

SELENIUM Introduction

- ✓ What is automation testing
- ✓ When to go for automation
- ✓ Different Automation Tools (vendor & open source tools)
- ✓ Advantages of Automation
- ✓ Criteria for Automation
- ✓ Difference between Manual Testing & Automation Testing process

Introduction to selenium

- ✓ What is selenium tool
- ✓ Use of selenium tool in automation
- ✓ Features of selenium tool
- ✓ Differences between selenium and other Tools

Selenium Components

- ✓ Selenium IDE
- ✓ Selenium Web Driver 3
- ✓ Selenium Grid

Configuration of Selenium IDE & Dev.Scripts

- ✓ Recording the scripts in IDE
- ✓ Understanding of the objects identification (id,name)
- ✓ Difference between Test case and test suit
- ✓ Language supported while recording
- ✓ Synchronization in selenium IDE (Wait commands)
- ✓ Whwn to use Selenium IDE
- ✓ How to put validations (assert, verify)
- ✓ How to read text/values from webpage (store commands)
- ✓ How to handle mouse ,keyboard events

- ✓ Limitations of IDE

- ✓ We can Run the Recording scripts against other browsers by using selenium Web driver

Configuring Eclipse IDE for java Selenium

- ✓ How to create new java project
- ✓ How to create a new java class
- ✓ Running java class
- ✓ Viewing the results of java program

Learning java

- ✓ Introduction to java programming
- ✓ Data Types in java
- ✓ Primitive Data types
- ✓ Wrapper Classes
- ✓ Declaring Variables
- ✓ Writing java program and running

Conditional Statements

- ✓ If condition
- ✓ If else condition
- ✓ If else if condition (nested if)
- ✓ Switch case statement
- ✓ Examples for all the above conditions

Loop Statements

- ✓ While loop
- ✓ Do While
- ✓ For loop
- ✓ For each loop
- ✓ Examples for all the above loops

Array

- ✓ How to declare array

- ✓
- How to store values in array
- ✓
- Reading values in array

Exception , error handling

- ✓
- What are exceptions ,errors
- ✓
- How to handle exceptions in the program
- ✓
- Using try and catch blocks
- ✓
- Types of Exceptions
- ✓
- Using of throws
- ✓
- Throw
- ✓
- Throwable

Object Oriented programming Class

- ✓
- What is class
- ✓
- What are fields and method
- ✓
- How to create object for the class
- ✓
- How to access fields and methods in the class
- ✓
- Constructors
- ✓
- What is abstract,final class
- ✓
- Variable Types (instance ,local,static)

Polymorphism

- ✓
- What is polymorphism
- ✓
- Methods overloading
- ✓
- Constructor overloading
- ✓
- Passing arguments to methods
- ✓
- Calling methods in the class
- ✓
- Return values from method
- ✓
- Return objects from method
- ✓
- Method arguments callbt value, call by reference

Inheritance

- Why to do inheritance
- How to reuse the fields and methods of parant class

- ✓
- Overriding fields and methods of parent class
- ✓
- Single in heritage
- ✓
- Multi level in heritage
- ✓
- Using super keyword
- ✓
- Composition/ Aggregation
- ✓
- Difference between inheritance and composition

Interfaces

- ✓
- What is interface
- ✓
- Difference between class and interface
- ✓
- When to use interface
- ✓
- Abstract class

Encapsulation and abstraction

- ✓
- What is hiding data
- ✓
- Using access specifires public ,private, protected default
- ✓
- Accessing the public methods outside the class
- ✓
- Difference in accessing in same package / different package

Package

- ✓
- What is package
- ✓
- How to create a package
- ✓
- How to import package into different class

Collections

- ✓
- Use of collections
- ✓
- Advantage of collection using array
- ✓
- How to add ,remove,and insert value /elements into collections
- ✓
- Using the collections like List,Set,Array list, Hash Table



Linked List

Web Driver



Introduction to Web Driver



Comparison of selenium RC & WebDriver



Configure Eclipse IDE (Adding selenium Libraries)



Using Firefox Driver Chrome ,IE, safari, Opera,Api



Browser Commands



Web Driver Interaction Commands



Web Driver Supported Locator names:



Id,Name,linktext,partiallinktext



Tagname,Xpath,css,classname



Understanding and writing Xpath, types of Xpaths



Working with Different Elements and programming



Editboxes,checkbox,Radiobuttons



Buttons,Links



Selecting values from a Dropdown list



Understanding xpath to locate elements in web page



Working with table elements



Reading Data from Table



Using Actions class



Handling keyboard,mouse events

Data Driven Testing



What is Data Driven Testing



How to parameterize the data to the script using excel



Reading ,Writing data into Excel



How to parameterize data to the script using Flat files

Debug Scripts in Eclipse



Understanding Debug



Using Breakpoints



Verify the values during debug



Using step over ,step into

Handling Windows



How to handle multiple browser



Handling alerts



Handling Frames



Handling windows alerts using (Auto it /sikuli)

Recognizing elements in webpage Using xpath ,DOM, CSS



Running java scripts in webDriver



How to recognize duplicate elements



How to recognize dynamically changing elements



Using Regular expressions

Configuring other Browsers



Configure IE browser



Configure Chrome browser



Running scripts on different browsers

TestNG Framework



What is TestNG



Create TestNG.xml file



Integrate the selenium scripts and run from TestNG



Reporting Results & Analyze



Run Scripts from Multi Browsers



TestNG Annotations



Tags in TestNG xml File Groups



Reporting Results

Automation Life Cycle



What is Frame work



Types of Frame work



Modular Framework



Data Driven Framework



Keyword Driven Framework



Hybrid Framework



Use of Framework



How Develop The Framework



Integration of the Frame work



How execute the scripts from Frame work

Cucumber (Overview)



How can we use it with Selenium
Web Driver



BDD Testing:Cucumber with
Selenium

Page Object Model Framework



Introduction to page object model



Advantages of page object model



Writing scripts Using page Object Model



Creating Repository class, Using
properties file



Execution of scripts Using page Object
Model



Generating Log files (log4j)

MAVEN



Installing maven in Local Machine



Creating Maven project



Importing Maven project in Eclipse



Understanding of POM .xml



Maven Integration with TestNG



Executing Scripts Using Maven build tool



Advantages Maven Tool

