Zachary Nicholas

April 10th, 2023

CS-250: Software Development Lifecycle

* **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.

With the roles of the scrum team, In this project we have seen that ability to work with others has made it more agile and made our team more able to deal with issues as they arose, what this also did is allow for better communication between everyone, we can see this during the project where our product owner would meet with the clients and give us the information we need in order to accomplish what they wanted in their requirements, what this also did was allow all of our team to ask the product owner what they thought to be the most important thing to work on in relation to the things they laid out.

* **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.

With using the Scrum-agile approach we allow for a better overall project and allows us to have a faster development time. With the experiences I have had with the SNHU trave project I have seen how our scrum team has helped to accelerate the development time in order to produce the software they would like, what this also did is allow for the team to have good communication with the other members and allowed for the team to ask question to the product owner that they can ask to the clients.

* **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.

One thing the agile practice is best for is the ability to introduce or change things about our project very quickly and allows us to keep a very tight deadline with that in mind, one time we see this happening is when we had made the original code for the top five locations then the next week they asked us to then change it to the wellness and retreat locations and how we had to work and accommodate that with our already existing project.

* **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.

Communication is the most important thing to consider when working especially within in a scrum team where you might be a 1 0f 1 or a 1 of 2 type of job and how you might go about making sure everyone knows where you are in your process whether that be in a tester or a developer role, to help with this we have things like a daily scrum meeting that allows everyone to share where they are at in their process and help to keep everyone informed about any issues that may arise during development or testing of our software. Another thing I find as important when it comes to being a part of a scrum team is to look at the sprint review in order to improve in any areas that you may have lagged and how you could add constructive criticism to your other team members to help improve things that could’ve been an issue in your eyes.

* **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.

One thing we did particularly well us the planning phase where we had used estimation techniques to understand what was asked of us according to our clients and how we would go about accomplishing them, in understanding what was asked of us and helped us to understand the time we were given.

* **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.

When it comes to pros and cons, the huge pro you get when using the scrum-agile method is the fact that it is a very fast and flexible it is also allowing our team to adapt very well to new things and new criteria from the client. The other pro is that it is very interpersonal and allows our team members to collaborate on a higher level. The one downside that is omnipresent is that it is difficult to get started from scratch as it requires everyone in the process to understand at least some of the scrum principles, it also doesn’t work with every type of project, so it is important to understand where and when to use it by understanding the scrum principles as well as the scrum techniques.

* + Determine whether or not a Scrum-agile approach was the best approach for the SNHU Travel development project.

I believe that this was an excellent choice for the scrum practice, what this did is allow for better communication across the whole team and allowed us to be more flexible in relation to when new things were added to our project or just to finish a task that we had from the start. I also believe that our team applied the scrum principles very effectively as we were able to make good test cases and user stories in order to do proper planning and allow for better development of our project as time went on, we also did very well adapt to new situations and kept up with our estimate of time that our project would take.

* **Explain the various roles on a Scrum-agile Team** by identifying each role and describing its importance.

Product Owner: The product owner is the main person in charge of our scrum team as they are the ones that have the direct connection to the client and help to reduce any confusion when it comes to giving our team information the project they are about to do. The product Owner is a very important role in the scrum-agile method as they have the connection to the customer and allows themselves to be the sounding board when it comes to asking the client questions that the scrum team may end up developing.

Scrum Master: The scrum master is the leader of the developers and the testers as it relates to the project and manages the daily goings on of our team as they host the daily scrum meetings that allow everyone to be up to date on the development process and helps to adjust the timetable and if they will need to do more things on that given day. They also make things like sprint retrospectives that are very useful to our team as they can identify things or areas where they may not have been proficient in before doing the latest sprint. As I said above the scrum master is a invaluable person to have as they will manage the team keep them on track with different goals and helps the team to continue to work, they will also relay this information to the product owner in order to allow them to never be blindsided by a goal that may take more.

Developers: Developers have a very important role as they are the ones that develop our code base and give an up-to-date idea of when the project may be done to the scrum master while also coordinating with the tester in order to have a working project while also bug testing.

Tester: The testers also have a very important role in the scrum process as they are the ones that test our product and helps to deliver the project to the clients with as few bugs and allows us to iterate on the design and make a much better product while also allowing our developer to find ways to improve the code still while it is being tested.

* **Explain how the various phases of the SDLC work in an agile approach**. Be sure to identify each phase and describe its importance.

Project Planning: during this phase we have identify the scope of the project, if the scrum-agile method is the best type for this project or if we would be better with a different development process, this is also the time that we begin to figure out how much resources we will need and how much time our team will need to complete the project.

Analysis: during this time, we get a good idea of the requirements from the client and our product owner, we also gather any additional information such as the system requirements. During this time, we can also see if we have the skills or knowledge to accomplish what is asked of us from the customer.

Design Phase: during this time, we begin to develop some of the requirements that we had identified during the analysis phase, also during this time we begin to set up our infrastructure to make our product whether that be the network infrastructure or the database we may use for storage of our product.

Implementation: In this phase we make a working product and in this we start to test the code and begin to develop it to match the requirements that we had developed in the analysis phase, during this time our project should be mostly done with everything and should only really need a final look over till we complete and install the project.

Support phase: This phase is less to do with the development process, it is more the continued support of our already complete project with this, we will do things like preventative maintenance to keep it running fine, we will also offer to enhance the systems and provide support to the users of our system.

* **Describe how the process would have been different with a waterfall development approach** rather than the agile approach you used. For instance, you might discuss how a particular problem in development would have proceeded differently.

With a waterfall method we know the advantages some of those being: it’s an easy model to manage it also allows for a fast delivery of the project, it is also very easily adaptable method for shifting teams. With this we can tell how the waterfall method would differ from the agile method we choose, we would not have any sprint phases instead with a waterfall method we would have distinct phases to break up our development process, another thing that would’ve been different is the fact that agile follows a incremental type of development where a waterfall method has a sequential method. Another important part that would’ve been different is the team coordination that comes with an agile the waterfall is severely lacking in this area.

* **Explain what factors you would consider when choosing a waterfall approach or an agile approach**, using your course experience to back up your explanation.

Some things that I would consider for not choosing agile:

1. if the project is a small development
2. if there is not an expert available to make important decisions about the future of the project
3. if cost is a major issue since agile will be more expensive
4. if the team leader isn’t able to keep the team on track the agile method can easily take longer than the waterfall method

Somethings that I would consider for not choosing waterfall:

1. Waterfall method isn’t good for large sized project.
2. If the person managing the team doesn’t fully understand the requirements the project can easily become a longer process
3. Can only be tested after all of the development process has been completed