**7-1 Final Project**

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All roles in a Scrum-agile team are necessary and all roles should work together with excellent communication and flexibility to ensure agile is implemented properly and as efficiently as possible. As the Scrum Master, my job is to enable our team and assist them with any roadblocks they may have and ensure good self-organization using the various agile principles and practices. I believe I was successful in the above obligations as well as scheduling the various Scrum events and ensuring there was proper communication from the team and accountability through these events. As Scrum Master I also created the agile team charter which clearly defined the various roles in the team, the success criteria, stated the key project risks, and established the rules of behavior for the rest of the Scrum team. I believe it is important that I communicate all these things because it gives the team a clear picture of the development project moving forward, setting clear boundaries and rules, and declaring the various Scrum events they will need to attend.

The Product Owner was critical in developing a product with high value for the SNHU Travel site. They were always available for the client and tried to get the client's goals for the project as well as get a clear picture of what they were trying to achieve. The Product Owner also worked on the backlog by creating user stories and prioritizing them from most to least important. This lets the development team and testers know what to start on first and gave the entire development team a clear picture of the use cases so they could more easily develop a product with high value for the customer. This also lets the testers create better test cases since they know what experience they want the end user to have. The reason the user stories make it easier for the development team to create their product is the included acceptance criteria. This educates the team to know exactly what they need to create to develop a product with value for the customer. Without the Product Owner meeting and interviewing with the customer, we would not be able to have a clear understanding of their goals, and therefore it would be a lot more difficult to build something the customer has envisioned. The Product Owner was readily available for the customer which is evident by the client changing directions on their travel site by wanting to change top destinations to top wellness and detox locations. The Product Owner quickly communicated this with the rest of the team and allowed the team to update their user stories and change directions on the project.

Without the testers in our Scrum-agile team, we would not have been able to deliver a fully functioning site with minimal bugs and issues. These testers used the user stories to create test cases that fit the typical end-user experience to ensure that were no issues in our code. When they did find issues they worked with the development team to ensure they were fixed promptly with excellent documentation on the error they received versus what the expected outcome should have been. This made it easier for the development team to find and fix bugs in their code. The testers also communicated well with the Scrum Master and Product Owner to request additional context for user stories and also requested an estimated date to QA which allowed the testers to be better prepared for upcoming test cases which reduced time to market.

The development team helped us make a great product within our set timeline by being flexible when changes needed to be made. When the Product Owner let the development team know we needed to transition from the top five destination page by listing the top five wellness and detox vacations they were flexible and willing to make the needed changes to the code. This flexibility is integral to agile; without it, we would not have been able to deliver what the client wanted. The developers worked closely with the testers to minimize bugs when developing the code and quickly locate and fix bugs when the testers found them.

The Scrum-agile approach helped us to ensure all user stories came to completion through our Scrum events which allowed the team to have clear and transparent communication about what they had done, and what still needed to be done, as well as let others know about issues they are having so we could work together as a team to overcome any roadblocks. Having the Product Owner get a clear understanding of the what client wanted was important for creating solid user stories which let the developers know what features to implement and the steps they needed to take via the acceptance criteria. It was important that the Product Owner be in its own role and not leave it to the developers to get an understanding of what is needed from the client which could have led to miscommunication and lowered effectiveness.

Our Scrum-agile approach allowed us to pivot easily when the client let us know they needed the features of the site changed. Because we had the Product Owner in constant communication as well as the developers getting feedback from the Product Owner during the development phase, it was much easier for them to change the code in their program. If we had done it from a waterfall approach, it would have been much more difficult to pivot because the site would have been created already before getting any feedback from the client. Then we would have had to go into the testing phase again which would lower the time to market. Agile lets us get feedback from the client while we are still developing and testing the code, which means it’s much easier to change directions when needed.

Good communication is integral to the Scrum-agile approach, when the developers and testers requested help and gave others suggestions they ensured their language was positive and let the team members know what they were doing correctly before giving suggestions on how to improve. When they did give suggestions, they made sure to give context as to why they were requesting these, and how it would help the team deliver a better product in a shorter amount of time. They also ensured that they ended the communication by telling them that if they needed anything from them or had any suggestions for them that they would love to hear back from the other team members.

Implementing Azure Boards seemed to be very successful this Sprint. It facilitated proper communication within the team and allowed everyone to see how the project was going at a moment's notice including what we still had to complete and what he had already accomplished. One of my favorite parts of Azure Boards is that we can upload most of our needed information for the given Sprint such as user stories, backlogs, and acceptance criteria. Having all this information in one place seemed to be beneficial for everyone and there was less confusion about what needed to be done. We will continue to use Azure Boards for the time being. Beyond the Azure Board application, our daily Scrum meetings were also very successful this Sprint. We were able to keep each other accountable by sharing what we had done the day before and what we planned to do that current day; it also allowed us to ask for help when we got stuck with an issue, which is bound to happen.

A Scrum-agile approach is not always the best choice for a given project. Like all development approaches, there are pros and cons. A major strength of a Scrum-agile approach is that it allows the project to be very flexible and allows changes mid-development if that is what is needed. Another strength is that it allows the client to see the product faster, and allows them to make changes if necessary to add value for the client and end-user. However, one of the main drawbacks of Scrum-agile is that the cost of the project is not fixed and is bound to fluctuate, additionally you need to have team members who are open to being flexible and willing to make changes to work already done. With all of this in mind, I do think Scrum-agile was the best option for the SNHU Travel project. It allowed us to make changes fairly easily and quickly when the client let us know they needed the product to behave differently and it allowed the developers and testers to work closely together to fix bugs, in some cases, before they even happened. Because we chose Scrum-agile, all these successes led to a lowered time to market than if we had chosen another method with less flexibility and we left the client very satisfied with their travel site.