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SDLC Final Project  
  
 The different Scrum roles showed to be invaluable in the development life cycle of the product and each contributed towards the success of the project. With the Product owner being able to contribute the product vision while engaging with the users and stake holders. By identifying these needs such as through the user stories found in module three, it provided a basis and understanding of the work that needed to be done moving forward with the project. Because of this identification of the needs of the user and proper prioritization of these needs for the team it provided a smooth experience for the user in the end while giving a clear idea of what tasks should be prioritized in the development process. By determining and defining these requirements they ensure that the product is built up to the standards set by the stakeholders.

The Scrum master and their execution of the sprint planning, daily scrums and the backlog refinement helped ensure the team was on the same page through every step of the development process. The backlog and task prioritization provided by the product owner was refined for the rest of the team and was invaluable for the team to work towards a product that met the needs set. The daily Scrum as shown in module two, was largely impactful and continued to be so for the team to understand the issues that could arise through the process and how to move forward encouraging collaboration and an understanding of how to tackle these issues as a team while addressing the work to be done that day. The scrum masters sprint retrospectives provided a great contribution throughout the process, and even beyond the current project give the team a better understanding of what was done well and could be done better in the future by identifying the strong suits and weak points that came up along the way.

The role of the tester could not be understated, by acting as a user when using the project, it was easy to identify what could be worked on to provide a smoother user experience. The collaboration between the product owner and the tester provided a basis of the work that needs to be done that was passed on to the development team through the user stories and further communication with the product owner. These actions provide a clear set of goals and an understanding of what the project is missing for a smoother user experience.

As a developer for an agile team there a quite a few things to take into consideration as your role continues in the life cycle of the software. Some common requests that would be made to the Product Owner would be the clarification of information received through user stories or the technical requirements that are needed. Reaching out for this information would ensure that the team is on the same page moving forward and provides a smooth development minimizing misunderstandings. Other requests made to the Product Owner would include prioritizing backlog so that there is a proper hierarchy of tasks to work on, ensuring the highest priority gets worked on first. Reaching out to the stakeholders as well as the product owner also provides valuable feedback and ensures that any of the features that have been developed that have issues can be addressed and resolved early in the development process. These team meetings would also foster better teamwork and communication between the team, which will allow everyone a proper understanding of the tasks as they come up and the problems that may arise. The agile methodology allows you to be more flexible in your approach to development, as it has a heavy emphasis on the communication and the collaboration of the team rather than stricter development stages such as the waterfall process.

A scrum agile approach to the software development life cycle proved useful in bringing the user stories to completion as the framework enables a more flexible and incremental approach to the development lifecycle. Because of this flexibility the updated user stories from module three into modules four and five were easily taken into consideration for the development of the project. By using this sprint-based approach its easily adaptable to changing requirements and allows testing earlier in the design process to enable an easier understanding of the task prioritization and the work that is needed to make the changes to provide a better user experience. Because of this emphasis on communication from the approach and reaching out to the product owner about the user stories within each sprint such as in modules four and five it provided a more in-depth analysis regarding the work for the team to be on the same page for.

The agile methodology and approach were incredibly easy to change the direction of the project as found in module five based on the flexibility allowed within each sprint and the constant communication between the team. In comparison, a traditional waterfall approach would have to go back to the planning stage and create a new project accommodating for these changes. However, due to the approach that was used, the team could respond by adapting the sprint backlog and reprioritizing the tasks as they come to fruition and adjusting the timelines as needed. The transparency and collaboration encouraged by the agile approach whether that be through the daily scrum meetings found in module two and three or the constant feedback provided by user stories and the product owner in modules three, four and five emphasized the importance of sharing the experience of each team member and allowing everyone to understand the roadblocks that may come up and how to handle them as a team.

Communication within the team was invaluable to the success of the development lifecycle and allowed the team to be on the same page for roadblocks and the current task prioritization. This was emphasized in the module four journal where an email was drafted to the product owner regarding a more in-depth analysis of the user test cases to get a better understanding of the prioritization moving forward. The daily scrum meetings being another asset that emphasized the communication used during the life cycle of the project, found in module 2 where it was properly broken down to understand the importance of understanding what is going to be worked on and how the team members can collaborate to work through roadblocks. The agile methodology helped with the emphasis on communication through the different sprints and ensuring that the ideas and requirements from the product owner and the customer are taken into consideration. Overall, the use of communication can not be understated throughout the process as it allows a cohesive team with a full understanding of the tasks needed to be prioritized while understanding and accounting for the changes in the needs that were found in module five when the direction of the project was changed.

There were a variety of organizational tools and scrum-agile principles that were incorporated into the development life cycle that proved useful in creating an end product for the user. The scrum events were invaluable, including the daily scrum and the sprint planning as it allowed the team a proper understanding of incrementing the work through sprints and getting a proper understanding of how to undertake the tasks at hand. One of the scrum agile principles that is just as important would be the self-organization of the team, allowing the members to take ownership of their work while making the decisions as a collective with proper communication through each step allowed changes in requirement to easily be implemented especially in comparison to the traditional waterfall approach. The emphasis of collaboration as a scrum agile principle was shown in every step of the lifecycle as it was invaluable to receive feedback and for the team to be on the same page regarding the tasks and how to undertake roadblocks as a team. With all these principles, tools, and events in conjunction it allowed the scrum team to be successful and on top of changes in design requirements.

I think that the scrum agile approach was appropriate for the SNHU travel project and that it was the best approach that could be taken for this project. There are a variety of pros that were prominent throughout the lifecycle of the project, including the transparency of the team, the collaboration between members and the emphasis on communication through the sprints, as well as the adaptability available to the team. The transparency of the team and sharing what work is going to be done by each member allowed a better understanding of the project for everyone involved while encouraging teamwork regarding roadblocks. The collaboration in the agile project was invaluable especially considering the change in design requirements and the overall direction of the project, in conjunction with the incremental sprints it allowed for decision making among the team allowing for a seamless transition into the new direction requested to make a seamless user experience fitting the requirements given. However there are always cons and for the agile approach it was shown that while it is more adaptable to changes it is less predictable and with being less rigid it is harder to predict timelines and budgets. Another con that could be found in this approach is that it relies on the team to be able to effectively communicate and while it is heavily encouraged and emphasized throughout the process it ultimately comes down to the team members and could prove to require more training or education to members who are not quite familiar with the approach or not fully invested in the process. In conclusion, with the change in requirements midway through the project I believe that this was the best approach for the development lifecycle as we were easily able to prioritize the tasks and for the team to get an understanding of the work that needs to be done to account for this change in direction however if we were using the more rigid waterfall approach this would have proven to be more intensive and damaging to the process to account for these changes.