1. Explain SDLC at a high level?

Answer:

Software Development Life Cycle(SDLC) defines the entire steps or process that need to be followed by the software development team while building a software. General steps in SDLC are:

* Feasibility study: Check whether the project is feasible by considering the budget and time
* Requirement Analysis: Collect all the requirements from the clients for starting the project
* Design: Software requirements will be converted to a design. These design need to get approval before moving to the next phase.
* Coding: Programmers begin to write code based on the requirement and will do testing of only the part of work they have done.
* Testing: This step will ensure that the entire system is working properly.

Different types of testing are

Unit testing, Integration testing, Load testing, User acceptance testing

* Deployment: Software is released to production environment so that users can start operating on it.
* Maintenance: Ensure smooth operation of the software and fixes if any issues arise.

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

Answer:

Waterfall model is a Software Development model which is sequential. In this model each phase should pass iteratively to the next once that is completed.

Phases of Waterfall model are:

Requirement Analysis

Design

Development

Testing

Maintenance

Waterfall model is still used for simple project or for the project whose budget is fixed scope are clear which will not require any change in the future

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

Answer:

The below figure represent the entire scrum process. It represents 3 actors Product Owner, Scrum Master and Team.

Sprint backlog

team

team

Demo to PO at end of Sprint

team

ProductOwner

team

PProduct backlog

team

Facilitates all process

Scrum Master

1. Who is Scrum Master?

Answer:

Scrum Master is like Project manager in Scrum methodology. He is the facilitator between the product owner and the scrum team. Scrum master is responsible for ensuring that the team is following agile principles and practices agile processes.

1. Differentiate between Product/Sprint Backlog?

Answer:

Product backlog has the prioritised list of all the requirements or features that are required for the product. It is managed (created and prioritised) by the Product owner. Sprint backlog is the subset of product backlog which have the items that the team commit for a single sprint. Managed by the scrum team.

1. What is Epic & Story

Answer:

Epic is a large amount of work which can be a customer request or feature requirement.

Epics are broken down into smaller stories based on the needs. Stories will be short and has simplified description of a feature. Each user story will have title, description and acceptance criteria.

1. What is called Velocity in SCRUM

Answer:

Velocity is the measure of work that the team could be able to deliver in a sprint and it help them to plan the future work. Velocity will vary from one sprint to another depends on the complexity of work and experience of the team.

1. Explain the SCRUM ceremonies

Answer:

Organise the backlog

Product owner will create features and requirements based on customer needs at this ceremony. Product backlog is created

Sprint planning

All the scrum roles will participate in Sprint planning. Team will plan about the next sprint. Sprint backlog is created. Create user stories and will discuss how long it will take to complete each user story.

Sprint

Each sprint will be of 2 to 4 weeks’ duration. Team will be doing actual task in Sprint. Product is designed, coded and tested during the sprint.

Sprint Execution

The team will demonstrate the task that they have complete in the Sprint to the Product Owner

Daily Stand Up

Daily Stand Up will be of 15-minute duration mostly conducted in the morning. The team will discuss about the status of the work. Each team member will discuss about the work they did last day, task they are going to do that day and any impediments they are facing. Meeting will be facilitated by the Scrum Master.

Sprint Review

In sprint review the Product owner and the team will discuss about review of task done by team during that sprint.

Sprint Retrospective

It is the feedback to make the development better. Team will discuss what went well and what went wrong in the previous sprint and what will continue from the previous sprint.

1. What is grooming

Answer:

Grooming is a meeting in which the product backlog items are discussed and the next sprint planning is prepared.

1. How Jira board is effective in SCRUM

Answer:

Jira is a tool that supports any agile methodology like Scrum. Jira helps the Scrum team to manage and track their project. In Jira board one can create product backlog, create user stories, create task, prioritise user stories, assign task to team members, add results to task, add comments, add estimate to each user story, view burndown chart, check the daily status of work. Overall it supports in all the phases of Scrum software development.

1. Differentiate between SCRUM & Waterfall

Answer

|  |  |
| --- | --- |
| Scrum Model | Waterfall Model |
| Works well with complex and difficult projects | Works well with smaller projects |
| Changes will be considered at any stages of the developments | Changes will be considered only at the requirement gathering stage |
| Frequent customer interaction. Thus mostly risk will be less | Customer interaction is only at major milestones. Thus sometimes risk will be more |
| Used when scope is unclear and it advocate changes | Works well when scope is clear and doesn’t support change in scope |
| Continuous team collaboration is required | Continuous team collaboration is not required, rather independent performance is considered |
| Budget is not fixed and will slightly increase as scope will change in between development | Budget is fixed |

1. Explain the responsibilities of Product Owner

Answer:

* Product owner represent customer to scrum team
* Defines the features of product from customers to team
* Create epics in Product backlog and sprint backlog
* Prioritise the features(epics)
* Will be responsible for the all development cycle of a product
* Communicate will all the participants