Introduction

- ➢ What is Testing?
- ➢ Why to test?
- ➢ What to test?
- ➢ Who tests?
- ➢ Why is software testing necessary?
- ➢ Objective of testing
- ➢ Fundamental test process
- ➢ Types of Testing

Architecture

- ➢ One Tier Architecture
- ➢ Two Tier Architecture
- ➢ Three Tier Architecture

SDLC

- ➢ Requirement gathering and analysis
- ➢ Design
- ➢ Coding
- ➢ Testing
- ➢ Deployment
- ➢ Maintenance

Software Development Models

- ➢ Waterfall model
- ➢ V model
- ➢ Incremental model
- ➢ Agile model

Verification and validation

- ➢ What is verification?
  - o Technical review
  - o Walkthrough
  - o Size
  - o Inspection
- ➢ What is validation ?
  - o Unit Testing
  - o Integration Testing
  - o System testing
  - o User Acceptance Testing

- ➢ Difference between Verification and validation

Quality

- ➢ What is quality?
- ➢ What is quality assurance ?
- ➢ What is quality control?
- ➢ Difference between QA and QC

Functional Testing

- ➢ What is functional testing ?
- ➢ Black Box Testing
- ➢ Equivalence Class Testing
  - o Boundary Value Testing
  - o Decision Table Testing
  - o State Transition Testing
  - o Use-case Based Testing
  - o Error guessing

- ➢ White Box testing
  - o Statement Coverage
  - o Branch Coverage

- o Path Coverage
- ➢ Gray testing
- ➢ Usability testing
- ➢ Configuration Testing
- ➢ Compatibility Testing
- ➢ Localization Testing
- ➢ Globalization Testing

Nonfunctional Testing

- ➢ Security testing
- ➢ Recovery testing
- ➢ Installation Testing
- ➢ Performance Testing
  - o Load testing
  - o Stress Testing
- ➢ Re-testing
- ➢ Regression Testing
- ➢ Smoke Testing
- ➢ Sanity Testing
- ➢ Adhoc Testing
  - o Buddy Testing
  - o Pair Testing
  - o Monkey Testing

STLC

- ➢ What is STLC?
- ➢ Requirement Analysis
- ➢ Test Planning
- ➢ Test Case Development
- ➢ Environment Setup
- ➢ Test Execution
- ➢ Test Cycle Closure
- ➢ What is Test Scenario?
- ➢ How to write test scenario

- What is test case?
- How to write test case
- What is positive test case?
- What is negative testing?
- Test case review
  - Self-review
  - Peer review
  - Review by a supervisor

DefectLifeCycle

- New
- Assigned
- Active
- Test
- Verified
- Closed
- Reopened
- Deferred
- Rejected
- What is Severity?
  - Critical
  - Major
  - Medium
  - Low
- What is Priority?
  - Low
  - Medium
  - High
- Difference of severity and priority

Live Project