

## Software Testing Tools

- ✓ Introduction
- ✓ Introduction to software Testing
- ✓ Software Development Process
- ✓ Project Vs Product
- ✓ Objectives of Testing
- ✓ Testing Principals

## Software Development Life Cycle

- ✓ SDLC

## SDLC Models

- ✓ Waterfall Model
- ✓ Spiral Model
- ✓ V Model
- ✓ Prototype Model
- ✓ Agile Model (Scrum)
- ✓ How to Choose Model for a Project

## Software Testing-Methods

- ✓ White Box Testing
- ✓ Block Box Testing
- ✓ Gray Box Testing

## Levels of Testing

- ✓ Unit Testing
- ✓ Structural Testing
- ✓ Statement Coverage Testing
- ✓ Condition Coverage Testing
- ✓ Branch Coverage Testing
- ✓ Path Coverage Testing
- ✓ Integration Testing
- ✓ Big Bang Integration
- ✓ Top Down Approach
- ✓ Bottom up approach
- ✓ Stubs and Drives

## Functional Testing

## System Testing

## Non Functional Testing

- ✓ Compatibility Testing
- ✓ Performance Testing
- ✓ Load Testing
- ✓ Volume Testing
- ✓ Stress Testing
- ✓ Recovery Testing
- ✓ Installation Testing
- ✓ Globalization Testing
- ✓ I18N

- ✓ L10N
- ✓ Security Testing
- ✓ Usability Testing
- ✓ Accessibility Testing

## User Acceptance Testing

- ✓ Alpha Testing
- ✓ Beta Testing

## Testing Terminology

- ✓ Functional Testing
- ✓ End-End Testing
- ✓ Ad-hoc Testing
- ✓ Risk Based Testing
- ✓ Sanity/Smoke Testing
- ✓ Re-Testing
- ✓ Regression Testing
- ✓ Exploratory Testing
- ✓ Parallel Testing
- ✓ Concurrent Testing

## Windows & Web Application

## Testing

- ✓ Check List for Window App Testing
- ✓ Check List for Web Application Testing
- ✓ Web App Testing Terminology

## Software Testing Life Cycle (STLC)

## Test Strategy

## Test Planning

## Test Cases Design

- ✓ Error Guessing
- ✓ Equivalence Partition
- ✓ Boundary Value Analysis

## Test Case Authoring

- ✓ Functional Test Case
- ✓ Review Test Case
- ✓ Walkthroughs
- ✓ Inspection
- ✓ Peer Review
- ✓ Traceability Matrix

## Build Release Process

- ✓ SRN & DD

- ✓ Build Deployment
- ✓ Project Dev Env (Dev, Test, Prod)

## Test Execution Process

## Defect Reporting & Tracking

- ✓ Defect Reporting
- ✓ Defect Life Cycle
- ✓ Severity, Priority
- ✓ Defect Tracking Tools

## Test Closure

- ✓ Criteria for Test Closure
- ✓ Test Summary Reports

## Additional

- ✓ Introduction to VSS
- ✓ Project Metrics
- ✓ QA & QC
- ✓ ISO & CMM Standards
- ✓ Testing Certifications
- ✓ Interview Question
- ✓ Organization Hierarchy
- ✓ Role of Project Team Members

## Test Management using

## Quality Center

Overview on Test Management

Architecture of QC Tool

## Site Administrator

- ✓ Create Project
- ✓ Create Users
- ✓ Assign User to Projects
- ✓ Monitor Connections & Licenses
- ✓ Sitescope
- ✓ Backup, Restore Projects
- ✓ Version Control

## Quality Center

- ✓ Managing Requirements
- ✓ Working with test Plan
- ✓ Developing Manual & Automation Tests
- ✓ Coverage Analysis/Traceability
- ✓ Create Test Cases
- ✓ Running Tests

- ✓ Record Results
- ✓ Defect Reporting & Tracking
- ✓ Integration with QTP
- ✓ Test Resources
- ✓ Test Linkage
- ✓ Defect Linkage

## Test Management

- ✓ Developing Reports
- ✓ Developing Graphs
- ✓ Dash Board

## Customization

- ✓ Creating Groups
- ✓ Module Access
- ✓ Managing Lists
- ✓ Mail Configuration

## Selenium

### Introduction

- ✓ What is automation testing
- ✓ When best to go for automation
- ✓ Advantages of Automation
- ✓ Criteria for Automation

### Introduction to Selenium

- ✓ What is Selenium
- ✓ Use of selenium
- ✓ When selenium can be useful in Testing
- ✓ Features of Selenium
- ✓ Differences between Selenium And QTP

### Selenium Components

- ✓ Selenium IDE
- ✓ Selenium RC
- ✓ Selenium Grid

### Configuration of IDE & Dev Scripts

- ✓ Recording the script
- ✓ Running the script
- ✓ Script
- ✓ How to save recorded script
- ✓ Object Identification
- ✓ Difference between Testcase and test suit

- ✓ Languages supported while
- ✓ Recording
- ✓ Synchronization in Selenium IDE
- ✓ Testing Vs Selenium IDE
- ✓ When to use Selenium IDE
- ✓ How to run the recorded script
- ✓ Against other browsers
- ✓ Why companies are not using
- ✓ Recording tools

## Creating the Environment for Selenium RC

- ✓ Creating generic scripts in Selenium
- ✓ Creating scripts by using Functions
- ✓ Running the scripts in Eclipse
- ✓ Inheritance
- ✓ Browser commands with Examples
- ✓ Interactive commands with Examples
- ✓ Information commands with Examples
- ✓ Validation commands with Examples

## Selenium 2 / Web Driver:

- ✓ Selenium 2.0 Features
- ✓ The Selenium Server – When to Use it
- ✓ Setting up a Selenium – Web Driver Project
- ✓ Migrating from Selenium 1.0
- ✓ Getting Started with Selenium Web Driver
- ✓ Introducing Web Driver's Drivers
- ✓ Commands & Operation
- ✓ Web Driver backed Selenium RC
- ✓ Programs on Web Driver
- ✓ Programs on Web Driver Backed Selenium
- ✓ How to get data from application with Web Driver
- ✓ How to validate the test cases
- ✓ How to handle alert Confirmation & popup window

## How to work with Excel files & other files

- ✓ How to take data from excel Sheets
- ✓ Why should we use excel sheets
- ✓ How to take large no of data from excel sheets
- ✓ How to export data to an excel Sheets
- ✓ Export large no of data to an Excel sheet
- ✓ How to export results after completion of execution the Script
- ✓ How to use Eclipse
- ✓ Debugging the script
- ✓ Maintaining synchronization Points
- ✓ How to handle Popups and alert Messages
- ✓ Recognizing Similar Elements
- ✓ Working with Table Elements
- ✓ Connecting to Database

## Developing reusable script for any Project

- ✓ Validations
- ✓ What is validation
- ✓ What is the use of validation in Automation testing
- ✓ When to use validation in real-time
- ✓ How to use validations

## Core Java Fundamentals Language Fundamentals

- ✓ Java Programming Language Keywords
- ✓ Class and Object
- ✓ Data Types
- ✓ Array Declaration, Construction and Initialization

## Flow Control, Exceptions, and Assertions

- ✓ Writing Code Using If and Switch

## Statements

- ✓ Writing Code using Loops
- ✓ Handling Exceptions
- ✓ Working with the Assertion Mechanism

## Object Orientation, Overloading and

### Overriding, Constructors

- ✓ Benefits of Encapsulation
- ✓ Overridden and Overloaded Methods

### Using the java.lang.String Class

- ✓ Using the java.lang.Math Class
- ✓ Using Wrapper Classes
- ✓ Using the equals() Method with Strings, Wrappers and Objects

## Defining, Instantiating, and Starting

### Threads

- ✓ Preventing Thread Execution
- ✓ Synchronizing Code
- ✓ Thread Interaction

## JUnit Introduction

- ✓ Proving it works
- ✓ Starting from scratch
- ✓ Understanding unit testing
- ✓ Frameworks
- ✓ Setting up JUnit
- ✓ Testing with JUnit

## Object repository

- ✓ What is object repository
- ✓ How to use object repository in Framework
- ✓ What is the use of maintaing Object repository
- ✓ Types of creating object repository

## Additional concepts

- ✓ How to use XPath
- ✓ How to use DOM
- ✓ How to use Key Commands

## TestNG Framework

- ✓ What is TestNG
- ✓ Create TestNG.xml file

- ✓ Integrate the Selenium Scripts and Run from TestNG
- ✓ Reporting Results & Analyze
- ✓ Run Scripts from Multiple Browsers

## Automation Life Cycle

- ✓ What is a Framework
- ✓ Types of Frameworks
- ✓ What is Modular framework
- ✓ What is Data Driven framework
- ✓ What is Keyword driven framework
- ✓ What is Hybrid framework
- ✓ Use of Framework
- ✓ How develop the framework
- ✓ Integration of the framework
- ✓ How execute the scripts from Framework
- ✓ How to handle Non GUI(Desktop) Elements & flex objects

## Sikuli

- ✓ Introduction to Sikuli
- ✓ Installing Sikuli
- ✓ Integrating Sikuli with Selenium In Eclipse
- ✓ Develop the Code with Sikuli and selenium
- ✓ Uploading file

## Jmeter- Introduction

- ✓ What, Why and How
- ✓ Downloading and Installing
- ✓ Test Plan
- ✓ View Results
- ✓ Simulating Concurrent Users

## Jmeter-Detailed

- ✓ Thread Groups
- ✓ Config Elements
- ✓ Pre-Processors
- ✓ Post – Processors
- ✓ Listeners
- ✓ Assertions
- ✓ Timers
- ✓ Record/Play

## Result Analysis

## Interview Questions