

Manual Testing Course Contents

Overview of Testing Systems

- ❖ Software Testing Overview
- ❖ Introduction to Software Testing
- ❖ Objectives of Testing
- ❖ Software Development Process
- ❖ Project vs. Product
- ❖ Error / Fault / Failure
- ❖ Why Software has defects
- ❖ Most common defects
- ❖ Cost of fixing defects
- ❖ Testing then ... and Testing now...
- ❖ What is Verification & Validation
- ❖ Difference between QA & QC
- ❖ Role of a Tester

Principles of Testing

- ❖ Early Testing
- ❖ Exhaustive Testing Impossible
- ❖ Defect Clustering
- ❖ Pesticide Paradox
- ❖ Testing is Context Dependant
- ❖ Testing Should Show Presence of Defects
- ❖ Absence of Error is a Fallacy
- ❖ Software Development Life Cycle (SDLC)
- ❖ SDLC Phases
- ❖ SDLC Models
 - ❖ - Waterfall Model
 - ❖ - V Model
 - ❖ - RAD Model
 - ❖ - Prototype Model
 - ❖ - Spiral Model
 - ❖ - Agile Model

Software Testing Methodologies

- ❖ Static Testing
- ❖ White Box Testing
- ❖ Black Box Testing
- ❖ Gray Box Testing

Static Testing Techniques

- ❖ Reviews
- ❖ Types of Reviews
- ❖ Inspections & Audits
- ❖ Walkthroughs

Levels of Testing

- ❖ • Unit Testing
- ❖ • Integration Testing
- ❖ • System Testing
- ❖ • Acceptance Testing

White Box Testing

- ❖ Unit Testing
- ❖ Integration Testing

Black Box Testing

- ❖ **System Testing**
- ❖ **Types of System Testing**
- ❖ Smoke / Sanity Testing
- ❖ Formal Testing
- ❖ Priority Based/Risk Based Testing
- ❖ Ad-hoc Testing
- ❖ Re-Testing and Regression Testing
- ❖ End-to-End Testing and Exploratory Testing
- ❖ Benchmark Testing
- ❖ Monkey Testing
- ❖ UI Testing
- ❖ Usability Testing
- ❖ Security Testing
- ❖ Performance Testing
- ❖ Load Testing
- ❖ Stress Testing
- ❖ Compatibility Testing
- ❖ Installation Testing
- ❖ Globalization Testing
- ❖ Localization Testing
- ❖ Recovery Testing

Initial Level Testing

- Sanity Testing
- Smoke Testing

STLC Testing Process :

- Test Initiation
- Test plan -
- Test Case Design Techniques
- ❖ ECP
- ❖ BVA
- ❖ Decision Table Testing
- ❖ State Transition Testing
- ❖ Use Case Testing
 - Test Design (Test data preparation, Test case preparation)
 - Preparing RTM
 - Test Execution
 - Defect Tracking Life Cycle(DTLC)
 - Bug Report
 - Test Closer
 - Manual Testing vs. Automation Testing
 - Web Application Testing
 - Categories of Tools