YADEVKRISHNA TR

1. Explain SDLC at a high level?

**Ans :** Software Development Life Cycle (SDLC) is a process used by the software industry to design, develop and test high quality softwares. The SDLC aims to produce a high-quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates.

1. What is waterfall and why is it still relevant ?

**Ans :** Waterfall model is a linear sequential development life cycle model. It is easy to understand . each phase must be completed before the next phase can begin and there is no overlapping in the phases.

Its is still being used in small projects with low chance of of any unpredictability. In such a situation, the Waterfall methodology presents as a cheaper and quicker alternative and also requires less resources and effort.

1. Explain Agile Model with a use case and the role of SCRUM in that?

**Ans:** Agile method is combination of iterative and incremental process which focus on adaptability and customer satisfaction by rapid delivery of the working products. Agile Methods break the product into small incremental builds. These builds are provided in iterations. During each we perform the waterfall strategy and after each iteration ,or build , a demo of the product upto date is shown to the client , the client will review the demo application and check whether the functionalities implemented is according to his requirement or not, and if not he will say the it is not what he want and we will make changes to the software according to the need. Along with that if the client want to add additional improvements we will take the requirements and implements it in the next iteration . Scrum methodology used to implement agile .In Scrum we will have sprint that is the each iteration in agile, so each sprint we will implements a number of functions. At the end of each sprint we will connect to the product owner about the software and make sure we are on the same track .so thus on each sprint we will learn from the last sprint and make improvements to the software and add addional improvements

1. Who is Scrum Master?

**Ans:** Scrum master manager the team towards the completion of the projects. MakeSure team follows the right track, clearing obstacles, Establishing an environment where the team can be effective, evaluating the performance, how much part of the project has been completed, what challenges are facing ,etc.

1. Differentiate between Product/Sprint Backlog ?

**Ans:** The sprint backlog is like a subset of the product backlog.  it contains only that item, or those items, that can be completed during each sprint.But product backlog is breaksdown the epics into user stories ,and each user story is task to be completed.

1. What is Epic & Story?

**Ans**: An Epic can be defined as a big chunk of work that has one common objective. It could be a feature, customer request or business requirement.an epic consists of product backlogs , improvement etc it is the overall definition of the product.While the user story is the individual breakdown of the product backlog that is the epic, ie the smallest unit of work , a user story is an individual task .A number of user story is completed in a sprint.

1. What is called Velocity in SCRUM ?

**Ans :** Velocity is the amount of work that the scrum team can complete in an sprint.Its calculated by totaling the Points for all fully completed User Stories.

1. Explain the SCRUM ceremonies?

**Ans:** Scrum requires teams that can quickly solve problems in unpredictable environments.Scrum ceremonies ensure that everyone the scrum master, product owner and scrum development team is in sync.

The scrum ceremonies include.

* Organize the backlog
* Sprint planning
* Sprint execution
* Daily scrum /standup
* Sprint review
* Sprint restrospective

**Organize the backlog**

The product backlog is a list of everything that is to be developed for your product or project. It can include new features, bug fixes, optimizations, or pretty much anything that somehow benefits the customer.

**Sprint planning**

This ceremony helps to set up the entire team for the coming sprint, creating a smooth pathway for a successful sprint.

**Sprint execution**

In this phase the execution of the sprint is done.

**Daily Scrum**

This is a standup meeting, or a very short – 15-minute mini-meeting – for the team to make sure they’re all on the same page.

**Sprint Review**

This is another type of meeting, but one in which the team demos what they shipped in the sprint

**Sprint Retrospective**

This is when the team reviews their work, identifying what they did well and what didn’t go as planned, so they can make the next sprint better.

1. What is grooming?

**Ans:** Backlog refinement (formerly known as backlog grooming) is when the product owner and some, or all, of the rest of the team review items on the backlog to ensure the backlog contains the appropriate items, that they are prioritized, and that the items at the top of the backlog are ready for delivery.

1. How Jira board is effective in SCRUM?

**Ans**:Jira Software is an agile project management tool that supports any agile methodology. We can use jira board for reports, you can plan, track, and manage all your agile software development projects, using Jira board we can manage backlogs , sprint planning , epic description , story description , mention story points, communicate with customer etc.It provides the necessary tool for implementing agile methodology .

1. Differentiate between SCRUM & Waterfall?

**Ans:** The **Waterfall Model** was the first Process Model to be introduced. It is also referred to as a linear-sequential life cycle model. In a waterfall model, each phase must be completed before the next phase can begin and there is no overlapping in the phases.water fall method include this stages

* Requirement Gathering
* System Design
* Implementation
* Testing
* Deployment of system
* Maintenance

All these phases are cascaded to each other in which progress is seen as flowing steadily downwards. Since the final product can be seen in the end if any changes have to be done , we will have to do it all from the top itself , by which we will lose a lot of time again .we use waterfall when Requirements are very well documented, clear and fixed, Product definition is stable technology is understood and is not dynamic.

**Agile scrum methodology** is sprint-based project management system whose goal is to deliver the highest value to stakeholders. The greatest benefit of agile scrum methodology is its flexibility. With the sprint-based model, the scrum team typically receives feedback from stakeholders after each sprint. If there are any problems or changes, the scrum team can easily and quickly adjust product goals during future sprints to provide more valuable iterations. This way, stakeholders are happier because they get exactly what they want after being involved every step of the way. There are three core roles: scrum master, product owner and scrum team. All of these people are committed to the scrum project

**Scrum master.**The scrum master is the facilitator of the scrum development process. In addition to holding daily meetings with the scrum team. The scrum master's responsibilities also include coaching and motivating the team, removing impediments to sprints, and ensuring that the team has the best possible conditions to meet its goals and produce deliverable products.

**Product owner.** The product owner represents stakeholders, which are typically customers. To ensure the scrum team is always delivering value to stakeholders and the business, the product owner determines product expectations, records changes to the product and administers a scrum backlog, a detailed and constantly updated to-do list for the scrum project. The product owner is also responsible for prioritizing goals for each sprint, based on their value to stakeholders, such that the most important and deliverable features are built in each iteration.

**Scrum team.**The scrum team is a self-organized group of three to nine individuals who have the business, design, analytical and development skills to carry out the actual work, solve problems and produce deliverable products.

1. Explain the responsibilities of Product Owner?

**Ans**: Product owner is typically the client or the customer if the product. They have expections for the product. It to the product owner our team communicates about the software . The team to build the software the fit the needs of the product owner. After every sprint , our product will be reviewed by the product owner and they will say that the features implemented by the scrum dev team is according to his needs or not , whether we need to improvements or not . We make changes to the software according the product owner.