

1. Actions in Selenium

Action class is used for keyboard and mouse events, drag & drop, right click and so on.

<ul style="list-style-type: none">• build• click• clickAndHold• contextClick• doubleClick• dragAndDrop• dragAndDropBy• keyDown	<ul style="list-style-type: none">• keyUp• moveByOffset• moveToElement• pause• perform• release• sendKeys• tick
---	--

```
WebElement ele = driver.findElement(By.xpath(.....));
```

```
Actions ref = new Actions (driver);
```

```
ref.moveToElement(ele);
```

```
ref.click().build().perform();
```

Locators:

Method	Target Syntax	Example
By ID	id= <i>id_of_the_element</i>	id=email
By Name	name= <i>name_of_the_element</i>	name=userName
By Name Using Filters	name= <i>name_of_the_element</i> filter= <i>value_of_filter</i>	name=tripType value=oneway
By Link Text	link= <i>link_text</i>	link=REGISTER
Tag and ID	css= <i>tag#id</i>	css=input#email
Tag and Class	css= <i>tag.class</i>	css=input.inputtext
Tag and Attribute	css= <i>tag[attribute=value]</i>	css=input[name=lastName]
Tag, Class, and Attribute	css= <i>tag.class[attribute=value]</i>	css=input.inputtext[tabindex=1]

2. Write positive and negative scenario for Alerts

3. Syntax for Windows handler

To handle alerts, popups and tabs.

Alert handles

```
driver.switchTo().alert().dismiss();
```

```
driver.switchTo().alert().accept();
```

```
driver.switchTo().alert().getText();
```

```
driver.switchTo().alert().sendKeys("Text");
```

Window handles:

```
parentWindow = driver.getWindowHandle();
```

```
Set<String> tabs = driver.getWindowHandles();
```

```

    for (String tab : tabs){
        if (!tab.equals(parentTab)){
            driver.switchTo().window(tab);
            Thread.sleep(3000);
        }
    }
}

```

Iframes:

```

List<WebElement> frameList=driver.findElements(By.tagName("iframe"));
driver.switchTo().frame("frame Name");
driver.switchTo().frame("xpath of the frame");

```

4. Find odd number

```

public static void main(String[] args) {
    int i = Integer.parseInt(args[0]);
    if ((i%2) == 0){System.out.println("Its an Odd number");}
    else{System.out.println("Not ODD");}
}

```

5. Disadvantages of Selenium

- supports only web based application, not desktop apps
 - cannot test mobile apps
 - Handling captcha is a limitation in selenium
 - Rely upon other tools for reporting facilities
-

6. Diff btwn get() and navigate().to()

- In .get(), WebDriver will wait until the page has fully loaded (that is, the onload event has fired) before returning control to your test or script.
 - The navigate interface also exposes the ability to move backwards and forwards in your browser's history
 - `driver.navigate().forward();`
 - `driver.navigate().back();`
 - **driver.get()** : It's used to go to the particular website , But it doesn't maintain the browser History and cookies so , we can't use forward and backward button , if we click on that , page will not get schedule
 - **driver.navigate()** : it's used to go to the particular website , but it maintains the browser history and cookies, so we can use forward and backward button to navigate between the pages during the coding of Testcase
-

7. Write code to click the Checkbox which is in the Dynamic Table

```

//table[contains(@class, 'table table-striped table-dark')]/tbody[1]/tr[1]/td[3]

```

Let's take above HTML table as an example:

```
1 WebElement htmltable=driver.findElement(By.xpath("//*
  [@id='main']/table[1]/tbody"));
2 List<WebElement> rows=htmltable.findElements(By.tagName("tr"));
3
4 for(int rnum=0;rnum<rows.size();rnum++)
5 {
6 List<WebElement> columns=rows.get(rnum).findElements(By.tagName("th"));
7 System.out.println("Number of columns:"+columns.size());
8
9 for(int cnum=0;cnum<columns.size();cnum++)
10 {
11 System.out.println(columns.get(cnum).getText());
12 }
13 }
```

Step 1: First get the entire HTML table and store this in a variable 'htmltable' of type web element.

Step 2: Get all the rows with tag name 'tr' and store all the elements in a list of web elements. Now all the elements with tag 'tr' are stored in 'rows' list.

Step 3: Loop through each row and get the list of elements with tag 'th'. 'rows.get(0)' will give first row and 'findElements(By.tagName("th"))' will give list of columns for the row.

Step 4: Iterate using 'columns.getSize()' and get the details of each cell.

Note: Above approach will be best suitable if the table dimensions changes dynamically.

//No.of Columns

```
List col = driver.findElements(By.xpath("//*[@id='leftcontainer']/table/thead/tr/th"));
System.out.println("No of cols are : " + col.size());
```

//No.of rows

```
List rows = driver.findElements(By.xpath("//*[@id='leftcontainer']/table/tbody/tr/td[1]"));
System.out.println("No of rows are : " + rows.size());
```

8. Code for Screenshot

```
takeSnapShot(driver, "screenshots/test.png");
public static void takeSnapShot(WebDriver webdriver, String fileWithPath) throws Exception {
    TakesScreenshot scrShot = ((TakesScreenshot) webdriver);
    File SrcFile = scrShot.getScreenshotAs(OutputType.FILE);
    File DestFile = new File(fileWithPath);
    FileUtils.copyFile(SrcFile, DestFile);
}
```

9. Maps in Java

10. Explain framework

A software framework is an abstraction in which software providing generic functionality can be selectively changed by additional user-written code, thus providing application-specific software

11. What is Pom.xml

A Project Object Model or POM is the fundamental unit of work in Maven. It is an XML file that contains information about the project and configuration details used by Maven to build the project

12. Identify elements (**Locators**): <https://www.guru99.com/locators-in-selenium-ide.html>

<ul style="list-style-type: none">• ID• Name• Class Name• Tag Name• Link Text• Partial Link Text• XPATH <p>By.cssSelector() does not support the "contains" feature.</p>	<pre>findElement(By.className("someClassName")) findElement(By.cssSelector("input#email")) findElement(By.id("someId")) findElement(By.linkText("REGISTRATION")) findElement(By.name("someName")) findElement(By.partialLinkText("REG")) findElement(By.tagName("div")) findElement(By.xpath(""))</pre>
---	---

13. Xpath methods (<https://www.guru99.com/xpath-selenium.html>)

```
Following : Xpath=//*[@type='text']//following::input[1]
Ancestor: Xpath=//*[text()='Enterprise Testing']//ancestor::div
Child: Xpath=//*[@id='java_technologies']/child::li
Preceding: Xpath=//*[@type='submit']//preceding::input[1]
Following-sibling: xpath=//*[type='submit']//following-sibling::input
Parent: Xpath=//*[id='rt-feature']//parent::div[1]
Self: Xpath =//*[@type='password']//self::input
Descendant: Xpath=//*[id='rt-feature']//descendant::a
```

14. Css selector

- Tag and ID : `css=tag[attribute=value]`
- Tag and class:
- Tag and attribute
- Tag, class, and attribute
- Inner text: `css=tag:contains("inner text")`

15.How to identify dynamic images

16.Print only integers from strings

17.Remove duplicates from arraylist

```
List<Integer> newList = list.stream().distinct().collect(Collectors.toList());
```

18.Print frame names

```
public void getIframe(final WebDriver driver, final String id) {
    final List<WebElement> iframes = driver.findElements(By.tagName("iframe"));
    for (WebElement iframe : iframes) {
        if (iframe.getAttribute("id").equals(id)) {
            // TODO your stuff.
        }
    }
}
```

19.How to read from XML or CSV file and store in hashmap

```

public static void main(String args[]) throws IOException {
    BufferedReader br = new BufferedReader(new FileReader( fileName: "src/test/resources/test.csv"));
    String line = null;
    HashMap<String,String> map = new HashMap<String, String>();

    while((line=br.readLine())!=null){
        String str[] = line.split( regex: ",");
        for(int i=1;i<str.length;i++){
            String arr[] = str[i].split( regex: ":");
            map.put(arr[0], arr[1]);
        }
    }
    System.out.println(map);
}

```

- 20.Get value of a cell in Dynamic table
- 21.Burndown chart(Agile)
- 22.Print these characters from a given string and change to uppercase

```

String a = "example";
String arr[] = a.split("");
for (String s: arr){
    System.out.print(s.toUpperCase());
}

```

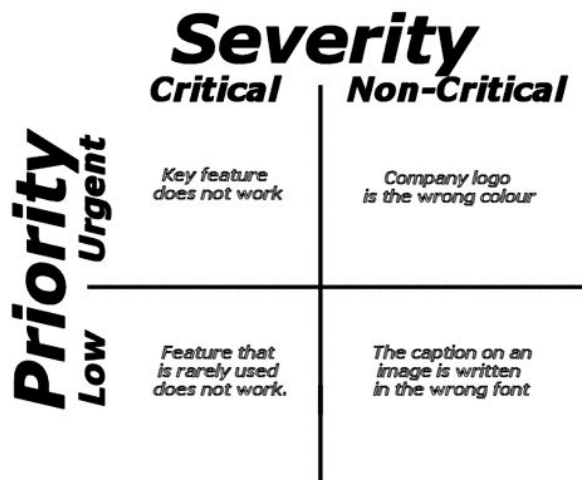
23. Access specifiers

Access Modifier	within class	within package	outside package by subclass only	outside package
Private	Y	N	N	N
Default	Y	Y	N	N
Protected	Y	Y	Y	N
Public	Y	Y	Y	Y

- 24. Difference between Priority and Severity
- 25. Example for High Priority and Low Severity and vice versa

Priority: order in which the developer should resolve a defect
Severity: degree of impact that a defect has on the operation of the product

<https://www.guru99.com/defect-severity-in-software-testing.html>



26. Difference between Test Strategy and Test Scenario

Strategy: Test strategy outlines the testing approach

Scenario: Test scenarios are an input for the creation of test cases

27. What Software Metrics you used

28. How to handle Dynamic Elements,since the webpage is designed in Angularjs

<https://www.softwaretestinghelp.com/selenium-tutorial-18/>

<https://www.guru99.com/handling-dynamic-selenium-webdriver.html>

Starting with : CSS ([attribute^=value])

Ending with : CSS ([attribute\$=value])

Text in between: CSS ([attribute*=value]) or contains function.

```
driver.findElement(By.xpath("//*[@contains(@id,'username')]")).sendKeys("username");
```

```
driver.findElement(By.xpath("//*[@starts-with(@id,'user')]")).sendKeys("username");
```

```
<button id="continue-12345" /> //button[starts-with(@id, 'continue-')]
```

```
driver.findElement(By.xpath("//*[@contains(@id,'username')]")).sendKeys("username");
```

```
driver.findElement(By.xpath("//*[@starts-with(@id,'user')]")).sendKeys("username");
```

29. Implicit and Explicit Waits

- When isEnabled(), isDisplayed(),or isSelected() was called while the element was not existing, WebDriver will throw a NoSuchElementException.
- When WebDriverWait and ExpectedConditions methods were called while the element was not existing, WebDriver would throw a TimeoutException.

common ExpectedConditions methods:

- alertIsPresent()
 - elementToBeClickable()
 - frameToBeAvailableAndSwitchToIt()
-

30. Cross Browser Testing

<https://www.guru99.com/cross-browser-testing-using-selenium.html>

31. Method Overloading and Method Overriding

32. Static Method
 33. Dependencies in Pom.xml
 34. Write code for fetching data from Excel
 35. Select Statement
 36. Assert and Verify
 37. Check a string is Palindrome or not
 38. Remove duplicate characters from a string and print
 39. Which Code Repository you are using(Ex: GitHub)
 40. How will you estimate the time to automate a scenario
 41. How to perform Right Click
 42. In a dynamic Table if I give 1 cell value, it should give me the values of other cells in that row
 43. Have you Developed any Tool, If yes explain
 44. Frames
 45. Read from a text file and store in HashMap
 46. Print the occurrence of a character if it is present more than once in a string
 47. Write code for nested drop-down, You have to check all the values in the dropdown, All permutation and combination
 48. Advantages of Selenium
 49. Try Catch
-

50. How to check if a checkbox is displayed

isSelected() is used when you want to verify whether a certain check box, radio button, or option in a drop-down box is selected.

Catching Exceptions:

```
WebElement txtbox_username = driver.findElement(By.id("username"));
try{
    if(txtbox_username.isEnabled()){
        txtbox_username.sendKeys("tutorial");
    }
}
catch(NoSuchElementException nsee){
    System.out.println(nsee.toString());
}
```

51. What all exceptions you have faced
 52. What all difficulties you have faced in Selenium
 53. What all TestNG Annotations used in project
 54. Where will you maintain the code
 55. What all Collections, you have used in your project
 56. How to run multiple test cases
 57. Primitive and Non primitive Data Types
 58. What is JDK, JRE and JVM
 59. Settings.xml in Maven
 60. Eliminate first and last string from array and print
 61. Encapsulation
 62. What is the use of build() and perform () in Actions
-

1. Tell me about yourself.
2. Are you working on manual+ automation or only automation?
3. What tools you have used in your project so far?
4. Explain bug life cycle. What priorities do you give while raising a bug?
5. What is a defect triage call?
6. If in a sprint two user stories have some conflict, what will you do?
7. Have you worked on BDD framework? Why BDD is preferred over other typical frameworks.
8. Write a feature file for login scenario.
9. Are you working on creation of framework from scratch or you just modify the existing framework?
10. What is a test runner file?
11. What is POM.xml file? Why it is used?
12. What is a testNG.xml file? What is the benefit of using a testNG framework?
13. What is a hybrid framework? What are the components of a framework?
14. What are the benefits of creating a framework? Why POM approach is preferred?
15. Have you worked on data driven framework? WAP to fetch data from a excel file, just tell me code.
16. From what type of files can we obtain test data?
17. How to find broken links in selenium?
18. What are test listeners in selenium? What are the different types of test listeners?
19. What is frame in selenium? Let's say I have 3 frames, then how I can go to the 3rd frame from 1st frame? And how to come back to 1st frame?
20. Have you worked on database testing? How many types of joins are there? What is the use of joins in SQL?
21. What is the difference between cross join and inner join?
22. Suppose I alter the table, then I dropped the table, then I did rollback, what can be the output?
23. What is maven in selenium? How maven is useful?
24. What is a build life cycle in Maven?
25. What are the qualities of a good build tool? On what basis you will select a build tool?
26. What is a wrapper class in java?
27. What is the difference between array and collections in java?
28. What is the difference between Final, finally, finalize?
29. What is the difference between SOAP and REST?
30. What are the different methods used in web services?
31. Have you worked on GIT? What are the commands in GIT?
32. What is the overall check in checkout procedure in GIT?
33. What are the exceptions that you have encountered in selenium?
34. What are different types of testing?
35. Tell me the annotations in testNG by order of execution?
36. What are the pop ups in selenium? How to handle windows based pop ups?
37. Can we handle user session in selenium?
38. How to capture screenshot in selenium? Tell me the code.
39. Do you know any scripting language like VB script? Java script? Can you automate web services using rest assured ?

Value labs interview questions:

1. Dynamic Xpath, Inheritance, Versions of Automation Tools and Browsers.
2. BUG lifecycle , SDLC,STLC
3. handle alerts using selenium?
4. difference bw POI and jxl jar

5. Thread concepts in java
6. What is "is-a" & "has-a" relationship in java?
7. How to take the screenshot in selenium?
8. How to identify the hidden elements in selenium?
9. What is the difference between == and === in javascript
10. How can you access the variable of one js file in another js file?
11. oops concept