

Selenium with Java Syllabus

❖ Selenium with Java

- ❖ Understand OOPS / java concepts v Selenium IDE, RC
- ❖ Selenium WebDriver tool in depth, its features & components
- ❖ Building a new Test Framework by using Web Driver, Test NG, and Maven

❖ Selenium Introduction

- ❖ Selenium Introduction
- ❖ What is Selenium and Why Selenium
- ❖ Use of Automation Testing?
- ❖ Explanation of Selenium and its advantages

❖ Differences between Selenium and QTP

- ❖ Selenium Components
- ❖ Introduction of selenium Components OOPS concepts and Core Java Introduction
- ❖ OOPS concepts
- ❖ Setup Java environment – Download JDK and

❖ Setup eclipse

- ❖ Java programming concepts
- ❖ Class, Object, variables, methods, Packages
- ❖ Conditions and loops Access and non-access modifiers
- ❖ Advanced Java Programming
- ❖ Interfaces, Inheritance
- ❖ Collections, Exceptions

❖ Selenium IDE and RC Introduction

- ❖ Installing Selenium IDE
- ❖ “Selenese” – Selenium Commands
- ❖ Actions, Asserts, Assessors
- ❖ Developing Test Cases & Test Suites with Selenium-IDE
- ❖ Introduction to Selenium RC

- ❖ **Installations**
- ❖ eclipse-Oxygen
- ❖ JDK 1.8
- ❖ Firefox 47.0.1, firebug, and file path
- ❖ Set up TestNG, Maven and Selenium (2.53.1 & 3.0 +) for eclipse
- ❖ parameterization
- ❖ Hybrid Framework

- ❖ **Develop Hybrid Framework**
- ❖ Developing Hybrid Framework for Web Application using WebDriver /TestNG and Maven
- ❖ Use external Data for Testing (Excel sheet, XML files, Property file)
- ❖ Reading and understanding reports
- ❖ Screenshots of failed Test case

- ❖ **Configuration Management**
- ❖ Jenkins Installation
- ❖ Maven Installation
- ❖ Dependencies and configure Maven Project
- ❖ Integrate Maven projects in Jenkins

❖ **Post Selenium Maven**

- ❖ Introduction to Apache Maven
- ❖ Maven Dependencies
- ❖ Maven Plugins
- ❖ Controlling The Build
- ❖ Maven Release Process
- ❖ Deploying to a Repository
- ❖ Using Snapshots

❖ **GIT**

- ❖ Introduction To Git
- ❖ Working Locally with Git
- ❖ Working Remotely with Git
- ❖ Branching, Merging and Rebasing With Git
- ❖ Using The GitHub Website
- ❖ GitHub For Windows Basics
- ❖ Teamwork With GitHub for Windows
- ❖ Social Coding with GitHub

❖ **Jenkins**

- ❖ Continuous Integration or Continuous Deployment concepts
- ❖ Installing and Configuring Jenkins
- ❖ Freestyle Project Configuration
- ❖ Jenkins Pipelines
- ❖ Testing With Jenkins

- ❖ Pipeline Enhancements o Multi-branch Pipelines and Code Promotion
- ❖ **Selenium WebDriver 2.0 and 3.0 Introduction**
- ❖ Selenium WebDriver Introduction
- ❖ WebDriver Vs RC
- ❖ Download and Configure WebDriver with Eclipse
- ❖ Simple Testcase v Open and Close Browser
- ❖ Cross Browser Testing – Firefox, IE, Chrome,Edge
- ❖ UI elements Locators
- ❖ Identifying Web Element using id, name, link text, Partial Link Text class Name
- ❖ XPath, CSS Selector and Tag Name
- ❖ Handling various Web Element using WebDriver
- ❖ Handling Mouse movements and Keyboard Events
- ❖ Gecko-Driver
- ❖ Verification Commands
- ❖ Validation commands
- ❖ How to operate with Web Table
- ❖ How to Handel Alerts in webpage
- ❖ Switch Commands
- ❖ How to operate with colanders
- ❖ Synchronization Commands
- ❖ File uploading using Auto-It and Robot
- ❖ **Testing Framework and Tools**
- ❖ Introduction of the Testing framework

- ❖ Types of frameworks
- ❖ Tools for developing Test Framework
- ❖ TestNG introduction and Configuration with eclipse
- ❖ TestNG Annotations and Data Providers
- ❖ Creating Test Suit with TestNG Framework
- ❖ Modular Framework
- ❖ POM
- ❖ Data driven BitBucket
- ❖ Gradle-plugins
- ❖ Working with files v Ant Integration
- ❖ Dependency Management
- ❖ Extending the model
- ❖ Task inputs & outputs
- ❖ The Java plugin
- ❖ Multiproject builds
- ❖ The build runtime
- ❖ **JIRA**
- ❖ Introduction To JIRA
- ❖ Test Management in JIRA (Zephyr)
- ❖ Advanced Search and Introduction To JQL (JIRA Query Language)
- ❖ Generating Reports In JIRA
- ❖ Introduction To JIRA Agile
- ❖ **Agile Methodologies**

- ❖ Agile Methodologies Overview
- ❖ Agile Scrum
- ❖ Agile ceremonies
- ❖ Agile artifacts
- ❖ Kanban
- ❖ Adaptive Project Framework (APF)
- ❖ Extreme Project Management (XPM)

- ❖ **API Testing**
- ❖ Set-up of API Test environment
- ❖ Types of Output of an API
- ❖ Test Cases for API Testing
- ❖ Approach of API Testing
- ❖ Difference between API testing and Unit testing
- ❖ What to test for in API testing
- ❖ Best Practices of API Testing
- ❖ Types of Bugs that API Testing detects
- ❖ Tools for API Testing
- ❖ Challenges of API Testing

- ❖ **SOAPUI**
- ❖ Introduction to SOAP UI
- ❖ Functional API testing
- ❖ Supported Protocols/Technologies
- ❖ SOAP-INTEGRATION with Other Automation Tools

- ❖ SOAP UI Vs Selenium:
- ❖ SOAP UI Vs SOAP UI PRO
- ❖ SOAP UI PRO Version
- ❖ SOAP UI -Version Timelines

- ❖ **Postman**
- ❖ Postman Introduction
- ❖ Working with GET Requests
- ❖ Working with POST Requests
- ❖ Parameterize Requests
- ❖ Create Postman Tests
- ❖ Create Collections

- ❖ **Demonstration On Live Project**

- ❖ **Resume Preparation & Mock Interview**

THANK YOU..