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CS-250

Final Project – Scrum Master, Chada Tech Deliverable (Sprint Review and Retrospective)

Review and Retrospective: Applying Roles

**Demonstrate how the various roles on your Scrum-agile Team specifically contributed to the success of the SNHU Travel project**. Be sure to use specific examples from your experiences.

The Product owner helped to identify the product backlog items, proposed the Sprint goals, and helped sort our backlog items by priority during each iteration. Working together with the Product Owner, I helped facilitate Sprint Planning sessions, ensuring appropriate backlog items were worked into the Sprint backlog for each iteration, and ensuring agreement on Sprint goals.

For the Daily Scrum standup meetings, the Product Owner and Development Team (including testers) updated each other on weekly progress and impediments, aided by Gantt chart visuals as well as Burndown charts. As a Scrum Master I helped remove certain impediments and offered solutions for the dev team to overcome those challenges. Once such incident was a dramatic overhaul of the UI; it required adaptation on our whole team’s part, but the underlying functionality remained much of the same and we were able to complete the Sprint on time.

Once per Sprint, our whole team got together for our Backlog Refinement meetings, where the Product Owner shared the backlog items to be refined and took suggestions from developers and team members. The Product Owner and Development team were responsible for building the product, while as a Scrum Master I helped provide feedback and facilitate impediments in this refinement process. During the end of each Sprint, we held a Sprint Review, inspected progress on that increment, adapting the backlog together with the Product Owner as necessary. We also collaborated with the Stakeholders to help optimize the value during each increment.

Review and Retrospective: Completing User Stories

**Describe how a Scrum-agile approach to the SDLC helped each of the user stories come to completion**. Be sure to use specific examples from your experiences.

Open communication between the Product Owner, customers, and Developers in the form of an interview helped in the creation of our User Stories for SNHU Travel; Our Product Owner formulated our User Stories from the interview notes, and organized them into the product backlog. These User stories represent the functionality and value that customers expect from our program, thus we add these stories to our Sprint Gantt chart and Burndown charts so that we accurately estimated their completion, and “burned them down” over the duration of the project.

Since the user stories were independent, valuable, size-estimable, and testable, the Product Owner could easily communicate the stories to developers, and prioritize them based on User Value by providing a clear user value statement for each. As a specific example, the team helped the Product Owner to write the user stories for “Custom Profile Tags”, “Customized Destination, based on Previous Travels”, and “Choose Destination Package Type.” These User Stories evolved during the incremental Scrum meetings, with the Product owner incorporating them into the Backlog for each incremental refinement, allowing the development team to prioritize items and assess development scope, giving us a general timeline.

Review and Retrospective: Handling Interruptions

**Describe how a Scrum-agile approach supported project completion when the project was interrupted and changed direction**. Be sure to use specific examples from your experiences.

In SNHU Travel, the Product Owner had completely changed direction of the Flight Packages interface midway. The Developer communicated that if any core functionality needed to be modified, the Velocity chart and Gant chart were to be updated to give an Estimation whether these changes could be accomplished within the current timeline. In this case, since it was mainly a thematic overhaul, the core code functionality stayed the same and our team was able to complete the graphical overhaul within the estimated Sprint goal.

The testing team was asked to write up the appropriate JUnit tests, ensuring tests were made for the GUI functionality; Pair Programming between the lead Developer and lead Tester was arranged to ensure all bugs are spotted and hammered out during that Sprint iteration is completed and the Definition of Done was met. Assignment and fixing of bugs was more rapid as a result of this Scrum-agile approach

Review and Retrospective: Communication

**Demonstrate your ability to communicate effectively with your team by providing samples of your communication**. Be sure to explain why your examples were effective in their context and how they encouraged collaboration among team members.

In the previous example of the graphical user interface overhaul, clear communication between the lead developer and product owner was absolute essential during this process to avoid making unnecessary changes or dissatisfying customer user experience, while at the same time communicating realistic standards in the scope of possible functionalities and timeline.

In SNHU Travel, there was an emphasis placed on frequent, clear communications. In AGILE, typically there is a Sprint Planning meeting to define deliverables of our product; then there are the Daily Standup meetings, to detect roadblocks and update status. Product Demo meetings helped show what our Pair Programmers have developed, and Retrospectives helped us to share lessons and improvements. Stakeholders also communicated with the product owner and Users, giving our team a clear idea of business value and User stories to strive for in our Sprint goals. As an example, during SNHU Travel there was an overhaul of the UI to a slideshow based interface. The Product Owner communicated changes to the UI and rationale, and the dev team communicated time requirement and technical requirements. Since core code stayed much the same it was finished within that Sprint. We helped expedite this by keeping clear open communication as to the current Sprint goal’s, Gantt chart estimation, and Burndown chart estimation for the week – after which we emailed the Developer, Tester, and Product owner of the updated expectations so we were all on the same page.

In order to optimize a Scrum team’s efficiency, working potential, and communication it is best to use a combination of Scrum events such as Daily Standup and Pair Driven Programming, and information radiators such as Gantt charts and Burndown charts. One specific Scrum event had our team transitioning from Waterfall to AGILE methodology. In that instance, I introduced Jira development workflow, and fostered an air of communication through vigilant response, updating Project Requirements, implementing Burndown charts to our workflow, keeping parties on track through automated text and e-mail alerts, and met the deadline with our Shareholders so that we could share the progress of our current Sprint and backlog items.

By utilizing Daily Standup, we communicated the vital goals, user stories, recent information, and critical knowledge with my proper facilitating (as the Scrum Master). This created an air of transparency between the members.

Review and Retrospective : Organizational Tools

**Evaluate the organizational tools and Scrum-agile principles that helped your team be successful**. Be sure to reference the Scrum events in relation to the effectiveness of the tools.

The specific Scrum event I’d like to focus on was our initial de-investment from Waterfall method and introduction to the AGILE methodology. In our first scrum we introduced Jira, which has a variety of information radiators and tools that helped the whole team throughout the project, from stakeholders’ User stories, developers’ code bases, Project Management for Product owner, and charts to view length until our project’s completion. Jira also provides continuous integration and deployment for developers, Product roadmaps with integrated Gantt charts and Burndown charts, and choice of workflow for shipping software. Our Product owner was about to manage her backlog, and view progress indicators on our first release. All of these combined help ease distance development and made communication easier. . Burndown charts helped track the team’s velocity and output, improving productivity of the team; Gantt charts gave us an idea of where we were along in the project, giving us a schedule that was accessible by any member.

Review and Retrospective: Evaluating Agile Process

 **Assess the effectiveness of the Scrum-agile approach for the SNHU Travel project**. Be sure to address each of the following:

* Describe the pros and cons that the Scrum-agile approach presented during the project.
* Determine whether or not a Scrum-agile approach was the best approach for the SNHU Travel development project.

The biggest challenge and con of AGILE was actually implementing it into our workflow and transitioning from Waterfall methodology, which was relatively simpler in comparison. Time, money, and effort to learn was required to incorporate the AGILE methods company and an investment to understand the facets of AGILE methodology was required on all parts throughout the culture shift. In addition, AGILE introduced a lack of predictability not found in the Waterfall methodology. It required furthering our prediction abilities on project scope and adaptabilities, complicating the budget and marketing/shareholder plans. We had to worry about the scalability of AGILE in terms of development team size, as our dev team consisted of over 40 developers it was hard to maintain cohesive 5 man teams. On the plus side, it introduced rapid development, flexibility in feature releases, a willingness to accept uncertainty and adapt to changes, and a honed responsiveness to change, focusing on customer stories and shareholder’s changing market conditions. In the situation of SNHU Travel Project, AGILE turned out to be the best approach, as the user requirements had some changes throughout it allowed the flexibility to adapt to those changes, and our team was able to use rapid AGILE development to create a working prototype to present to Shareholders and customers, resulting in a product that was customer-centric.