1. **SDLC:** It is a structured process of producing high quality software that meets customers expectation & completion within a time frame and cost.

It has 6 stages like» Requirement Gathering & Analysis »Designing »Development »Testing » Deployment »Maintenance

**>>Requirement Gathering & Analysis:** Gathering requirements from Stake holders, Customer & Industry Experts, analysis the requirement before accepting the requirement on the basis of technical feasibility, resource & etc.

Input: Stakeholder Inputs, Use Case

Out Put: Business Requirement Document, Functional Requirement Document & Software Requirement Specification

**>>Designing:** Here the Project Manager and Software Architecture create the Project plan, which includes Scope of project, Design plan, Risk, Budget, Deadline & etc. Also Software Architecture create the DDS which includes the system level & Unit level designs.

Input: BRD, FRD & SRS

Output: DDS- Design Document Specification (High Level Document & Low-Level documents), Project Plan

>>**Development:** Developers developed the products using the High- & Low-level programming.

Input: Project Plan, BRD, SRS & DDS

Out Put: Project Built

>> **Testing**: Here Test lead create Test Plan, Test Scenarios & Test cases, which is executed by QA

Input: BRD, FRD, SAD, Built

Output: Test Deliverable (like Test Palan, Test Scenarios, Test Case, Defect Report,

Execution Logs, Test Summary Report.

>> **Deployment:** Here the application released in actual business environment/ Production environment.

Input: Test Results, UAT Feedback

Output: Release Notes, Deployment Plan, User Manuals

>> **Maintenance:** Here support and maintain is given for the customer after the system deployment. (Mainly 2 types of support given here 1. Corrective: Which is unchangeable during the Warranty & Guaranty period, 2. Adoptive: It is always Chargeable)

Input: Release Notes, User Manuals

Output: Change Request, Maintenance Plan

1. Places for BRD, Design Document, FRD uses

* BRD (Business Requirements Document): Early stages of a project, while taking the requirements from stake holder & post analysis of requirement to create DDS, Development & Test Plan creation
* Design Document: In the development phase for understanding system behavior and integration.
* FRD (Business Requirements Document): Post analysis of requirement to create DDS, Development & Test Plan creation

1. **STLC:** It is a sequence of activities performed by QA to ensure the Quality of the software.

It has 6 stages like» Requirement » Analysis Test Planning & Controlling » Test Design » Test Execution & Implementation » Evaluation of Exit Criteria & Reporting » Test Closure

**>>Requirement Analysis:** The testing team analyzes the requirements of the system in detail to understand the scope of testing.

Input: Project Plan, BRD, SRS, FRD

Output: **Test Strategy Document/ Solution Approach Document**

**>>Test Planning & Controlling:** Here the Test lead identify testable aspects & create the Test Plan document, which includes the testing activities, resources, and schedule, also control the activities like check the process is running as per requirement till the success of the project, test environment setup & etc.

Input: **SAD**, BRD, FRD

Output: Test Plan Document

**>>Test Design:** In this phase the Test Lead create Test Scenarios, Test Case based on the requirements and system design.

Input: **SAD**, BRD, FRD, Test Plan Document

Output: Test Scenarios, Test Cases

**>>Test Execution:** In this phase the test cases are executed to validate the system.

Input: Test Plan, Test Cases

Output: Test Execution Reports, Defect Logs, Retesting Results.

**>>Evaluation of Exit Criteria & Reporting:** Here the Testing Team check the execution logs against the exit criteria.

Input: Test Execution Logs, Test Cases

Output: Test Summary Report

**>>Test Closure:** The test closure phase wraps up the testing activities and evaluates the testing process for future improvements.

Input: Test Plan, Test Cases, Defect Reports

Output: Test Summary Report, Lessons Learned