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CS 250 Software Development Lifecycle

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My team at ChadaTech transitioned from a Waterfall development model to an Agile development model, and this is our final sprint review and retrospection. I will be discussing roles, user stories, how interruptions were handled, communication, organizational tools, and evaluation of the agile process. Our team is the SNHU travel team and we are the first to transition from the Waterfall development model to the Agile development model to provide information to ChadaTech about the possibility of broader implementation of the Agile method.

The Scrum Team Framework has several roles, including the Scrum Master, Product Owner, and Development Team. All these roles work together to work toward the sprint goals and increments. The Scrum Master is responsible for making sure the team members adhere to the Scrum theory, practices, and rules. The Product Owner is responsible for the value of the product and work and is the only one responsible for the Product Backlog, which includes expressing the backlog items, goals, and missions. The Development Team does the work of delivering on increments, is self-organizing, and cross functional. Each of these roles are vital for maintaining momentum and focus to meet the sprint goals.

Completing the User Stories with the Scrum-Agile approach helped substantially by breaking down the user story into smaller tasks and having the team deliver functional increments. An example of a User Story would be for the SNHU travel website, where there would be a filtering mechanism added to sort by vacation types, so the user could search by cruise, domestic flights, international flights, and tropical vacations. It had smaller functional tasks for acceptable criteria, such as a drop-down box where the user could pick the vacation type that they would like.

Handling interruptions with the Agile method is much more effective and flexible than the more rigid Waterfall method. In the Agile method, the Product Backlog can be changed by the Product Owner to accommodate changes, and the Scrum Master can replan a session to inform the changes with the rest of the team. With the Waterfall method, having a change in the middle of the project could be detrimental, and in most cases it is. In our project at SNHU Travel, we had a change in the middle of the project, where the Product Owner came back from a meeting with management, where they found that an industry report showed that detox and wellness vacations are going to be the next big travel sector. With the Agile method, we didn’t have to redo everything from scratch, we only had to update the test cases, and change the existing code to focus on detox and wellness travel. This demonstrates the flexibility and adaptability provided by utilizing the Agile method compared to the Waterfall method. The Agile method can handle quickly changing market demands, which can give ChadaTech a competitive advantage.

Communication with the Agile method is extremely important, it is also done often. There are daily Scrum meetings, sprint reviews, and retrospectives that allow for the team to communicate effectively to meet goals and it makes the team more adaptable and flexible to changes. Communication in these daily scrums can also be helpful for early identification of issues to help project momentum continue, because when a team discusses the issues immediately, they avoid delays. During the daily scrum meetings, it provides a place for each individual in the team to discuss how far they are on their part of the project, any issues or roadblocks that they are experiencing, which will keep everyone on the same page on a daily basis.

Organizational Tools help manage Agile projects by allowing the team to keep track of the progress of projects before starting new ones and seeing what needs to still be done to maintain a steady workflow. One organizational tool that I believe is effective is the Velocity Burn-up/Burn-down charts. Burn charts help to see what has been done, and what has already been completed. It helps establish a baseline velocity for the team as well. These charts also provide information for sprint reviews that allow us to evaluate performance against sprint goals and adjust when necessary.

Evaluating the Agile process, it offers many benefits to the SNHU travel project. It is adaptable, flexible, can incorporate changes midway through, and it delivers fast usable increments. It allows for reviews of the process, retrospection, and can determine velocity of how fast a team works to make quality projects quickly and within budget. The Agile method was a good approach for the SNHU Travel Project because it allowed for addressing user feedback and changes during the project, as well as continuous quality work. The frequent reviews and retrospectives enable the team to enhance processes, making each sprint afterward more effective.

The transition from the Waterfall method to the Agile method with the SNHU Travel project demonstrated to the ChadaTech company that the Agile method shifted appropriately in for the team from the Waterfall method, and it provided numerous benefits to the project development as well. The success demonstrated by the SNHU Travel project utilizing the Agile method shows the potential for Agile to be implement across other teams within ChadaTech, where it’s other projects will have the adaptability and competitive edge against competition.