories from the perspective of end-users. This approach got everyone involved in breaking down these features and ensured that the user stories were detailed with important information like specific preferences for vacation types and price limits.

3. Describe how a Scrum-Agile approach supported project completion when the project was interrupted and changed direction. Use specific examples from your experiences.

By using a scrum agile approach we prepared for there to be disruptions and changes in direction. One of the main characteristics of agile is adaptability. By taking user feedback into account and incrementally developing it allowed us to continuously adapt and improve. While using this approach we were able to change product backlogs and reprioritize tasks effectively. For example, there was a sudden change in requirements made by SNHU Travel management. Having the agile framework allowed us to implement those changes as soon as possible. We were able to reprioritize product backlogs, build off of our previous progress, and update test cases to match these new changes. These steps allowed our developer to get a good understanding of the new requirements and develop a feature that met the client's new expectations. Without this adaptability, our project could have failed.

4.Demonstrate your ability to communicate effectively with your team by providing samples of your communication. Explain why your examples were effective in their context and how they encouraged collaboration among team members.

Communication was key to properly collaborating and allowing all of our team members to understand all requirements. Below is an email example of some communication between the product owner and tester:

Hello Christy & Brian,

I hope this message finds you well. I am currently starting to develop under our new plan. I would like to clarify some details to ensure that our development aligns with the user's expectations. Could you please answer my following requests:

1. Could you please provide detailed user stories and acceptance criteria for the new features? Having clear definitions will help me understand the expected outcomes.
2. What conditions must be met for the story to be considered complete?
3. What features are marked as a priority? I would like to get started on these as soon as possible.
4. I would love to establish a regular feedback loop. Would it be possible to schedule brief check-ins throughout the sprint to discuss progress and any adjustments?

Having this information will greatly assist me in aligning our development efforts with the project goals. Thank you so much!

* + Jose Lopez

The example worked well because it gave our team members a clear and well-organized request with priorities that allowed them to share their ideas and opinions. By asking for feedback on user stories and suggesting frequent check-ins the communication helped build an environment of collaboration. I know that everyone felt appreciated and involved in the project in this new environment. This in the end helped produce better results and more collaborative teamwork.

5. Evaluate the organizational tools and Scrum-Agile principles that helped your team be successful. Reference the Scrum events in relation to the effectiveness of the tools.

JIRA helped our help team build and prioritize our product backlog so we could tackle the most important tasks first. That way everyone’s efforts stayed focused on what mattered most for the project. Our team was also able to use JIRA in sprint planning sessions by assigning tasks from the backlog to specific iterations which helped the team increase efficiency. Azure Boards allowed our team to create, track, and manage work items such as user stories. This helped us prioritize work and ensured that everyone was aligned on project goals. In our daily stand-up meetings Azure Boards for visualizing work tasks ensuring that everyone was aware of their responsibilities. Many agile principles helped our team be successful but the most important were collaboration, iterative development, and self-organization. Without collaboration, our team wouldn't have been able to effectively communicate and share ideas which would’ve led us to potential miscommunications and delays. Daily stand-up meetings provided a platform for team members to discuss their progress, challenges, and next steps. The collaboration on pair programming and shared knowledge helped our team become self-sufficient. Iterative development allowed us to break the project requirements into small manageable increments. This principle was important because it helped the team understand what we were working on and how completing it would bring us closer to our goals. Each sprint consisted of iterative development which allowed us to see progress being complete. Lastly, self-organization allowed our team members to take ownership of their work. With a supportive and collaborative team around them, our team was able to tackle tasks at their own pace. This helped them build confidence in themselves and gave them a sense of freedom to suggest solutions or improvements. We saw their sense of self-organization during sprint reviews, this is where our team was able to talk freely about what went well and what could be improved on. The team was able to ask for help or help others around them to help everyone reach their goals.

6. Assess the effectiveness of the Scrum-Agile approach for a specific project. Address each of the following:

* Describe the pros and cons that the Scrum-Agile approach presented during the SNHU Travel project.

With a scrum agile approach, our team was able to adapt to any sudden changes in requirements. Having a framework that is built around customer and client feedback we were able to input their changes into functional features relatively quickly. The Scrum model we used focused on collaboration which provided a solid foundation for our team to feel comfortable sharing ideas and suggestions. On the other hand, for the scum agile approach to be 100% effective it needs to be fully developed in all aspects of the project. From planning to developing to testing to maintenance. This needs all members of the team to be fully trained in agile practices for it to be effective. This can be a challenge for team members who may have not gained any efference or knowledge in the best practices. In our SNHU Travel project, there was a lot of planning and organization before any development even started. This can be risky for teams that are unsure of how long it will take for a project to complete. There were moments where it felt like we didn’t start and got the ball rolling as fast as possible but in the end we finished strong.

* Determine whether or not a Scrum-Agile approach was the best approach for the SNHU Travel development project.

I 100% believe that a scrum agile approach was the best approach for our development project because it allowed us to be flexible in responding to changing client and user needs. Having continuous communication and collaboration among all team members, clients, and stakeholders ensured that we were able to develop a fully functional software on time. The iterative steps of scrum allowed us to have assessments to reflect on software issues and team performance. This approach felt natural and set us up for success early on in the development process. I would choose this method every time to develop software as a team.