Oscar Rosa

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7-1 Final Project

While in the Software Development Lifecycle course I took on the various roles that comprise a Scrum-agile Team. The first of which was a Scrum Master, and from this role I learned the importance of a Scrum Master to the team. The Scrum Master is responsible for establishing and creating schedules and daily meetings for the team and facilitates how information is exchanged throughout the team. It is through the scheduling and establishment of these daily meetings where the Scrum Master asks their team a series of questions such as “What did you do yesterday?”, “What did you do today?”, and “What is impeding your progress?” to facilitate the exchange of information about the project the team is working on to one another and to gauge the status of both the team and the project as a whole. Not only does these meetings help to keep the team on track and focused on the project but it also helps to gain incite on how the teams in feeling between each other as well as how they feel about the project itself, which in turn helps to build and foster a strong relationship amongst the team and gain feedback on how to improve everyone’s abilities and how to improve the project. From my experience in this role as Scrum Master, I found asking these questions helped me to not only understand the members of my team better when they would share information on the progress of the project but it allowed everyone a chance to contribute making it so that everyone felt included when working on the project, as well as making sure everyone was on the same page with one another while working on the project. In addition to serving as the facilitator if disseminating information amongst the team, Scrum Masters also serve as a coach or mentor to the team and takes into consideration the capabilities each member of the team has and helps better optimize the team by matching the member to a specific task that they can accomplish in a timely manner. The Scrum Master also helps encourages others in sharing information and skills to others that may not be skilled in a particular area that way there is not one specialist within the team as everyone can have a chance to perform and accel while working on the project. I found this especially helpful as while working on this course I found myself learning a tremendous amount from others and gaining insight into how to improve my own skills from others who were well versed in the matter. Lastly, Scrum Masters work in tandem with the Product Owner of a project and together they make sure all the necessary pieces of a project is completed within a timely manner and that all parties involved with the project understand what is required to complete it and what steps are needed to move forward.

The next role that I worked on for the project was the role of the Product Owner. As the Product Owner I was the face of the team and served as a liaison between the team and the client that was requesting this project. As Product Owner I had to maintain a constant communication between the client and the team and had to make sure that not only did I understand the clients requests and requirements for the project but that the team understood the requests and requirements of the client as well. What I learned from this role while working on the project was very beneficial because I received valuable feedback on what was needed in order to complete the project but also what improvements could be made to make a better final product for the client. So as the Product Owner I had to truly understand the needs of the client and be able to translate the client’s needs to the team in a way that everyone was on the same page, this was translated by user stories and backlogs in which the customer needs were used in the user stories to help translate the feedback given to the team to be incorporated into the project and the backlog prioritizing which feedback needed the most attention in the project. This was a little difficult to manage from my experience as the Product Owner but served to be very helpful to the team as they would know what to include into the project and which tasks required the most attention to complete in order to meet the deadline set by the client.

Moving on to the next role of a Scrum-agile Team was the role of the Tester. As a tester, it is their job to take the user stories provided by the Product Owner and create test cases that help determine when a user story has met the requirements to be considered complete. These test cases are conducted at the start of development and remain a constant part throughout the entirety of the development process. What this does for the team is create immediate and constant feedback that can be utilized by the development team to make improvements or corrections to the project if need be and provide amble time to do so. This allows testers the ability to provide support for the team as they can determine which parts of the project needs improvements or corrections and work closely with developers to provide continuous support and feedback throughout the development phase of the project. In my experience as a tester for this project, I found that I had to have a deep understanding of the user story in order to provide detailed information to the developers and I had to understand specific details of what the client wished to incorporate into the project. This has also helped me in the understanding that failure is also very important to a Scrum team, as in through failure much can be gained from the experience as it allows for the team not only the time to correct and learn from the mistake but also allow for innovation and experimentation to occur as well, which I found to be very helpful in my time working on this project through the various roles.

The final role of the Scrum-agile Team that I was able to work in was the role of the Developer. As a developer I was responsible for developing and incorporating the client’s requests into the project and producing the deliverables of said requests. This is especially important as I have found in my experience as a developer for this project that the more detailed information that can be gathered from the client and Product Owner the easier it is to meet the requirement and produce the necessary deliverables for the project. This process goes in tandem with the tester as when a developer produces a deliverable and sends it to the tester, the tester makes sure that the deliverable satisfies the requirements that have been requested before deeming whether or not task is completed before moving on to the next section of the project. As a developer the working relationship between developer and tester proved invaluable to me as I was able to stay on task and complete and deliver a better product. By having continuous feedback and support from the tester I was able to make improvements to the project where needed and make corrections with ample time so that the project did not stall in development. From my experience as a developer, I believe under the agile method this role benefits the most as the response time for feedback and insight is almost immediate.

The Scrum-agile approach to the SDLC helped each of the user stories come to completion by simplifying the description of the required requests of the client, and was documented in a template in the project management software. The user stories helped to shift and maintain the focus of the idea/feedback of the client into the actual project. When the requirements of the project changed as the client and team delved deeper into the design of the project, the user stories helped to keep the team on track and made it possible to either replace or improve the overall design of the project. As a result, the time for the design and development of this project was reduced and allowed for the team to deliver a better overall product to the client. In essence and from my experience while working on this project is that the Scrum-agile approach is self-organization, empiricism, and continuous improvement that allowed the team to deliver a high-quality work to the client. Because of this the development team was able to take responsibility for their tasks, in which they were able to organize and improve themselves to ensure that the project was completed correctly. Not only was the team involved knowledgeable about their work but they also had a wide variety of skills that allowed them to support one another as the project progressed. In addition, the daily scrum meetings helped in ensuring transparency and allowed for the team to remain dedicated to the project. Because of the daily scrum, the development team was able to inspect and adapt their work accordingly and ensured that the work being done on the project was conducted effectively and efficiently.

While working on this project I did notice that there were changes made to the requirements of the project, and while under the Agile methodology I found myself being able to adapt to this change quickly and accordingly. One of the key elements that I noticed with Agile, is that when making code for the project it was mostly based on having a working code quickly rather than making the code perfect to start. It is to be expected that requirements will change when working on a project, and from my experience working under the Agile methodology that change is encouraged and allows for a higher-quality product to be delivered to the client. When the project’s requirements changed or if it had a shift in direction, I was able to use the revised user stories and test cases to help myself better understand the new requirements or shift in direct and adapt accordingly. By not having my focus be on making the code perfect but workable allowed me the time needed to adjust to the changes that were being made and apply my focus on making the code for the project match what was required for the new changes. Because of this I found that the Agile method does in fact allow for more freedom and innovation when it came to developing and completing the project for the client.

While working on this project I found that having constant communication with the team to be very critical in completing the project in a timely manner for the client. In particular, face-to-face communication was used to convey specific information to the team on the requirements of the project and how to proceed further. In addition to face-to-face communication, other Agile tools were used to help convey information to the team and made sure that the information that was being exchanged was correct and that everyone working on the project understood the information with little to no misunderstandings. Such tools like the Sprint process, standup meetings, user stories, test cases, and backlogs were extremely helpful in creating and maintaining transparent communication with everyone on the team as well as the client also so that everyone was on the same page and knew what to expect with the project. Another tool that I found very helpful with communication was the Team Charter that was utilized in the second week of the course, as the Team Charter helped to set the foundation for the development team throughout each phase of the project. With the Team Charter it helped to communicate to everyone what was expected of them while working on the project and what behaviors and the team dynamics should be like while working on the project. I found that this was especially helpful early on as this was used to effectively communicate to the team as to what to expect from the beginning.

Some other tools that helped the team to be successful in completing this project were the organizational tools and Scrum-agile principles. For instance, while working on this project the scrum board tool was used to help the team track sprints, and served as a visual tracker and helped give visual representation on the progress of the project to the team. This was especially helpful to me as I was able to keep track of the project’s progress and help the team stay focused and meet the project’s deadline. Another helpful tool was the sprint backlogs, as this enabled the team the ability to visualize the current sprint before moving forward to the next sprint. This helped to set alerts for the fluctuating changes and to prevent data replication. When taking part in the daily scrum a tool that was used was a whiteboard and sticky notes. This tool helped to track the tasks that were completed, the tasks that still needed to be completed, and any issues that may have been hindering the team at the time. I found this to be very helpful as it helped to organize the tasks in a manageable way so that the team did not lose direction when working on the project and help them to remain focus and stay on track, and it was very helpful to me as I would find myself losing direction from time to time and this tool would help me get back on track as well.

From my experience while working on this project, the effectiveness of the Scrum-agile approach to the project was that it shortened the development process of the project and the approach made it easier to adapt to the interruptions and changes the project underwent through the development process. A pro to this method that I found compared to other methods was that it was much easier to facilitate and incorporate feedback after the end of a sprint and before starting on the next, this in turn allowed the team the ability to adapt to the feedback and implement the changes into the project without delay. This is not the case with the other method as that did not account for change or feedback and would have been very difficult to incorporate changes last minute without having to scrap the project entirely and start over from scratch. While working on the project I did not happen to notice a con of any sort from this method as the Agile method was very accommodating and flexible to change where as the other method the Waterfall method seemed to be the opposite and was not very accommodating or flexible to change. This leads me to believe that the Scrum-agile approach was the best approach for this projects development because it concentrated on teamwork and communication to complete the project in a very timely manner and significantly maximized the team’s efficiency. In addition, the client was much more involved in the development process than they would have been with the other approach and the client was able to see the progress of the project along with the team as it was being developed which allowed the client to provide immediate feedback to any changes or requirements they wished to include into the final product. This helped to foster a strong relationship between the team and the client to deliver an overall high-quality product in the end.