PHASE 1 -Q & A

1) **Explain SDLC ?**

Ans: SDLC provides a well-structured flow of phases that help an organization to quickly produce high-quality software which is well-tested and ready for production use.

The SDLC phases explained below:

Requirement analysis: Gathering all the requirements needed for the project.

Planning: The team determines the cost and resources required for implementing the analyzed requirements.

Architectural Design: In this phase the system and software design are prepared from the requirement specifications. These designs will be reviewed by various department for approval.

Software Development(Coding): Based on system design documents, the work is divided in modules/units and actual coding is started.

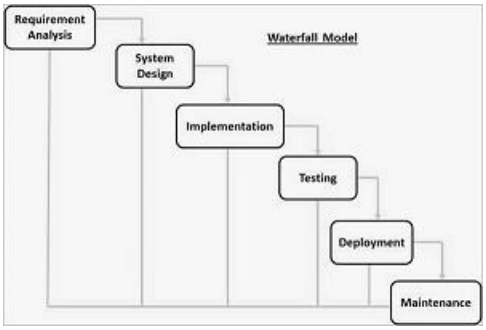
Testing**:** After the code is developed it is tested against the requirements to make sure that the product is actually solving the needs addressed

Deployment**:** After successful testing the product is delivered / deployed to the customer for their use.

Maintenance**:** Once the customers starts using the developed system then the actual problems comes up and needs to be solved from time to time.

2) **What is waterfall and why it is still relevant?**

Ans: Waterfall approach was first SDLC Model to be used widely in Software Engineering to ensure success of the project. In "The Waterfall" approach, the whole process of software development is divided into separate phases. In this Waterfall model, typically, the outcome of one phase acts as the input for the next phase sequentially.



Some situations where the use of Waterfall model is most appropriate/relevant are when:

- Requirements are very well documented, clear and fixed.
- Product definition is stable.
- Technology is understood and is not dynamic.
- There are no ambiguous requirements.
- Ample resources with required expertise are available to support the product.
- The project is short.
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3) **Explain Agile Model with a use case and the role of SCRUM in that?**

Ans: Agile model is a combination of iterative and incremental process models with focus on process adaptability and customer satisfaction. Its value based, iterative, adaptive & easy to understand.

With Agile development methodology –

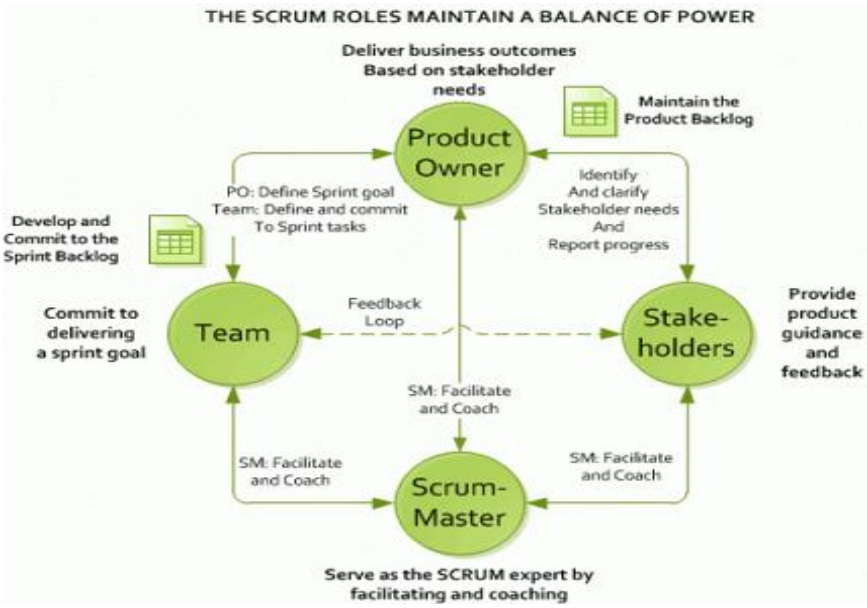
- In this, each project is broken up into several 'Iterations'.
- All Iterations should be of the same time duration (between 2 to 8 weeks).
- At the end of each iteration, a working product should be delivered.
- In simple terms, in the Agile approach the project will be broken up into 10 releases (assuming each iteration is set to last 4 weeks).
- Rather than spending 1.5 months on requirements gathering, in Agile software development, the team will decide the basic core features that are required in the product and decide which of these features can be developed in the first iteration.
- Any remaining features that cannot be delivered in the first iteration will be taken up in the next iteration or subsequent iterations, based on priority.
- At the end of the first iterations, the team will deliver a working software with the features that were finalized for that iteration.
- There will be 10 iterations and at the end of each iteration the customer is delivered a working software that is incrementally enhanced and updated with the features that were shortlisted for that iteration.

SCRUM: It's a agile software methodology, it's a iterative project management process.

It is a very specific framework that focuses on the following roles.

- Scrum Master
- Product Owner
- Team
- Stake holders

Scrum Master: The Scrum Master is a facilitator of the Scrum framework and process.



Team: The Team works with the Product Manager to determine what items from the Product Backlog they can deliver in a Sprint. Work with the Product Owner to analyze and decompose the Product Backlog items

Product owner: The Product Owner is responsible for delivering product value

Stake holders: Stakeholders are responsible for communicating their needs, and providing feedback on the product.

4) **Who is Scrum Master?**

Ans: Scrum Master is a facilitator for scrum framework. The scrum master is responsible for ensuring a true scrum process over the course of a project. They hold together the scrum framework, facilitating the process for the organization, product owner and scrum team.

5) **Differentiate between Product/Sprint Backlog?**

Ans: **Product Backlog**: The product backlog is compiled of all the things that must be done to complete the whole project. An effective product backlog breaks down each of the items on the list into a series of steps that helps the development team.

Sprint Backlog: The sprint backlog is like a subset of the product backlog. The sprint backlog comes from the product backlog, but it contains only that item, or those items, that can be completed during each sprint.

6) **What is Epic & Story?**

Ans: Epic: It's a high level description of the client wants and have some value attach to it. usually broad in scope .

Story: Epic is broken down to smaller user stories. It contains just enough information to give the Scrum team proper context as to what the final product should be like, and for them to calculate an estimation for the completion.

7) **What is called Velocity in SCRUM?**

Ans. Velocity is a measure of the amount of work a Team can tackle during a single Sprint and is the key metric in Scrum. Velocity is calculated at the end of the Sprint by summing up the Points for all fully completed User Stories.

8) **Explain the SCRUM ceremonies?**

Ans: The four scrum ceremonies are:

- Sprint Planning: Sprint Planning is the scrum ceremony designed to make sure the team is prepared to get the right things done every sprint.
- Daily Scrum: This scrum ceremony provides a frequent opportunity for the team to get together and communicate individual progress toward the sprint goal
- Sprint Review: The Sprint Review is the scrum ceremony where all work completed during the sprint can be showcased the stakeholder
- Sprint Retrospective: The Sprint Retrospective is the final scrum ceremony in the sequence that allows the team to look back on the work that was just completed and identify items that could be improved.

8) **What is grooming?**

Ans. It is the activity where the PO and the team members discuss the items lying in the backlog.

10) **How Jira board is effective in SCRUM?**

Ans. The Jira scrum Board is the tool that unites teams around a single goal and promotes iterative, incremental delivery.

11) **Differentiate between SCRUM & Waterfall?**

	SCRUM	WATERFALL
1.	It includes customer and stake holder in each phase	This keeps customer at bay. By the time the result is near
2	It saves time and money by regular sprints	It might take extra time as reviewing is done at result only.
3	Work is divided in teams as an individual responsibility	Work divided into phases as team work closely.
4.	It works well for difficult and complex projects	It works well for smaller projects

12**) Explain the responsibilities of Product Owner?**

Ans: Responsibilities:

- Maximize business value by the Team
- Maintain and prioritize the Product Backlog sequentially
- Help the Scrum Master organize Sprint Review Meetings
- Attend Scrum Meetings
- Clearly communicate the business case to the Team and Stakeholders
- Build and maintain a relationship with the Stakeholders
- Report progress to the Stakeholders regularly