

Duration: 60 hours

Batches: Weekdays/ Weekend

Fundamentals of Testing

- What is software testing?
- Basic Terminology used in Testing
- Importance of Software Testing
- Defects and Defect types
- Why is testing necessary
- Causes of Software Defects
- Roles of Software Tester in Software Development
- Characteristics of a Software Tester
- Testing principles
- Basic Testing Life Cycle

SDLC, STLC (Methodologies)

- Software Development Life cycle
 - Waterfall
 - Spiral model
 - VV model
 - Iterative Model
 - Incremental Model
 - Agile Model
 - Test Levels
 - Unit Testing
 - Integration Testing
 - Functional Testing
 - System Testing
 - Acceptance Testing
 - Alpha Testing
 - Beta Testing

Non-Functional Testing

- Usability Testing
- Performance Testing
- Load Testing

- Configuration Testing
- Compatibility Testing
- Recovery Testing
- Availability Testing
- Volume Testing
- Internationalization Testing
- Localization Testing

Other Types of Testing

- Mutation Testing
- Progressive Testin
- Contingency and Migrationg
- Regression Testing
- Re Testing
- Sanity and Smoke Testing
- Maintanance Testing

Verification- Static Testing

- Inspections
- Walk through
- Peer reviews
- Review and Its Types

Validation- Dynamic Testing

Black Box

- Equivalence Partitioning (ECP)
- Boundary Value Analysis (BVA)
- Error Guessing
- Adhoc Testing
- Risk Based Testing
- Exploratory Testing
- Use case Testing

White Box

- Data Coverage
- Statemenegt, Condition and Decision coverage

- Code Coverage

Test Management

- Software Testing Life cycle
- Test Organization
- Test Strategy
- Test Plan
- Estimates
- Test Progress Monitoring and Control
- Incident Management
- Configuration Management

Test CASES

- Objectives
- Structure of Test Case
- Sample Test Case

Defect Life Cycle

- Format of Defect Report
- Defect Lifecycle
- Meaning of different defect
- Lifecycle Status
- Severity and Priority

Why Automation

- Potential Benefits and Risks
- Introduction of a tool in an organization
- Types of Tools

Manual Testing Project

- Case Study
- Understanding Business
- Requirement
- Creating Test Case
- Executing Test Case
- Logging Defects

ISTQB Preparation

- Sample Paper 1

- Sample Paper 2
- Practice Sessions

SQL Queries

- SQL Introduction
- Use of SQL for Database Testing
- Data Definition
- Data Manipulation
- Data Control
- JOINS
- SQL Queries

API Testing

- What is API
- API Testing By Using postman Tool
- Rest Assured Library Used for API Automation

AUTOMATION TESTING

Selenium Web Driver)

- Selenium setup
- Basics of Selenium
- Locators used in Selenium
 1. Tagname
 2. Id
 3. Name
 4. Classname
 5. LinkText
 6. Partial Link Text
 7. CSS Selector
 8. Xpath
- Absolute and Relative Xpath
- Selenium Web Driver Architecture
- Web Driver Interface
- Web Element Interface

- Handling List
- Handling Drop-Down List
- Managing Radio buttons and Checkboxes
- Implicit and Explicit Waits
- Actions Class in Selenium
- Handling Alerts and PopUps

Framework Design In Selenium-

Selenium Advance

- Page object model [POM]
- Page Factory Pattern
- TestNG Framework
- TestNG, Annotations, Listeners, Assertions
- Framework Design
- BDD Framework By Using Cucumber
- How to Craete Maven project
- Handling the Git
- CICD - Jenkins tool