**7-1 Final Project: Sprint Review & Retrospective**

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CS-250: Software Development Life Cycle

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December 10, 2023

Our SNHU Travel Project required a team comprised of a product owner, scrum master, developers, and testers to achieve the desired outcome our client was looking for. Each role is pivotal to the project’s success, especially under the agile methodology given teams are meant to be small and flexible. This team structure is obviously meant to benefit the project, but given the smaller nature of them, it adds pressure to those who are involved because there are less individuals to fall back on.

We will cover the product owner first because this role can be seen in part as an initiator, as they speak to the client and gather specific information about our project. Without them, we would have much less, or perhaps nothing, to work with. They gathered crucial information from the client so that we could professionally design their website to their liking. If our team were to just receive a rough outline of our clients’ expectations, we would have to go back and forth, creating something, getting rejected or corrected, and go back to the drawing board. This process would be lengthy, frustrating, and costly. For instance, we were able to clearly understand the sort of filtering features the client was looking for on their website, or the type of travel destinations they wanted displayed in the slide show. Their connection and communication with the client as well as the scrum team help design the cohesive process that is agile development. We cannot forget about their role in the product backlog because this shared document gives the team the visual needed to properly structure the project.

As the scrum master, prioritizing scrum ceremonies played a crucial role in the success of our development process. This review and retrospective are a portion of that process, but the sprint planning and daily stand-ups were no less important, and much more so. Our scrum meetings brought the team together and opened lines of communication early on in the development cycle. Although the meetings were only fifteen minutes long, they aided in building a longer-lasting environment for team members to reach out to each other.

One could argue that the developers are the central role of a development team, and other roles act to serve and aid the developers to achieve the best result possible. Our developers were tasked with understanding the requirements of the project, specifically SNHU’s expectations for the travel website and destination slideshow. These requirements and expectations gave them the guiderails needed to write the proper code that would achieve what they were asked for. Their responsibilities did not end there however, as they had to attend the daily scrums and go over what they worked on the day prior, what they would be working on that day, and what impediments they were facing. Although potentially stressful at first, speaking openly and honestly in these moments designed the circumstances that would allow for such an expedited and flexible development process.

The testers of our team ensured that the product we were delivering to our client was polished and appeared as intended. Developers are not perfect, and mistakes will occur. We cannot let this fold the entire project, however we can try to minimize the issues as we display our work to the client. We want the client to be able to judge what is presented to them purely from a subjective standpoint. Perhaps they want things adjusted in the design, but we do not want them having their experience obscured by bugs or technical issues. The testers’ role was to prevent this scenario and ensure that each iteration of the project presented to our client allowed them to have a clear understanding of the direction and design so they can make relevant comments and requests.

The scrum-agile approach tasked our product owner with reaching out to customers to find exactly what they were looking for in the design of the SNHU Travel website. We discovered information relevant to what kind of content filtering options they wanted or what kind of control over their user account they were looking for. This information was then added to the product backlog and communicated to our team to begin implementation and iteration. The collaborative nature of our environment gave way to open discussion of the user stories interpretation and how this might be best implanted. Users cannot be assumed to have a technical background, so their stories must be translated and understood further by those with the technical knowledge of how exactly our team can achieve their expectations.

Road bumps are expected in the software development life cycle, this is clear when one considers the very existence of the agile methodology. The agile approach is designed to function with an iterative and incremental development process. Our team worked on aspects of the project, and then presented this to the client in SNHU Travel. We would then receive their feedback and adjust. For example, SNHU Travel wanted to alter the focus of their booking tool to change towards detox and wellness travel. This specific desire was not difficult to adapt to for our team because not only our team, but our design implantation was created to be flexible. The code was designed in a way that we simply needed to change the images and a minimal number of lines of code to see their expectations realized. The testers were then able to adjust their test cases to the new increment and we were back on track, without the need to postpone any deadlines. This is a prime example of agile development at its best and displaying the potential benefits, especially when compared directly to waterfall development.

Communication is an essential aspect to agile development. We used build in communication tools such as the daily scrum meeting that helped bring the team together to discuss the three essential questions, what did you work on yesterday, what will you work on today, and what roadblocks are you dealing with. Our team also used communication software such as Microsoft teams to keep open lines of communication throughout the development process for minor updates and inquiries. A circumstance that required in-depth communication was during the period previously discussed where SNHU Travel wanted to adjust the focus of the project to detox, and wellness destinations and we had to work together as a team to alter the project. The product owner had to effectively and clear communicate these changes to the development team, and the development team had to work closely with the testers to ensure that this short notice change did not disrupt the quality of what had been created up to that point.

One of the major principles of the scrum-agile approach was our customer focus. This can be seen in the use of user-stories and the communication between our product owner and the SNHU Travel client. We gather customer and client relevant feedback to design the product. Furthermore, we implement incremental development so that we can continuously refer to these sources for our design choices and alter the project to their expectations.

Based on our clients’ and customers’ needs, the flexibility of the agile approach was necessary and certainly functioned as the superior development approach. We were able to enhance quality through the iterative and incremental design approach. Given we did not have a ridged and predefined project ahead of us, it fit our needs very well. Had the project been structured to an exact outcome from the beginning, a waterfall approach may have been more appropriate. We were also fortunate to have an experienced team. Given the smaller team we worked within, inexperience could have created issues as there are not the same number of members to rely upon. While communication with our customers has been discussed as a positive aspect, we were dependent on our client and customer feedback to guide our design. This can be seen as a negative given the level of dependency on an outside source. Had the information they provided been unclear or incorrect, it could have created significant issues.