**Sprint Review and Retrospective**

1. **How the different roles on our Scrum-agile Team specifically contributed to the success of the SNHU Travel project.**
   1. Scrum Master
      1. The Scrum Master was instrumental in keeping the project moving and on course. Without their help to clear up roadblocks and helping to facilitate daily stand-ups. They made sure that we were on-topic and that our time was used effectively in these meetings to keep production efficiency high.
      2. With the help of the product owner, they worked to prioritize the backlog items to make sure accurate progress was reported and that our information radiator was kept accurate and up to date.
      3. At the end of each sprint, they worked to better understand what was possibly slowing down the project’s velocity and worked to help correct and address these problems wherever possible.
      4. Not always included but they made a special effort to make sure that everyone on the team felt appreciated and needed, and worked to develop team bonding activities so we could work together more cohesively.
   2. Product Owner
      1. The product owner sought to be a liaison for both the client and the development team. Making sure that both sides felt heard and that everyone’s concerns were addressed and articulated to the best of their ability.
      2. They made a special point of making sure that information and project updates were as clear as possible, and that these could be viewed at a glance from the project’s information radiator. They worked hand in hand with the Scrum Master to develop strategies to overcome roadblocks and address possible future issues that could become hinderances before the team came to them.
      3. As changes came up from the clients’ adjusting requirements, they worked to keep these within the scope of what the team was already working on so that monumental shifts and changes in the project were kept to a minimum.
      4. They worked with both the client and development team to make sure that the user stories were very clear and acted as a middleman where needed to seek further clarification from the client if a certain piece of information seemed clear at first, but later needed additional clarification, or insight.
   3. Tester
      1. Working with the Product Owner the tester developed clear test cases to make sure that the user stories were properly completed and had clear pass/fail conditions. This helped to make sure that the project was moving in the right direction and that everything was still on course.
      2. When additional clarification was needed, they were able to reach out to the product owner who either had the information on hand to help with clarification, or they met with the client to better refine what was needed for the final product.
      3. By thinking both creatively as to how the user may use the final product and how the client wanted it to look and feel the tester was able to help shape the overall project to make sure that it matched what everyone was looking for.
   4. Developer
      1. As one of, if not the main, driving force behind the development team, the developer bears some of the greatest weight as to what the team’s velocity is with how they go about completing the user stories. They rely heavily on the rest of the team to make sure that they stay on task, and that user stories are clearly defined and are not ambiguous.
      2. One of the best ways that they have to ensure they receive clear answers to their questions is likewise to ask clear and concise questions. The more specific a question is the more specific an answer can be. Both will help to ensure that stress on the team is kept to a minimum, and that user stories are completed in a timely manner.
      3. Of any other role the developer may see the best results from using an Agile framework. Instead of needing to complete a monolithic project all at once and possibly have one piece break or be changed half-way through. Agile allows instead to focus on getting an MVP out the door as quickly as possible, and to then iterate on the design as the client comes back with feedback. This allows for shorter pieces of code to be implemented and allows for more robust error checking as the project progresses. As it is much easier to do smaller unit tests than to test the entire project.
2. **How a Scrum-agile approach to the SDLC helped each of the user stories come to completion.**
   1. By using a Scrum-agile approach the user stories were able to be more appropriately broken down into smaller more testable pieces that the team then went to work on both creating and iterating upon.
   2. With the testing for the top 5 destinations there was initial confusion on what the best method of this would be, but after speaking with the client and subsequent meetings it was discovered that the client had envisioned these to be a slideshow that would show separately from the rest of the page but could be incorporated into the main site later.
   3. This type of change could involve work to change from the current format to the desired one, but because of having an Agile approach this was able to be done much more quickly and to ensure that it met high quality standards and had a professional feel to it before it was ever released to the public. This was done through the efforts of the tester writing clear test cases, giving feedback to the development team, and working with the product owner to iron out problems in advance of their occurring.
3. **How a Scrum-agile approach supported project completion when the project was interrupted and changed direction.**
   1. During the project it was brought down from the client that they wanted to change focus to be on wellness and relaxation from general niche offerings that were displayed in the top 5 travel destinations slideshow. This change came as the client was doing their own research and had come across some recent market surveys that pointed out that consumers would be moving in this direction soon.
   2. Because of the agile approach used by the team this information was able to be parsed and changed with minimal error. The team came together and was able to quickly enact the client’s request to have the change put in place.
4. **How we applied the ability to communicate effectively within our team.**
   1. Because of the distributed nature of our current team, we needed to be more conscientious about our communication practices and check early and often our team’s internal discussion boards to make sure that our team was on the same page and work to come to a mutual understanding and agreement on best practices moving forward.
   2. Since this is a new experience for the team to adopt the Agile methodologies and practices it was quite beneficial to have daily stand-up meetings and discuss what we were working on and what we were struggling with.
   3. This was done by answering.
      1. What did I work on yesterday?
      2. What will I work on today?
      3. What am I struggling with?
   4. By answering these questions in an open and honest way this allows the team to accurately gauge where we are in our tasks and if additional team members are needed to help with either pair or mob coding to help resolve issues and what roadblocks can be resolved by the Scrum Master or Product Owner.
5. **Evaluation of the organizational tools and Scrum-agile principles that helped our team be successful.**
   1. By using tools such as JIRA our team was able to show what the project’s progress was and we were able to use this to update our team’s burn-up charts so that everyone was able to see our total progress towards the project’s completion.
   2. While we were newer to this it was effective to have daily stand-ups over video conferencing software so we could effectively note where we were personally and what each of our days would look like.
   3. Also, using these tools allowed us to look back at the end of each sprint to help us better understand where we may be lacking as a team and what if any changes needed to be made.
6. **Assessment of the effectiveness of the Scrum-agile approach for the SNHU Travel project.**
   1. Pros:
      1. Team collaboration allowed for greater coverage of skills. No single person could do as effectively as what the whole team was able to accomplish. And not just a sum of parts, but what felt like a multiplication of parts for everyone’s unique skillset.
      2. Clear and concise reporting and information viewing prevented undue stress on both the development team and the client.
      3. After an initial few sprints, it was easier to gauge the team’s velocity and better track where we were on the project overall, and better track what expected completion date would be.
      4. Because of changes we were able to quickly adapt and turn around in the direction the client wanted us to go in. This was possible because of the responsiveness of Agile practices.
   2. Cons:
      1. Because of the newness of the Agile methodologies to the team there was an initial learning curve where some old practices from traditional waterfall methods were brought up, but over time these were phased out in favor of more Agile approaches as what was entailed in these was better understood as the team became more used to the ideas and practices of Scrum-Agile.
      2. Initial time estimates were wildly off as the team had not had experience with this methodology before and many still used waterfall timescale to measure velocity and estimate how quickly they could complete user stories.
         1. Some were overconfident they could complete tasks quickly and bit off more than they could chew taking longer overall than they had estimated.
         2. Others that were unfamiliar with new tools and practices felt it would take longer to adjust than it really had and were able to help other team members as their tasks had been completed early.
   3. Conclusion:
      1. Agile was overall a great choice for this project as it allowed for increased adaptability and responsiveness to changes that arose, and team members were able to better assist each other than they would have otherwise been able to by using a waterfall methodology.