SOFTWARE DEVELOPMENT LIFE CYCLE

SDLC # Software Development Life Cycle

- SDLC is a process that a company takes to develop a software.
- It comprises of many phases to complete it.
- It is a part of Project management
- And compulsory for any software developer to know it by heart.

SDLC PHASES

1) Planning
2) Feasibility study
3) Designing the project
4) Project execution/coding
5) Software testing
6) Deployment/training
7) Project closure

Planning Phase

- You need to create a project plan with the client's details.
- Discussions with stakeholders
- A project deal is signed between the client and the company who is develping the application/software.

Feasibility Study

- Studying of the feasibility of the project. How much will be the budget, man-hours required, risk analysis.
- Set goals
- Set the timeline
- Set the cost
- Analyze the risk
- SRS – Software requirement specifications document

Designing Phase

- What is the software architecture to be used.
- DDS – Document Design Specification document
- DDS is being read by all the stakeholders.
- Based on DDS they will give the inputs.

Project Execution

- Software is being developed based on the SRS and DDS documents.

Testing Phase

- STLC phase

Deployment Phase

- You deploy the production grade application/software to the cloud/server.
- Train the client and its staff.

Project Closure Phase

- Full document given to the client.
- Company receives the money in form of cheque/DD/online-payment in full or part which is left from the client.
- A corporate party on the successful completion of the project.

SOFTWARE TESTING LIFE CYCLE

STLC # Software Testing Life Cycle

- It is the part of SDLC
- It is detailed steps required to do testing of an application/software
- STLC test cases are being developed during the Feasibility and Designing phase

STLC Phases

1. Analysis
2. Planning
3. Test case development
4. Test environment setup
5. Test execution
6. Test reporting
7. Closure

- Deliverables have entry and exit criteria
- Entry criteria are mandatory things which are needed before the software testing

Analysis

- Case study on the project is done by the team
- Team looks for the requirements.
- It looks whether automation is required or not for software testing.
- You have to create a RTM (requirement Trackability Matrix) document
- Feasibility study report.

Test Planning

- Prepare the plan
- Cost estimation
- Risk analysis
- Roles and responsibilities
- Training to the client

Test Case Development Phase

- Create test case scripts
- Create test case datas

Test environment setup

- You have to make the software setup
- Setup the test data
- Do some fake test/ smoke test on the application
- Deliver the test case report to the client

Execution Phase

- Tester tests the application based on test scripts, data on the software.
- If there is any bug it will be reported to the development team for rectification.
- When the bug is being removed the application will be again tested for the same bug.
- If there is no bug then it will be released for production environment
- Make a report for the bugs and its probable remedies.

Project Closure Phase

- Complete documentation of the project is being done.
- Qualitative and Quantitative analysis is being done on it.