Scrum-agile development is a very sensible structure to help format the software development lifecycle. Because of the need to make design changes, code corrections, and address security concerns through the life of an application the agile approach allows for flexibility in those aspects. The Scrum team is designed to help improve the efficiency of the software development lifecycle.

The Product Owner is the lead in the Scrum team. According to *The Project Manager’s Guide to Mastering Agile,* “The Product Owner is responsible for maximizing the value of the product and the work of the Development Team. How this is done will vary widely across organizations, Scrum Teams, and individuals.”(Cobb, p. 35) In general the Product owner is responsible for maintaining the product backlog, communicating with users, and crafting user stories. The Scrum Master is a similar role to a supervisor. The Scrum Master works closely with the Product owner to manage the Product Backlog, maintains regular communication with the development team, ensures the team adheres to Scrum rules and practices, as well as ensuring the development team has everything they need to complete their assigned tasks and maintain a high level of productivity. The Team role consists of the development team who work on delivering the product. This mostly consists of Developers and Testers. The development team is intended to be self-organizing, cross functional, and accountability for the product belongs to the Development team as a whole, rather than individual, specialized members.

During the development of the SNHU Travel project, the Product Owner regularly made changes to the product backlog which changed the goals of the project. This led to the restructuring of the product throughout the software development lifecycle to ensure the end result was what the user had intended. The SNHU Travel application for example, was restructured from a list view to a slideshow after the product owner communicated with the User and was made aware of their intention. The test cases produced by the Development team helped to ensure that the product functioned as intended. This ensured there was no missing functionality in the application as well as ensuring there were no bugs in the product which would cause the application to misbehave or crash. The user stories managed by the Product Owner and the Scrum Master were helpful in creating the baseline for the changes made in the software. From the user stories for SNHU Travel, as the Developer I was able to make changes to the SNHU application to showcase detox and wellness resorts.

The change from all hotels, resorts, and cruises to only those specializing in health and wellness was a large change in direction that would create an interruption in development. The initial reaction from the development team was that all of the previous work would be scrapped and they would need to start over. The Product Owner took charge and redirected the team to keep the existing infrastructure and just change the destinations to those matching the new User Story. The Product Owner also took responsibility to reprioritize the backlog so that the project would still be completed in the same timeline, but some features would be left out to accommodate the shift. During my interactions with my team during the weak six discussions we coordinated with one another to assign roles for the team. I took place in the Development team while other students participated as the Product Owner and Scrum Manager. Everyone participated in the Discussion which is similar to a Scrum weekly meeting. Everyone communicated their roles and made suggestions for improvements to their responsibilities. This demonstrates the effectiveness of collaboration within a Scrum team.

The primary and most important tool in Scrum organization is the product backlog. The product backlog is a list of user stories which are essentially feature requests. The backlog is managed by the Product Owner and the Scrum Master to ensure the necessary product features are being implemented in development. Without the product backlog, developers wouldn’t know what to work on. This brings us to user stories; user stories are also managed by the Product Owner and provide the necessary information for a developer to make a change or create a feature in software. The product backlog is brought up in the weekly meeting to determine the state of the product being developed and decided what will be developed during each sprint. The weekly meeting is an organizational event which keeps the product development focused and ensures production moves forward. There is also a daily Scrum meeting to ensure the development team is moving forward with production and provides an opportunity for the development team to request help as necessary. This also facilitates the coordination of completing packages that are prerequisite to other packages. The Scrum-Agile approach ensured that the project continued to progress as needed throughout the software development lifecycle. The separation of roles helped to add structure to the project with defined roles and processes. The flexibility of agile allowed for major developmental changes to occur without making a drastic delay in the timeframe of the development of the software package. Since the application is allowed to be agile and changes are able to be made during production the downside is that some development time is wasted backtracking and making large changes. The waterfall method sets strict guidelines at the beginning of the software development lifecycle which prevents these kinds of major changes without reworking the development plan and therefor the cost and contract. The Scrum-Agile method is a double edged sword which allows for this flexibility but can waste time. Without the Scrum-Agile method these changes would npt have been easily made making it the best approach for the SNHU Travel development project.

**References**

Charles G. Cobb. (2015). The Project Manager’s Guide to Mastering Agile : Principles and Practices for an Adaptive Approach. Wiley.