**SDLC**

Software Development Life Cycle

We have 4 phases

1. Requirement gathering and Analysis (Entry : CRS Exit : SRS)
2. Design Phase (Entry : SRS Exit : Product Design or Prototype) HLD and LLD
3. Development : Entry : Product prototype LLD Exit : Product for testing
4. Testing : Entry : Product for testing : Exit : Bug free product

Each Phase will have specific entry and exit criteria’s

Different types of Models

1. Waterfall Model – Most robust model. Sequential Model : Airforce and Medical projects
2. Spiral Model
3. Incremental Model
4. V& V Model (Verification and Validation)
5. Agile Model

**Assessment 1 : Understand and analyse different SDLC models**

STLC

Software Test Life Cycle

1. Requirement Gathering and analysis to develop testcases
2. Design the testcases
3. Develop the testcases
4. Test the product with the testcases developed

**Assessment 2 : Different between Verification and Validation**

**Assessment 3 : Write scenarios for V & V model w.r.t STLC Process**

Scenario 1 : To develop scenario for Amazon Login

Scenario 2 : To develop scenario for Amazon Add to cart

Testing

3 major phases or types of testing

1. White Box Testing
2. Black Box Testing
3. Grey Box Testing

White Box Testing : Testing the developed code for the functionality . This is also called Unit Testing

Black Box Testing : Testing the functionality of the application.

Grey Box Testing : Combination of white box and black box testing

**Assessment 4 : Difference between Bug, Error, Defect, Issue**

Different testing types

1. Functional Testing
2. Integration testing
3. System Testing also called as E2E Testing
4. Regression Testing

FT : Testing the functionality of each web component is called FT

IT : Testing 1 or more modules integrated perfectly.

ST : End-2-End Testing is called System Testing

Regression Testing : To identify the impact area after new requirement is merged to existing code

Process of writing Testcases

1. Understand the requirement
2. Convert the requirements into Scenarios
3. Review the scenarios (Peer review)
4. Fix the review comments for the scenarios
5. Convert the scenarios into Testcases
6. Review the Testcases (Peer review)
7. Fix the review comments of testcases
8. Store it in the repository

Scenario Template

Testcase Template

**Assessment 5 : Write testcases for important feature of Amazon home page.**

Note : Pre-requisites to write E2E flow