**CS-250**

**Final Project**

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**08/14/2021**

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**Sprint Review and Retrospective**

**Agile Team Roles:**

Each agile team member has played an important role in the development process. An important aspect of agile is clearly defining roles and ensuring roles are understood and executed. Having a structure where a scrum team can work together on defined and specific tasks will cut out any unnecessary guess work, making the team more efficient.

**Scrum Master:** The scrum master plays a key role in the Software Development Life Cycle (SDLC). The scrum master ensures scrum events are handled properly and teams are given the proper tools and guidance to succeed. In the travel project, the scrum master coordinated communication amongst the team, determining specific roles and responsibilities for specific tasks. The scrum master is the lynchpin to the scrum team process, acting as the point that hold the team together with communication and coordination.

**Product Owner:** Within the travel project and the SDLC overall, the product owner plays a pivotal role in communicating needs among the team. The product owner creates the product backlog, providing a basis to the team of goals and tasks needed for the project. The product owner in the travel project created user stories that were critical to see what the teams should put their priority toward first and having a clear guideline of features that need created.

**Tester:** Testers ensure the product that is being created is the product needed. The testers play a key role in developing user stories and ensuring features work. The tester is invaluable in scenarios when change is needed, as seen in the travel project. The tester worked with the product owner to change or create new user stories to fit the needed changes without having the need to completely change the code.

**Developer:** The developer has a strong role in the scrum team, being the party responsible for developing the features of the project itself. The developer works with each other scrum team member to ensure the correct code is being developed in the correct order. The developer will heavily rely on communication with the rest of the scrum team, using resources like user stories to determine what is most important on a project.

**User stories:**

Using the scrum-agile approach to user stories is a great resource to the scrum team and especially useful in the SNHU travel project. The daily standup meetings including the scrum master, product owner, tester and developer were incredibly beneficial in creating user stories. The features and feedback needed to create the user stories came from those meetings and provided a basis of the work needed on the project. The initial scrum meeting showing the discussions between the team members showed input from each team member about needs and features of the project, which is probably the most beneficial scrum event to creating user stories.

**Interruptions and changes:**

One of the most beneficial ways that the scrum-agile approach was shown in this project was the changes made to the trip type discussed in the scrum meeting, allowing the product owner to work with the tester to add a user story that outlined the desired changes. The work for the top 5 trip feature was already created but adding to the existing code to meet the needs outlined in the user story is a great agile example.

**Team Communication:**

During the project, team communication was consistent and needed to ensure the team is on the same page and keep consistent in an agile environment. When agile changes come around such as changing trip types, the initial communication among the team is needed to see who must collaborate on the changes together. In this example, the developer is reaching out to the product owner and tester about user story changes.

**Example Email:**

**To: Product owner, product tester**

**Subject: Changes needed**

Hello,

Thank you for informing me of the changes needed to the travel project. If you both could include information for me to ensure we are executing these changes correctly that would be very helpful.

I would need an updated product backlog to show the changes made and if any changes would affect features that would need updated.

Updated user stories would also help to determine what changes take priority over existing project goals. Having a clear priority level would show what the development team should consider working on next.

Thank You-Developer

The example email outlines clearly who the email is directed to, clearly stating what is needed, showing the need for the communication. An email such as the one shown above is a good communication example of dialogue amongst teammates, collaborating on different areas of the process.

**Tools and principles:**

The tools used in the travel project helped the team collaborate by utilizing agile principles through the tools. Having a shared spreadsheet to show user stories and the backlog are examples of excellent communication tools that only help enhance agile principles used. A shared spreadsheet allows changes to be made and team members to see the changes right away, opposed to waiting on receiving another iteration of the spreadsheet or waiting for the next meeting. The principles of communication and change within agile are utilized with tools like shared documents.

**Scrum-agile approach:**

When using an approach like scrum-agile, there are many pros but also a few cons in the process. The agile approach allows you to collaborate with your team and come up with ideas and goals as you go, building a collaborative and communication focused environment. The team focused environment helps to solve issues as team, and truly feel like it was a team-built project. A con with agile is the unknown, not having a defined goal or deadline may prove to be difficult at times. The waterfall approach gives a clear boundary and deadline for what needs to be done, which adds structure and organization to the project. An agile approach requires more team communication to make sure everything is on track and going in the correct direction.

For the SNHU travel project, I do believe that the scrum-agile approach was he best approach. The team created different features that users wanted creating a travel application that met pre-determined goals. The reason why the scrum agile approach was the best option is the need for changes and retrospective approaches. Going back and modifying is an essential part of agile, which proved to be extremely beneficial in the SNHU travel project.