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CS 250 Software Development Lifecycle

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Sprint Review and Retrospective

             Throughout the SNHU Travel project, the Scrum-agile framework and its use of specialized roles helped streamline development and produced a quality project. Through ongoing collaboration, the team was constantly updated on fellow members’ status and project projection. The roles that went into completing this project were the Product Manager, Scrum Master, developer, and tester.

             The project started out in the hands of the Product Owner and Scrum Master. These two met with the client, SNHU Travel, in an in-person interview to get a sense of what the project criteria were going to be. During this interview they ask important questions regarding different functionalities, timelines, and goals. After this interview, the Product Owner created a product backlog which took the user stories from the interview and ranked them from the most important to complete to the least. This task hierarchy will be used to guide the developers and testers through development.

             While the Product Owner was working on the backlog, the Scrum Master was getting the team organized and ready to start development. The Scrum Master figured out a time for a daily meeting where he will facilitate a stand up every day to track members achievements, goals, and challenges. This will be an opportunity for team members to see what others have done, what they plan to do that day, and where they may need help. Testers and Developers can use this meeting to see what is working and what isn’t. The tester’s job is to create use cases that will test if developers’ code meets the needed criteria outlined by the Product Owner. The tester can write tests ahead of time so that developers have a goal to work towards, or after and test what they have written. It is through many continuous cycles of writing code, testing, tweaking, testing, and fixing that the final quality product will eventually be produced. The developers and testers are the closest layer to the product and are the ones on the front line coding up the system and solution to the client’s needs.

             The client, while describing their original needs in the interview with the Product Owner and Scrum Master, might produce new additions that need to be incorporated into the system. The original and new user stories are part of the grooming process where the Product Owner, with the help of the Scrum Master, combs through the backlog and re-rank tasks for completion. There is a funnel of user stories to get added to the backlog as developers and testers complete and validate the ones existing on the backlog. Development is the process of taking a user story, writing a solution, testing, and rewriting until it meets the criteria. This is done until the time the team has expires and they pass the product to the client.

             The addition of new user stories is an easier fix than the changing of an existing one. However, though the agile framework there is a lot less backtracking than before, using the waterfall technique. When using agile, the Product Owner is in frequent contact with stakeholders and clients showing progress and updating them on the system. This gives them the chance to amend the existing system before it gets too far incorporated. When we originally created the top five list, there was not too much instruction of how it was done. The developers did their best to guess what SNHU Travel would like but there is little way to test. When the Product Owner showed the clients they wanted it a different way, in a slideshow format. At this point in production, this is quite an easy fix, however, if we waited until the end and they wanted this change, we would have several other functions placed on top of the scroll menu style that we would have to redo. It is through this collaboration that the Product Owner was able to find this change and have the developers update it before it snowballed into a larger problem.

             Collaboration with stakeholders is important, but on the team, level is also important. Knowing how to efficiently collaborate within a team is an important skill to have. I took on the role of tester in our group discussion and practiced the importance of being concise and asking direct questions. In a busy work environment, it is important to get your point across briefly. When asking questions, if you want a direct answer, you need to be sure to ask detailed questions. Knowing which roles are responsible for which tasks also helped you direct questions and information to the correct person. In the group discussion it would not make any sense for me to ask the developers about the backlog or the Product Owner about the new function added because these are areas they are not working in. Collaboration is one important agile principle but not the only one. Alluded to before but not stated directly, the help of other principles such as time-boxing, value-based priorities, and iterative development help guide development.

             The use of time-boxing is useful in blocking out time to accomplish tasks. There are different lengths and reasons to use time-boxing. There may be a large time-box over the entire sprint, letting everyone know when development will end. There can also be smaller weekly time boxes where if someone is stuck on a task at the end of that time box it may be better for the team to pass it off and choose a new task. The product backlog is how value-based priorities are set. The Product Owner arranges tasks in the way that provide the most value to the client. This considers what the task is, how long the task will take, what amount of the budget this task will use, and several other factors. There are several ways for this information to be displayed and tracked and it comes down to team preferences. Some teams may choose to have a physical board that tracks the status of tasks with sticky notes. In the daily stand up they can pick new tasks from the backlog and move completed tasks respectively. Other teams may choose to use an online organizational tool such as Jira, Asana, or CollabNet. These online organizational tools are like physical boards but provide a mobile version of display. This can be useful with remote/hybrid jobs, or when someone is out of the office. Tracking the status of tasks is very important and there are many tools that can be used to do so. It is then through iterative development, the back and forth between the tests and developers, that tasks are completed, and the product is created. These cycles of development test, fix, and display help show ongoing processes to stakeholders so that changes can be made on the spot such as the slideshow instead of scroll bar styling.

             In the SNHU Travel project, the use of agile was helpful. There were no imminent drawbacks to the new framework. The Ability to quickly get from interview to product using the product backlog and specialize roles meant that there was more time for production. Throughout developed the cohesion of the team through collaboration and specialized roles helped streamline development and produce a quality product. Agile was certainly the best approach to use for this project. When starting a project like this from scratch, it is hard to know what the final product will look like so it is important to use an approach that understands that change will happen, and being able to adapt is important. Agile caters to change and makes it easy to implement. In contrast to the waterfall method, being able to quickly change directions allows less waste in going back to fix obsolete parts. If we were to use the waterfall methods, we may have never caught the scroll bar to slideshow issue until too late. There would also be more issues in the test as the tests would be testing the entire system after the entire development was done. Opting for the use of agile was the best choice and using Scrum-agile team product a quality product for the client.