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Domain : Testing

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SDLC

- It stands for Software Development Life Cycle.
- The main goal of SDLC is used to test the high quality of the software application.
- It maintains the software that it meets the needs of user's requirement.
- It defines the entire software application in a step-by-step process. They are:

1. Requirement Analysis:

To collect the required information from the client and need to work on the application according to the requirements.

This may include customization, deliverable time, needs and necessities related to projects.

These requirements get approval from the client, the manager, the business analyst and all the stakeholders.

2. Planning :

The quality of the project is the result of planning.

The information from the analysis forms the building block of a basic project.

Once the requirement is understood, the SRS (Software Requirement Specification) document is created.

3. Design Phase:

The next step is about bringing down all the knowledge of requirements analysis, and design of the software project.

This phase is the combination of requirement analysis and planning, based on the two phases the software design would be created.

SRS is a reference for the software designers to come up with the best architecture for the software.

Here, with the requirements defined in SRS, multiple designs for the architecture are present in the Design Document Specification (DDS).

4. Development :

In the development phase, the development team codes the product.

They analyze the requirement to identify the smaller coding task they can do daily to achieve the result.

After development the final results of the software application should meet the needs of the client's requirements.

In this phase, the developer tests their code line by line by themselves. This type is called Unit testing.

5. **Testing :**

After development the code is to be tested by the testing team, so that they may lead to smooth execution.

The Testing team tests the functionality of the entire system.

Finally, the testing team checks the entire software application to ensure that the projects satisfy the client's requirements.

6. **Deployment :**

Once the testing is done, and the software is ready for deployment, it is released for the customer to use.

The users are then provided with the training or documentation that will help them to operate the software.

Again, a small round of testing is performed on production to ensure environmental issues or any impact of the new release.

7. **Maintenance :**

The maintenance phase of the software development life cycle is where the software is monitored to ensure it continues to function as it was designed to, and repairs or upgrades are performed as needed.

The maintenance phase occurs once the software is fully operational.