Sprint Review and Retrospective

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Introduction

Agile is a methodology that focuses on a couple of core concepts. These concepts are what I like to call the 3 C’s: Collaboration, Communication, and Continuation. These C’s mean a couple of things. Collaboration in agile means you will always be talking with people about the project; This could be done through 15-minute scrums as well as talking with every aspect of the team in the design process. The 2nd C is Communication, when implementing agile you will continuously create graphs as well as constantly managing yourself among your teams by changing these graphs. For the final C it means continuation, in agile creating new features on the fly is a priority continuation means that you can keep making new features for your application. While completing the SNHU travel project I learned a lot about how agile can heavily prove a team’s production. Specifically, I learned about each role.

# Roles

Agile has a lot of moving parts, all moving in unison. Due to this it is better to make smaller groups of the team do different things to allow agile to work smoothly. I am going to break down each common team name and what they do.

## *Product Owner*

Product owners are owners of the product you are making it for. In SNHU’s case this could be the owner of the SNHU travel project. They engage in the creation process and will be asked about features they like or asked for their personal views on the matter.

* Manage Scrum Backlog
  + They will oversee what features they will want to be implemented.
* Set Product Vision
  + Product Owners handle what the end goal might be for the project and can adjust it as they see fit.
* Communicating with external stockholders
  + They will communicate with stockholders to secure any necessary funding.
* Ensure the team is focused on features.
  + They will oversee the priority of adding features. This could be if we needed to choose to add a new travel option or a new category for travel they would decide what it needs to be.

### Scrum Master

A scrum Master will organize the team. You can think of him as the coach for the players on a basketball team. It is up to him to manage the team to do the workload the Product owner wants to be done.

* + Organizes Team
    - Scrum Master will divide the team into smaller sections as well as allocate more resources when it is needed.
  + Focus on Communication
    - Scrum Masters will host most 15-minute sessions as well as meetings regarding scrum.
  + Break Hard concept to simple components.
    - Scrum masters oversee keeping the team focused and to ensure everyone understands what their job is on the team; to do this they will break down harder concepts for most people to understand.
  + Graphs, Diagrams, & Charts
    - Scrum masters are in charge of most of the graphs, Diagrams, and charts for the team.

### Developer

The Developer is the most important member apart of the team. Developers make the products which you would not be able to produce without them. It is important for the developer team to know everyone’s strengths and weaknesses as it is essential for agile. For instance, if your teammate Chris never used HTML but John has. It would be better to give John the HTML role.

* + Creates Project
    - Developers are the people creating the project to completion.
  + Assist in Sprint planning.
    - Due to the developer team knowing each other they know what they are capable of so they will choose what sprints need to be done and when.
  + Find the best development Practices.
    - The developer team, knowing each other will find a practice that works for everyone on the team. For instance, if everyone feels like it is hard to work after a day off, they will assign a less taxing task so it can be fully completed.
  + Ensure high quality maintainable products with scalability in mind.
    - Due to how agile is very naturally adaptable. You can expect developers to create modular code which can be swapped out in most places. This allows you to add onto it easier and much more nicely.

### Tester

Testers are not required for agile, however, are a huge advantage to have. Testers will test and attempt to break the program the developers create which means developers can focus on the creation of new features rather than focusing on code they have already made.

* + Keeps Project Quality High
    - Testers keep the project quality high and consistent. They will be tasked with quality control mainly.
  + Communicates with dev team.
    - Testers communicate with the dev team closely so they can exactly point out what is wrong with the feature. They communicate so closely sometimes Testers are developers.
  + Allows for the Dev team to focus on feature implementation.
    - Testers allow for dev teams to focus on creating new features rather than being stuck debugging their old features and code before making a new one.
  + Locate Potential Blockers
    - Testers can find and locate code that could cause issues in the future as well as find issues with the application that could cause mistakes to be made. For instance, if Developers were creating a button for SNHU travel application that is supposed to open a new window and show content. Testers might find if you press the button fast you can create multiple windows which could lead to an overload in the future.

# User Stories

In Agile communication and speed are key when making the product. User stories allow for this to be done at an effective level. It not only gives suggestions of what to create in the future but also allows us to further break down components into smaller tasks. For instance, if we wanted to add a sort by city function to SNHU travel that could take a lot of development time but if users said they mainly wanted Major cities we can develop that first which gives our users what they ask for straight away while allowing us to have time to start something new.

It also gives us reports of bugs and mistakes that slipped through the developer and tester. This could provide the team with valuable insight into what to fix on a range of how important it is.

# Interruptions

Interruption is something that always happens in software development. It is not something that can be prevented at all as it’s an unknow variable. However, you can mitigate the disturbance the interruption causes. With agile due to being extremely flexible if our client wants to change the program or add new features or cancel some, we can always accommodate for that. Due to how we design 1 feature as a time modular it allows for it to be changed in a heartbeat without stopping the entire project and restarting. It also will not affect the entire team, specifically who was creating that singular feature.

# Communication

Communication is something that is essential for agile. It would not be a scrum methodology without it. Agile provides multiple times to communicate in a day as well as daily standups allowing teammates to share projects or discuss challenges. During sprint reviews the team will decide what went correctly and what went wrong and can provide corrections to where they are needed. For instance, if a team had trouble with HTML someone can be code with partners with them. It also provides a safe environment to let others know when you need assistance as well as failures with the team encouraging a safe and happy environment. Which according to oxford a safe and happy environment can raise production by almost 14%.

# Organized Tools

Organization tools are not required for agile to be used however it does speed up agile to an even faster rate. Which when speed is the main benefit of the mythology that is perfect for this type of development. JIRA is the first tool that comes to mind as it allows you to create so many options in a single application. In JIRA you can: manage backlog, maintain progress, create diagrams, attend meetings, and even keep in communication with your team using integrated slack. Using tools while not required can easily speed up any project as the down time between not having a diagram and having a diagram becomes every small.

# Agile Analysis

Agile has provided multiple benefits in the creation of the SNHU travel project. It allows for the development team to adapt to changing requirements, Adapt to customer feedback, and deliver useable products consistently. However Agile does have some challenges like feature creep being the biggest one or maintaining detailed documentation. Below is an attached graph of the pros and cons.

Agile, even with all its faults, was still the best choice for SNHU travel project. When creating the travel project, we referred to and implemented user stories in development which could only be obtained though the agile method rather than anything else. It also saved us when the product owner changed what they would like to do during week 5. Luckily thanks to agile we were able to overcome it without any large disruption.

# Conclusion

Overall, there is a reason agile is used by most companies today. Using Agile is something that can only be improved overtime as it receives fast feedback as well as developers are able to sort their own team so they can truly benefit and are effective for the company. It provides easy to use management styles where everyone does their part and can accommodate human nature of changing your mind about something at a later date and deciding to add new features. It also makes staff happier, which can give a 14% increase in output. It also reduces the chance for any amount of HR reports as staff will be communicating constantly in a safe open environment.

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