CS250 Final Project - Sprint Review and Retrospective

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The success of the SNHU travel project was the direct result of collaboration and communication among the client, the product owner, the scrum master, and the developers and testers on the team. As the scrum master, I initiated the product development process by coordinating a face-to-face meeting with the client, the product owner, the developer, and the tester. This meeting allowed for the development of several user stories based on the requests of the client for a new travel website and travel booking service. The product owner then took these user stories and placed them into a product backlog with specific descriptions, desired outcomes, and acceptance criteria. The product owner also prioritized these user stories and gave them a size descriptor of small, medium or large. As an example, one of the user stories required the development of a customizable user profile on the travel website with certain criteria that the end user could utilize to further customize their search results. This user story was given a high priority and designated as a large user story given that it had many components and requirements.

To go along with these user stories, specific test cases were created that the tester could use to ensure the developed product was working as expected. The fact that the user stories were clearly defined aided in the test cases also being clear and specific. Using the same example of the user profile user story, a test case for this user story was created to ensure that the website had a working link for the user profile and that the fields in the user profile were properly fillable and able to be updated. Having the test cases available to run concurrently with the user stories gave the opportunity for any bugs or other issues to be caught early in the development process, which allowed for these issues to be fixed long before a final product was delivered to the customer. This focus on quality control all along the way during product development allowed for a higher quality product to be delivered in the end.

As the scrum master, I also created the framework for the daily scrum meetings. These meetings gave the team members the opportunity to describe the work they completed the previous day, the work they planned to do on the current day, and any potential obstacles they had that could be impeding their work. These minutes were at the same time every day and were limited to 15 minutes so as to keep the disruption of the meeting to a minimum while giving everyone on the team a chance to communicate with the rest of the team. These communications were reflected on a kanban board which was constantly updated as work was completed, or changes were made. The tasks reflected on the kanban board were based on organization and prioritization of the user stories and test stories and were broken down into sprints that could be completed in two or three weeks. I also kept the product backlog up to date as items were completed or changed and maintained constant communication with the team regarding these updates.

The developer’s main role on the team was to help create the appropriate user stories and then use these user stories to begin developing a final product. With the user stories being broken down into different functionalities, the developer was able to divide up the work that needed to be done into manageable pieces that could be completed in a single sprint. The developer was also able to work closely with the tester to create test cases to correspond to the various user stories so that each of the different functionalities could be tested and verified as they were developed. As an example, one of the user stories was to have radio buttons available for the user to decide how many search results to display on their screen. Specifically, the end user could choose to show 5, 10, 25, or all results. This was a simple functionality that could be added to the website quickly by the developer and handed off to the tester for evaluation. Being able to finish this small piece of the project quickly and efficiently gave the team a sense of accomplishment by being able to take that task off the board with little effort. The collaboration between the developer and the tester for each of the user stories and corresponding test cases was of utmost importance in the completion of the final product.

The client for this project was involved in the product development throughout the course of the project, mainly by communicating her desires for the appearance and functionality of the website clearly and effectively. The description of the desired final product is the starting point for any agile-based development project. Although agile is flexible by its nature and leaves a lot of room for change along the way, the initial intent of the client in working with the agile team should be to give the development team the best possible description of their vision of the project. However, even with the best intentions of the client to start off the project with a specific vision, changes in this vision are bound to happen along the way, as was seen in this project. After much of the development had been done, the client decided that she wanted to change the focus of her travel website to wellness and detox type vacations with a slide show view as opposed to a list view of the search results. This was different than the original vision but not so drastically different that her changes could not be accommodated. Although the developer and tester were initially dismayed at the need to scrap a good bit of their work and start over, the team was able to quickly adjust, thanks to the agile-based approach. The user stories and test cases were revised to reflect the changes and the team got back to work on the development. As an example, the user story for the user profile just needed to be changed to ensure that the functionality still worked with the slide show layout, the same as it did with the list layout.

Another key aspect that contributed to the overall success of this project was effective communication at all stages of the project and from all team members. The project began with face-to-face communication from the client to the team members. Several communications by email were also used in order to seek clarification from the client on project requirements and to discuss the new requirements with the developer and tester to make sure everyone was clear about the changes. As an example, one email was sent to the client after the initial development of the user stories to further clarify some of the requirements. Specifically, the email requested that the client provide some details about the functionality of the user story relating to the user profile to include the location of the link for the user profile, whether a user should be allowed to add a photo to their profile, and whether the profile would be shareable to other users. Some other clarifications were also sought with this email, all listed in a bulleted format that would be easy for the client to read and ensure that all issues were addressed.

Overall, the benefits of the agile-based approach for this project far outweighed any potential disadvantages of this technique and certainly provided a strong argument for the use of agile over a more traditional waterfall-based approach. Agile is flexible and accommodates change which was important in dealing with changes from the product owner. Agile also thrives on open communication which helped to keep all team members and the product owner on the same page and gave everyone on the team specifically defined tasks. In addition, agile provides the means to break down a larger project into smaller, more manageable tasks that can be completed in two-to-three-week sprints, thereby allowing for deliverable functionality early and often in the development process. If a waterfall approach had been used, the changes requested by the product owner would have been much more difficult to accommodate since this approach requires all planning for the final product to be done prior to any development. Waterfall would have also been detrimental in terms of trying to break down the project into smaller chunks for completion since waterfall requires all development to be done at once prior to testing. In conclusion, the agile-based approach was the correct choice for the SNHU travel project and should be the recommended technique for future projects as well.