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Final Project

The various roles on our Scrum-agile Team for the SNHU Travel software all had very important roles and impact this past Sprint. Our product owner did a great job conducting a meeting with users of this software to be able to take in their opinion and create opportunities and ideas for improvement of the software. The product owner took that feedback and was able to create user stories that represented the needs of those users, then determined the size and importance of the task when placing them on our product backlog. Our tester on our team was able to take those user stories that our product owner created and was able to develop test cases based on those user stories. Those test cases laid out a plan on an excel sheet that would be the most logical way that the feature mentioned in the user story would work in our software. Our tester reached out to our product owner with a list of questions regarding each user story to receive some clarification to be able to develop better test cases. After receiving that feedback, our tester then created 3 revised test cases based on that feedback to be put our developer in a great position to be able to implement the feature the way the team envisions it. Our developers then were able to take these revised test cases, and with the great communication of our tester with our product owner, implement these features into our software working in the logical flow the test case lays out.

The Scrum-agile approach helped each of the user stories come to completion because of the framework and principles that come with Scrum. One of the main principles of the Scrum-agile approach is collaboration. With this approach devising a small team to their own respective roles, it allows for developing software, which is a big process with many complicated steps, to be broken down into segments managed incrementally and on your own responsibilities. The product owner one of the roles in the scrum-agile approach, in this case, had a responsibility to create these user stories and add features ranked by their priority to the backlog. With at the time, not having any other tasks, they are able to completely focus on the steps needed to do that. The waterfall method in which you develop a plan and work on the entire thing and test or think afterwards. The agile approach takes feedback from the entire team, and the product owner was able to conduct interviews with actual customers of the software to take their feedback and implement the features the customers are directly asking for making it a lot easier to complete those user stories.

**The Scrum-agile approach supported project completion when the project was interrupted and changed direction. It did this by the framework of the Scrum-agile process. The waterfall model, which is often looked like the counterpart to Scrum, is a model that plans everything from the start of the task. Taking the requirements of the task at hand and designing from that point to just implementing. Testing is one of the last steps in the waterfall model and because of this, the project lacks the opportunity to evolve or see issues until you are already deep into the waterfall model process. The Scrum-agile approach can support interruption and change in the project because of its very nature in which this process is. With four roles having their responsibilities, that can be completed by constant collaboration. Daily scrum stand up meetings, sprint planning, and other various topic meetings allow for constant communication with the team to be able to have the best interest and constant change in plans to be fluid with the project. The sprint cycle allows for implementation of small tasks at a time and usually is not the entire project, so change in plans are encouraged if needed with constant review of the tasks and ideas that were already implemented. It is much easier to be able to have interruptions with this agile based approach in comparison to the waterfall model.**

**As the Scrum Master my job to create and look over this team and to have effective communication with them is an important aspect of my role. I was able to carry out this responsibility by having daily scrum stand up meetings. In these meetings I demonstrate respective behavior by using an object for a team member to hold to represent that they are the current speaker and to have undivided attention. This idea is to not only make sure no one gets interrupted while speaking but to allow that team member to have a moment with everyone on the team to be able to hear them clearly and give them the respect that they deserve in hopes to encourage them to communicate their issues if they have one, or to just feel respected and important. I would ask the current speaker, and eventually everyone in the group three key questions. What have you been working on? What do you plan to work on? Are there any complications with that plan? These three questions are all I need for our members to provide clear communication with the rest of the team. The first question allows the team to know was task has been being worked on and the state of that task. The next question allows for the team to know what this person plans to be working on, which is important because then it is another task that they know they should not worry about, or possibly they needed that task to be worked on to be able to continue a different task in which they were working on before. The last question allows for the speaker to talk about any issues and other team members who possibly experienced an issue like this can be able to express ideas or possible solutions to this issue. The speaker could also need someone with a specific expertise to work with them, which allows for an easy way to plan a time for them to do that, and cross trains to allow for everyone on the team to grow their skill set.**

**The tool we used for our team to stay organized and to keep good communication is Microsoft Azure. Azure offers many different tools within its product, arguably the most important tool within Azure was DevOps. DevOps is a Microsoft service that allows for a team to organize specific topics and ideals that are found in an agile approach. Our team used it to organize our backlog, our current Sprint, all our upstream repos labeled by the software, pull requests, and an area to communicate about certain tasks. With the agile process there are three main principles in which the team should be mindful of: Self-organization, collaboration, value-based prioritization. Self-organization because as this is a team that relies on the effectiveness of your team members at times, they need to be able to keep good track of their work and showcase a strong independent work ethic when needed. Collaboration as again, this process is team based so the ability to communicate effectively with other team members, and to identify appropriate times to seek feedback, advice, or updates on current tasks from other members. Value-based prioritization by understanding the value of your time and the energy you put into specific tasks, the product backlog showcases what is important at the time and to be able to complete and spend time on the more important tasks at hand provides a greater value to the entire team.**

**Overall, the effectiveness of the Scrum-agile process approach is positive and was the perfect fit for the SNHU travel project. The agile process is adaptive, allowing constant communication and encourages change due to the design. It took this large project and was able to break tasks down into smaller increments which is easier to handle for the team. The scrum events allow for clear and concise visibility on the overall project to the team members. The feedback we get from users is what derived our user stories which is the best approach is creating a product that keeps the customers interested and happy. The agile process can have negative sides if the team members are not fully committed into the ideal and lack good communication or self-organization to stay on track and output their induvial responsibilities.**