**Module 7, Joel Gomez Ruiz**

**Sprint Review and Retrospective**

Throughout these weeks we have seen how the agile approach sets new processes for a more efficient way to develop the SNHU Travel booking system. First of all, in order to make this happen, our team had to take on different roles to follow Scrum guidelines such as the Product Owner, a Scrum Master and the Development Team formed by Developers and Testers. Our Product Owner took on the responsibility to be the connection of the team with the client, shareholders or possible customers. She was able to meet with them and receive information regarding how the project of SNHU Travel was envisioned, which helped her plan the user stories that were added to the product backlog. I, as the Scrum Master, took on the important role on leading us on the right direction to properly follow agile principles, for instance, I created the team charter, with some rules and recommendations so the team understands what is expected from each of us. Furthermore, I was able to set up meetings when needed and provide assistance with any difficulties that came as a result of trying this change of methodology. I made my best effort to show our team this new path and made the change much easier to assimilate. The Development Team also had a very important role working on this project, developers and testers planned which user stories they would be working on during the sprint and took ownership of such stories, organizing themselves so they could efficiently develop each one of them, and also created test cases where they verified through a list of steps if the functionality of a user story passed the requirements established by our client. Moreover, they were able to adapt to new changes and adjusted our work quickly so still satisfy our previous deadline.

This new agile approach was really helpful to complete user stories as our team was focused on collaboration and constant communication. Thanks to our daily Sprint meetings, our team was able to follow up with each other and communicate any issues that they may have seen while working on a story, as well as provide each other feedback or help to quickly advance on other stories. With agile they were able to communicate more properly, became more able to adjust to changes and embrace feedback and understood that each sprint will take us closer to the best and improved version of the project. For instance, while developing the “Top 5 Destination List”, there was a little of uncertainty regarding how the list should be displayed to the user; by reaching out to the product owner, our developers understood more clearly how the story should be developed and also how the test cases should be built to pass the criteria. Because of this approach, no assumptions were made, neither time was wasted working on a final version of the story that could have been not what the client desired.

Thanks to agile and its model of working through short sprints it was possible to quickly remove, adjust or add some functionality to a user story if the client’s requests changed; that is one of the main benefits of working with agile, that work is done through quick but small steps with limited functionality, enough so the client can give their feedback so change can be implemented on the next sprint. For instance, after having developed the “Top 5 Destination list”, the product owner informed us that the client had decided to focus the vacation packages on wellness and detox experiences. Despite the stories were already built under general criteria, these new changes only required a few modifications to the list, as the story is still on its early versions and is far from being a final product. Modifying the user story was much easier for our developers than expected and it did not even need to be worked on the next sprint.

One of our most effective ways of communicating was through daily Sprint meetings, where we gathered to share our progress with the rest of the team. We also made use of a Kanban board to record and keep track of the team’s progress so we can be aware of what is done, what is currently being worked on or anything related to the current sprint. Moreover, whenever face-to-face communication was not possible, emails were a good way to reach out other. For instance, after the client decided a change to the project, one of our developers emailed the product owner for extra detail about the extent of the new requirements, and one of the testers asked her for more information to properly display the list. The product owner was able to quickly respond because the email was right to the point and specified the kind of answer that was needed. Nevertheless, the most important way to communicate when possible was through face-to-face communication, which was very important, as it served as a great opportunity to solve any doubts and to provide feedback (since the first moment the client met with our product owner to our last meeting where we all were informed of the new requirements).

There were different strategies that helped us quickly work on this project. As it was already mentioned, our product owner created user stories based on the requirements given by the client and a few of the possible customers. These user stories provided an easy and relatable way to understand the requirement, rather than simply providing general functionality, our team was able to understand who we were building the software for, and why it needed to be built. A good tool to keep these stories organized were using Excel where we recorded and updated the user stories as they were being made or completed. We also used Kanban boards in our meeting room, so everybody was able to take a look and keep track of progress, which I would also encourage the development team to review every morning during the daily Scrum meetings. Furthermore, our team was able to envision the agile perspective, embracing change and continuous feedback, as well as the benefits of working through incremental development, by quickly making small parts of the project with enough functionality rather than taking long periods of time to produce a final version that might end up being revised. Our team successfully finished all the user stories that were selected during the Sprint Planning and are ready to work on the next set of stories.

Using this new methodology definitely has proven to be very useful. Although there may be some drawbacks due to its high level of uncertainty with an undefined horizon, which then may lead to improper measurement of time and resources, Agile has proven to surpass those limitations and turn them to our advantage. Because there is not a strict plan that defines the end product, feedback can be welcomed throughout the development of the project, so we can be sure that it fully satisfies every requirement from the client and the customer, tailored to their own wants and needs. Encouraging communication also results in a very important benefit of this methodology. This has allowed our team to make a minimal number of mistakes, that were fixable through teamwork and constant review.

Using this methodology for the SNHU Travel project certainly was the best decision as we were quickly able to work towards the “ideal” product, rather than the “first planned” product. As seen many times while using a waterfall methodology, feedback was provided until later phases of development, when a good amount of time and resources were used to produce a product that was fully consolidated, whenever our clients did not feel comfortable with the results, it became very difficult and costly to change it all again in another direction. Agile’s versatility has proven to be a key to the successful development of the product that our clients are looking for, so I strongly suggest that we move forward with this new and more efficient methodology.