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Final Project

Throughout this course, we have been learning about the key aspects of the software development life cycle. These key aspects would be the two main types of development, their strengths, and their weaknesses. While studying the two different types, it is clear that the stronger choice between waterfall and agile development, is agile development. Agile development focuses on key aspects like tight communication with the team, any alterations that are to be made mid-development, the use of user stories, and the tools that are centered around agile development that help lead to success.

Within our agile development process, the use of Scrum methodology has been key to our success. Scrum methodology is built on the idea of gathering a team where everyone has their own specific role. These roles include: the product owner, the Scrum master, and developers and testers. As mentioned earlier, these roles each were a key component to our success.

The Scrum master was the spearhead of the operation. They are responsible for being the leader of the group. They also work closely with the product owner to groom the backlog which helps decide which task is most important and the resources that are required to ensure the task is completed. They are also responsible for hosting and leading daily Scrum meetings. These meetings are typically anywhere from 10-15 minutes. They discuss what is included in the backlog and divide the tasks amongst the team. These meetings also give the team a chance to speak about where they are in the development process, and any troubles they have faced along the way.

The product owner is also a very important role of the Scrum methodology. They also have very important responsibilities that will help direct the team to success. As mentioned earlier, the product owner works closely with the Scrum master to refine the product backlog. They also are in charge of being the support of the team, gathering resources and prioritizing needs of the team. On top of that, they are also responsible for being in communication with the shareholders and client. They are responsible for notifying shareholders and the client where they are at with the development process, in addition to taking the client’s request and finding a way to implement it into the product backlog.

Lastly, we have the developers and testers. They are the backbone of the project. Without the developers and testers, there is no finished product. They are responsible for a few things as well. They are to hit the development deadlines in a timely manner. They are also responsible for working out any bugs that are faced along the way. The developers and testers also need to be efficient at communication, talking with the team about any resources they may need to get over a specific trouble, or giving updates about where they are at with the development process as well.

Another key aspect of agile development is the use of user stories. These are software features that are written from the users’ perspective. An example of how user stories are used in the SNHU Travel project would be when the user wanted features added to SNHU Travel’s website, or the things that they would like to see added. Some of these user stories include: having a top destination list, have a destination list that could be customized based on the user’s profile, price limitations for vacations, and having the ability to choose what type of vacation. Having these user’s stories is key to developing and releasing a product based on the user’s opinions and needs.

One key aspect of agile methodology is the flexibility. This flexibility helps when the project changes direction, or is interrupted for whatever reason. This is also why user stories are so vital to the success of the product. Because the user may change their mind or opinion on certain features that should be added or removed, the flexibility of agile allows us to implement those ideas or features. As mentioned earlier, the users had mentioned that they would like to see profile customization, price limitations, vacation types, and top destinations listed. After the product owner had mentioned that in the daily Scrum meetings, the developers and testers were able to divide up the tasks added in the product backlog, finish the development for those tasks, and then move back into the development of the rest of the project.

As mentioned earlier, being able to effectively communicate with the team is a pillar of Scrum methodology. One way that communication was effectively achieved was through the daily Scrum meetings. During these meetings, it gives the team a chance to communicate where they are at with the task that was given to them in the previous week. It also gives the product owner and the scrum master a chance to update the team on what is new in the product backlog. This also gives the team a chance to mention any roadblocks that they are facing along the way, and then gives the rest of the team an opportunity to help that team member to continue the development process.

There are also plenty of tools that help with organization and execution of Scrum. One of these tools would be JIRA. JIRA offers an effective way to set up, clean up, and manage the workflow of the project. They also offer a roadmap that is used for helping organize ideas that are related to the “big picture”, communicate plans with the shareholders, and ensures that the team is all on the same page. Lastly, JIRA effectively keeps all plans in real time so that up-to-date information is communicated with the team freely, ensuring that everyone is up to speed (“JIRA Software”, n.d.).

In conclusion, it is clear to see that agile methodology was the correct choice of development for the SNHU Travel project. There are many pros of the Scrum-agile approach. One key importance and pro being the communication effectiveness of the approach. Making sure that everyone knows what they are doing, when it needs to be completed by, and what they are working on next, is vital for having a smooth and rapid development process. Another pro would be the flexibility offered by utilizing user stories. Being able to take the consumer feedback and add the features that they would like to see implemented is key to releasing a product that will not only be appreciated by the consumer, but also sets the product apart from similar products. The only con of this concept is when user stories are implemented, it is important to keep the product deadline in mind, as the user stories may add additional development time that was unaccounted for. Through the examples and reasoning provided, it is clear that the Scrum-agile approach is the best of the SNHU Travel projects.

Works Cited

*JIRA Software.* (n.d.). Atlassian. https://www.atlassian.com/software/jira?&aceid=&adposition=&adgroup=89541890862&campaign=9124878120&creative=542569520290&device=c&keyword=jira%20scrum&matchtype=e&network=g&placement=&ds\_kids=p51241495776&ds\_e=GOOGLE&ds\_eid=700000001558501&ds\_e1=GOOGLE&gclid=CjwKCAjw6dmSBhBkEiwA\_W-EoEiK0aF9XkDwdNBrjJDxf0\_oY6s1mYUzhqpG\_lMqHKYxkffjh9FuxxoCR\_EQAvD\_BwE&gclsrc=aw.ds