

Training Module: Software

Testing Course length: 3 Months

**Basic concepts : MANUAL TESTING**

- Basic Testing Vocabulary
- Quality Assurance versus Quality
- Control The Cost of Quality
- Software Quality Factors
- How Quality is Defined
- Why Do We Test Software?
- What is a Defect?
- The Multiple Roles of the Software Tester (People Relationships)
- Scope of Testing
- When Should Testing Occur?
- Testing Constraints
- Life Cycle Testing
- Independent Testing
- What is a QA Process?
- Levels of Testing

**Testing Techniques**

- Structural versus Functional Technique
- Categories Verification versus Validation
- Static versus Dynamic Testing
- Examples of Specific Testing Techniques



## Test Administration

- Test Planning
- Customization of the Test
- Process Budgeting
- Scheduling

## Create the Test Plan

- Prerequisites to test planning
- Understand the Characteristics of the Software Being Developed Build the Test Plan
- Write the Test Plan
- Test Cases:
  - Test case Design
  - Building testcases
  - Testdataexecution
- Test Reporting
- Defect Management

## Test Metrics – Guidelines and usage Test Reporting

- Guidelines for writing test

reports **Test Tools used to Build Test**



## Reports Managing Change

Software Configuration Management

Change Management

**Risks** – Risk Analysis and Management with examples

**User Acceptance testing** – in detail explanation with details

**Case Study:** How to test web, stand alone and database applications – with examples.

Help with resume and testing interview skills.

**Basic Concepts**      **AUTOMATION**  
:                              **TESTING**

## Selenium Fundamentals

Introduction to Selenium  
Selenium Test Life Cycle

## Selenium IDE

Installing Selenium IDE  
Creating your First Selenium IDE  
script How to use Locators in  
Selenium IDE  
How to enhance a script using Selenium IDE  
Creating and Running Tests  
Creating and Running Test Suite



## Java for Selenium

Java Standard edition or core Java is enough for Selenium Testing, In Core Java, learn,

- Data Types and Variables
- Operators
- Decision Making
- Arrays
- Loops
- Classes and Objects
- String Class

## Selenium WebDriver

Introduction to Selenium WebDriver  
Selenium WebDriver EnvironmentSetup  
Web Elements and Operations  
Web ElementLocators  
Element Locators  
Inspecting Elements  
Selenium WebDriver APICommands  
Browser Commands  
Commands for Web Elements  
Writing Basic Selenium TestCases  
Enhancing Selenium Test Cases



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**This Course also  
includes:**

Tools: Postman, Jira(PMS), Eclipse

Frameworks: Cucumber

UI automation framework using Cucumber BDD

