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Designation : Trainee

Domain : Testing

SDLC (Software Development Life Cycle)

SDLC stands for Software Development Life Cycle.

- The main goal in SDLC is to understand the requirements from client and to   deliver the high quality software to the client.

- SDLC is a process that is used to design,develop and test good quality software.

- SDLC includes cost effective and time efficient process that development teams   use to design and build the software.

- SDLC refers to the structures process or set of stages that software development follows from initial concept to the final stage.

Phases of SDLC

1. Requirement Analysis:

- Project manager gathers all information. Once the requirements is understood, the SRS (Software Requirement Specification) document is created. The developers should throughly follow this document.

- Business Requirements Documents created by Business Analyst.

- Once the requirements analysis is done, the SRS document should be accepted from project stakeholders.

2. Design Phase:

- In this phase, the software design is created, which includes the overall architecture of the software.

- System Design document includes Usecase diagram, class diagram, ER daigram, Sequence diagram, Flow chart.

  Input : SRS Document

  Output : SRS and Design Document

3. Development Phase (Coding):

- In this phase, the development team develops the code by coding guidelines. Developers use the design documents to create the software.

- The developer team also done the unit testing in development phase.

  Output : Source code, Libraries and development documentation.

4. Testing:

- The software is tested to ensure that it meets the requirements and works correctly. The development team combines automation and manual testing to check the software for bugs.

- Quality analysis includes testing the softwares for errors and checking if it meets client requirements.

- Many teams immediately test the code they write, the testing phase often runs parallel to the development phase.

- Testing team creates Test Case document which includes Name, Time, Date, Testcase, Name of tester and developer, Input and Output, Test result. If there is any failure in test result, the reason for failure should be mentioned in the document. It will repeat until the test result succceed.

  Output : Test cases, Test reports and defect logs.

5. Deployment :

- Once the software has been tested and approved, it is deployed into the production environment, making it availabe for end users.

- The deliverables will be Deployed software, User manuals and deployment reports.

6. Maintenance :

- In this phase the team fixes bugs, resolves customer issued and manages software

changes.

- The team monitors overall system performance, security and kept up-to-date to ensure it continues to function smoothly.