

Software Testing (QA Training) Full Course

● Manual Testing

1. Manual Test Process Implementation
 - a. Introduction to Software Testing and Quality
 - b. Software Life Cycle Stages
 - c. Software Development Models
 - d. Testing Techniques : Static Testing , Dynamic Testing , Black Box Testing, White Box Testing
 - e. Software Quality Assurance Standards CMMI Model and SIX SIGMA
 - f. Test Planning, Test Design and Test Execution
 - g. Test measurement Techniques and Metrics Collection
 - h. Defect Management
 - i. Defect Severities and Priorities
 - j. Defect management and defect resolution process
 - k. User Acceptance Testing
 - l. Testing Terminologies
2. Test Management with Quality Center (QC)
 - a. Introduction to Quality Center
 - b. Defining Test Requirements
 - c. Adding Test Cases
 - d. Planning Test execution
 - e. Mapping Business Requirements to Test cases
 - f. Adding Defects
 - g. Generating Graphs and Reports
 - h. Export requirements to Quality Center
 - i. Export Text Cases to Quality Center from Excel

● Automation Testing

1. SELENIUM
 - Introduction to automation
 - Introduction to the Selenium Suite
- Selenium IDE**
- Installing Selenium IDE
 - Selenium IDE icons
 - Recording your first test with Selenium IDE

- IDE Context Menu
- Assert
- Verify
- Adding Selenium IDE comments
- Synchronization commands
- Storing elements
- Creating test suites
- What you cannot record

Locators & Object Identification

- Tools to identify elements/objects
- Firebug
- IE Developer tools
- Google Chrome Developer tools
- Locating elements by ID
- Finding elements by name
- Finding elements by link text
- Finding elements by XPath
- Finding Elements by using CSS
- Summary
- Some Special IDE commands
- Write your own Selenium IDE script without record and playback

Java Basics

- Introducing the JAVA technology
- Packages
- Introduction to all predefined packages
- User Defined Packages
- Access Specifiers

Object Oriented Programming Concepts

- Introduction
- Class
- Object
- Local, Instance and static variables
- Constructors
- This keyword
- Inheritance and Types
- Working with super classes and subclasses
- Using types of polymorphism such as overloading, overriding, and dynamic binding

- Abstraction
- Encapsulation
- Abstract classes
- Interfaces

String Processing

- String manipulation with String Builder and String Buffer
- Essential String Methods

Exceptions and Assertions

- I/O Streams
- I/O using Java
- Files (Create/Read/Write operations on files)

Wrapper Classes

- Introduction
- Byte, Short, Integer, Long
- Float, Double
- Character
- Boolean classes
- Collections
- Introduction
- util Package
- List, Set and Map
- Reading data from Property files using java program
- Reading and Writing data from/to Excel files using Apache POI API and JXL API
- TestNG Framework
- How to Install TestNG plugin in Eclipse?
- TestNG sample script
- Writing Selenium testing script from scratch
- Creating Test suites using TestNG
- Reports generation using TestNG
- Parameterized test cases using TestNG framework
- Selenium WEB-DRIVER
- Why WebDriver?
- Downloading WebDriver Jars configuring in eclipse
- Architecture of Selenium WebDriver
- Drivers for Firefox, IE, Chrome
- What is the difference between Selenium RC and WD?
- Sample Programs in WebDriver
- Text box

- Link
- Button
- Checkbox
- Radio Button
- Drop Down Box
- Select value
- Display all values
- Select values step by step
- Capture screenshots
- Synchronization Commands In WebDriver
- Implicit wait
- Explicit wait
- Web Driver wait
- File uploads and File downloads
- Handling alerts
- Handling confirmation messages
- Keyboard actions
- Mouse actions
- Handling Iframes
- Handling multiple tabs
- Handling popups
- Preparing WebDriver test cases using customized x-path
- Identifying controls using x-path predefined functions
- Web Tables
- What is Web Table
- Extracting data from web tables
- Examples on static and dynamic Web Tables
- Creating Reusable functions for Web Tables
- WebDriver with TestNG Frame Work
- Batch Running Test cases using TestNG
- Validations and its usage in Automation test scripts
- Customized Report Generation
- Implementing Logs using Apache Log4j API
- Database testing using WebDriver
- Working with Multiple Browsers
- Executing Automation Test Cases in multiple browsers Sequentially
- Executing Automation Test Cases in multiple browsers Parallel
- Build Configuration Tool-Apache Maven

- Downloading and configuring Maven
 - Create Maven project
 - Maven commands and operations
 - Adding Maven dependencies to the project
 - Execute Test Suites using Maven
 - Automation Framework Concepts
 - What is an Automation Framework ?
 - Types of Automation Framework ?
 - i. Data driven framework
 - ii. Modular driven framework
 - iii. Keyword driven framework
2. Backend Testing using SQL (Structured Query Language)
- Introduction to Database and Rational Database Management System
 - DML Commands (Insert, Select, Update , Delete)
 - DDL Commands- (Create, Use, Alter, Drop)
 - Sub queries ,Joins and Unions
 - Simple and Complex SQL- queries
 - Other DB Utilities Toad, SQL Navigator etc
 - Database role in application development
3. Reporting tool Jira
- Introduction to Jira
 - Track bugs and issues
 - Monitor Activity
 - Report on Project Status
4. Project Training
- Insurance
 - E -commerce