What is Scrum Theory?

Scrum makes it possible for product manager and development team to improve the project.

It is founded on empiricism which is based on experiences and making decisions based on that.

The basis of iteration in scrum allows for less risk and lets prediction be done with ease. The 3 major parts on the scrum theory are transparency, inspection, and adaptation. Transparency is essential because the development team should be clear with what is happening with the project with the sponsors. There should also be a common definition of what done is. Inspection is when scrum users must inspect what progress is made towards the sprint goal and find any issues that come up. Adaptation is when items in the project is found to be going outside the acceptable limits hence the process must be adjusted to minimize future deviation. Sprint planning, daily scrum, sprint review, and sprint retrospective are involved in inspection and adaptation.

What is the size of Agile development team and the role of each member?

Size is optimal if it remains small enough to be nimble but large enough to work properly for a sprint. Less than 3 members and more than nine is not good. Three members means there would be a lack of proper skills and there might be an issue with the delivery during the release. More than nine members however would be too much coordination and complexity. The nine or three members exclude the scrum master and product owner. Roles include the product owner, development team, and scrum master. The product owner's role is to manage the backlog and decide on what will be brought into the sprint. They should make sure everything in the backlog is prioritized properly and make sure it is clearly visible and will show what the scrum team will work on. There will only be one product owner. The development team is made up of self-organized team members that take items put out by product owner from backlog into potentially releasable functions. Everyone has the title of developers; however, each member has a specialized skilled area. There is also the scrum master who ensures that the scrum theory and practices are followed.

What is the difference between Scrum Master and Product Owner?

While the product owner actually meets with the users and creates the backlog and decides on the business side priority, the scrum master helps by finding effective product backlog management. Scrum master also ensures that the product owner knows how to arrange the backlog by getting most value. The product owner makes sure there is valuable output for the business, but the scrum master makes sure the scrum team understands the entire product backlog.

What are the main objectives of Sprint Retrospective?

A sprint occurs within one-month time and releases something to the business/sponsor. During a sprint there is no change of the sprint goal and scope. Sprint planning is based on the entire scrum team deciding if these items can be worked on within the period of time. The objective of sprint retrospective is for the scrum team to review their work and see what went well and what can be improved for the following sprint. The timeline for this is right after one sprint and before the next and time is based on the length of the sprint. During this time there is no business but just the scrum team and the scrum master facilitates it. So during this time the people, relationships, process and tools are inspected and the major items and improvements are identified. Lastly there is a plan made for the future of what to be done by the scrum team for next sprint. In the team I work on, I am scrum master and we have a page where we write down the points made and next step improvement to be followed by the team for a more effective future sprint.

What are the main similarities and differences between Product Backlog and Requirements Document?

Product backlog contains all the items needed for the product and all the requirements for any changes made to the product. Main thing is that it is flexible and is never complete based on the needs. Has a list of all features, functions, requirements, and fixes. Even if multiple teams work on the product, only product backlog is used. Both the product owner and development team collaborate on the details of product backlog items and refine it. The higher the items are in the product backlog, the more detailed, more precise estimates they are since it is more immediate. Selections of items that can be "Done" in a sprint are deemed to be "Ready". Requirements document is created at the beginning and is not usually edited later. It is not broken down by tasks like the product backlog, but rater contains all information for what a product will do. However, the similarity is that this it has functional requirements, which defines a function of the system and has technical details and behavior requirements. This is like the product backlog since this is used to make the product backlog. It is different in that it has a clear definition of the scope and usually is not changed but in product backlog there is a possibility of change and flexibility. Lot of what is needed for development team is put into a requirements document and is very formal; however, in product backlog it can be more easily modified.

What is Agile/Sprint monitoring process?

The product owner tracks the total work remaining every sprint. There are burn-down, burn-up and cumulative flows to display the trends of the work being code. During the specific sprint there is something called the daily scrum that is run by the scrum master for 15 minutes. It is to see what the person do yesterday to meet sprint goals, what will be done today, and are there any road blockers preventing them from meeting the sprint goal. So the overall idea is to inspect the progress toward completing the sprint backlog. Though the scrum master oversees the meeting, the development team ae the one conducting the meeting. This allows for increased communication and quick decision making.

Why is it important to have a “Definition of Done”?

The sum of all the items in product backlog completed during the sprint and the value of the increments of previous sprint. This becomes the "Done" and it is the new done becomes the scrum team's definition of 'Done". It is important to have a definition of done so there is a common shared understanding among the scrum team of what it means for work to be completed and have the transparency. This definition guides the team to know how many items to take from product backlog for the sprint during the sprint planning. If there are multiple scrum teams working on a product, then all teams must mutually define the definition of "Done." As scrum team grows and develops the definition of "Done" will have more criteria for higher quality.

What are the biggest challenges in Agile development?

Though agile is great there are a few challenges. It is not too useful if team is unfamiliar with the technology. Also, if the developing system is too complex because this would require team to become more experienced with it and that will require extra time. Also, some things I notice are that the team has the pressure of finishing the task within a two to 4-week time frame and if not done, it looks bad to the stake holders as well as messing up the cycle.