

Selenium Interview Questions and Answers

SELENIUM INTERVIEW QUESTION ANSWERS:

1.What is Automation Testing and benefits?

*Test Automation is a process that makes use of automation testing tools to execute pre-scripted tests on applications, then compares the test results to the expected behavior and reports it to the testers.

Benefits:

- *It execute tasks automatically
- * increase effectiveness
- *efficiency
- *coverage of the software testing.

2.Why should Selenium be selected as a test tool?

*Selenium is an open source automation testing tool which is used to test web applications.

*Selenium testing tool is also consists of different set of tools in it like Selenium WebDriver, Selenium RC, Selenium IDE which has different features.

3.What is Selenium? What are the different Selenium components?

*Selenium is a portable software testing framework for web application.

*Selenium provides a playback tool for authoring tests without need to learn a test scripting languages.

Different selenium components:

- *Selenium IDE
- *Selenium RC
- *Selenium Webdriver
- *Grid

4.What is the difference between Selenium RC, and WebDriver?

Selenium RC:

*It doesnot make direct calls to the browser using each browser's native support for automation.

Selenium Webdriver:

*It doesnot make direct calls to the browser using each browser's native support for automation.

5.What is the latest version of selenium jar file and how you will configure selenium jar file with eclipse?

Latest version:

*3.14.0

Configure jar file:

*We have to give add to build path for configuration.

6.Can Google Chrome will be supported by Selenium IDE?

*No,Google Chrome will not be supported by Selenium IDE.

7.What are the different browsers supported by selenium?

- *Firefox browser
- *Chrome browser
- *IE
- *safari browser
- *Opera browser

8.What is the Classname,driver name for the below browsers?

```
=====
    ClassName      Driver
    -----
 1.Firefox browser-->FireFoxDriver
 2.Chrome browser -->ChromeDriver
 3.IE          -->InternetExplorerDriver
 4.safari browser -->SafariDriver
 5.Opera browser -->OperaDriver
```

9.What is the WebDriver ? Whether WebDriver is class or interface?

*Webdriver is a web automation framework that allows you to execute your tests against different browser,not just firefox.

*Webdriver also enables you to use a programming languages in creating your test script.

*Webdriver is a interface.

10.What is the method name to launch the url?

*get()- used to launch the url.

11.What are the Method names to get the title and current URL?

*getTitle()- used to get the title of the webpage.

*getCurrentUrl()-used to get the current url of the webpage.

12.What is the difference between close() and quit()?

close():

*It will close the current window only.

quit():

*It will close all opening window and browser.

13.What are the methods available in webdriver?

```
*close();
*findElement();
*findElements();
*get();
getTitle();
getCurrentUrl();
*manage();
*quit();
*switchTo();
```

14.What is the use of WebDriver?

*It is mainly used for providing the connection between the browser and local system.

*It act as a bridge.

15.What are the locator available in selenium?

```
*id
*classname
*name
*Xpath
*CSS selector
*link Text
*partially Link Text
*tagname
```

16.Which locator is fastest in selenium?

*id is the fastest locator in selenium.

17.How will you find the locators in selenium? write a code for it?

*We can find the locator by using findElement(),findElements() methods.

Code

driverrefname.findElement(By.locator("values"));

18.Explain about findElement & findElements?

=====

*Both are used to find the webelement from the webpage.
*findElement find one webelement.
*findElements find the list of web element.

19.Difference between findElement and FindElements?

=====

findElement

*It find only one webElement.
*If no element is found it throws no such element exception.

findElements

*It finds a list of webElement.
*findElements will return an empty array when no elements found

20.What is the return type of findElement and findElements?

=====

*findElement - WebElement
*findElements - List<WebElement>

21.In which class all the locator methods are available?

=====

*In By class all the locator methods are available.

22.What is method to insert a value in textbox?

=====

*sendKeys() method is used to insert a value in textbox.

23.Write a code for inserting value in textbox?

=====

*WebElementRefname.sendKeys("values");

24.Whether in finding the locator index will start from 0 or 1?

=====

*For selecting first locator we pass 1 in the index.

25.How will you click a button in webpages?

=====

*By using click() method we can click a button in webpage.

26.Whether WebElement is a interface or class?

=====

*WebElement is a interface.

27.What is mean by System.setProperty?

=====

*System is a class.
*.setProperty is a method in this we have to pass key and value.
*It is used to set the class and path location of driver.

28.What is Xpath? Why we are going for Xpath?

=====

*Xpath is one of the locator available in webpage.
Reason for going to Xpath:

*For validating the locator.
*When id,classname,name is not present.

29.What are the Types of Xpath?

=====

*Absolute Xpath
*Relative Xpath

30.What is the difference between Absolute xpath and Realtive Xpath?

Absolute Xpath:

*It contain \

*It find the webelement from the top of the downstrom.

Relative Xpath:

*It contain \\

*It find the webElement from that particular tag.

31.What are the differenece between / and // ?

\ :

*It means absolute Xpath

*It find the webelement from the top of the downstrom.

\\:

*It means Relative Xpath \\

*It find the webElement from that particular tag.

32.What is the difference between Radio and CheckBox button?

Radio Button:

*For Radio button we have to select atleast one option.

*we have to select only one option.

*for deselecting we have to selct the another option present.

Check Box:

*For check box no need to select atleast one option.

*we can select more than one option.

*for deselecting we have to selct the same option one more time.

33.What is the method used to perform click?

=====
*click() method is used.

34.What are the Xpath function?

=====
*text()
*contains()

35.How will you select a female Radio Button in facebook signup and write a code for it ?

=====
*WebElement feBtn=driverREF.findElement(By.Xpath("//input[@value='1']"));
feBtn.click();

36.Write a code for performing Radio Button and CheckBox button click using Base Class?

=====
*Public Static void btnClick(WebElement element){
element.click();
}

37.What is mean by Stale Element Exception?

=====
*Stale Element means an old element or no longer available element. Assume there is an element that is found on a web page referenced as a WebElement in WebDriver.

*If the DOM changes then the WebElement goes stale. If we try to interact with an element which is staled then the StaleElementReferenceException is thrown.

38.What is the purpose of debug?

=====
*It is the step by step verification.
*We can easily identify the step where the code getting exception.

39.What are the steps to be debug?

=====
*Set the break point

*Click the shortcut key F6 for stepOver.
 *just right click-->debug us-->java application.

40.What are the types of debug?

=====

- *Eclipse debugger.
- *Firefox JavaScript debugger.
- *Dynamic debugging technique
- *On line debugging tool.

41.How to take a locator which contain no attribute?

=====

- *By using xpath function text()
`//tagname[text()='textname']`

42.How to print a paragraph from webpage?

=====

- *By using xpath function text()
`//tagname[text()='textname']`
- *By using getText() method we can get the text
`System.out.Println(webElemRef.getText());`

43.What are the methods to get and print the text from webpage?

=====

- *getText() method is used to print and get the text from webpage.

44.What is the purpose of getText() andgetAttribute() ?

=====

- *getText() method is used to print and get the text from webpage.
- *getAttribute() method is used to get the values from the attribute.
- *getAttribute() also used to get the input what we are giving.

45.What is the return type of getText() andgetAttribute() ?

=====

- *String is return type of both methods.

46.In which class getText() andgetAttribute() ?

=====

- *In WebElement interface this methods are present.

47.What are the difference between getText(),getAttribute()?

=====

- getText()**

 - *print or get the text present in webpage.
 - *Example:webElement.getText();
- getAttribute()**

 - *used to get the text in attribute tag.
 - *Example:webElement.getAttribute("value");

48.Whether it is possible to getText from webpage without using getText()?

=====

- *No,it is not possible to getText from webpage without using getText().

49.What is MouseOverAction?

=====

- *When we place a mouse on some option it will display a list of subOption.
- *For mouseOverAction we can use Actions class.

50.Write a code to perform MouseOverAction?

=====

- *Actions refName= new Actions(driver refName);
`refName.moveToElement(WebElementrefName).perform();`

51.Whether Actions is a class or Interface?

=====

- *Actions is a class.

52.How will you perform Drag and drop?

```
=====
*Actions refName= new Actions(driver refName);
refName.dragAndDrop(wesrcRefName, wedestRefName).perform();
```

53.what is the use of the Actions class?

```
=====
*Actions class is used to perform mouseOverAction,dragAndDrop,rightClick,doubleClick.
*This class will contain more methods for performing mouse actions.
```

54.What is the purpose of Drag and Drop?

```
=====
*For minimize the time required for the copy and paste.
```

55.In which class dragAndDrop method is available?

```
=====
*Actions-class
```

56.Why we use .perform()?

```
=====
*The menu list disappear with in the fractions of seconds before Selenium identify the next
submenu item and perform click action on it.
*So,it is better to use .perform() method.
```

57.What is the purpose of moveToElement()? where it is used?

```
=====
*moveToElement() method will move to the particular element.
*It is mainly used in actions class performance.
```

58.In which class moveToElement() is present?

```
=====
*Under Actions class moveToElement() is present.
```

59.What are methods available in Actions class ?

```
=====
*moveToElement();
*ContextClick();
*doubleClick();
*dragAndDrop();
```

60.What is the difference between moveToElement() & switchTo()?

```
=====
*moveToElement() will move to that particular element.
*switchToElement() will move to alert,different windows,frames.
```

61.What is mean by Robot class?

```
=====
*Robot class is a class which is used to perform the keyboard action in java.
*It is present in java.awt package.
*It contain two methods keyPress and keyRelease
```

62.What are the purpose of Robot class?

```
=====
*Used for performing the keyboard action.
```

63.Write a code for Robot class?

```
=====
*Robot refname = new Robot();
refname.keyPress(KeyEvent.VK_ANYKEYYOUWANT);
refname.keyRelease(KeyEvent.VK_ANYKEYYOUWANT);
VK-->virtual key
```

64.In which package Robot class is available?

```
=====
*java.awt
```

65.what exception Robot class throws?

```
=====
*AWT Exception
```

66.Which method is used to perform rightClick?

=====

*contextClick() method is used to perform rightClick.

67.Which method is used to perform doubleClick?

=====

*doubleClick() method is used to perform doubleClick.

68.How will take a screenshot of webpage?

=====

*By using of TakeScreenShot and getScreenShotAs() method.

69.Whether TakeScreenShot is a class or interface?

=====

*TakeScreenShot is a interface.

70.In which place the screenShot will store in default?

=====

*OutputType.FILE

71.What are the methods used for scrollUp and scrollDown ?

=====

*executeScript() method is used to scrollup and scroll down.

72.Whether JavascriptExecutor is a class or interface?

=====

*JavascriptExecutor is a interface.

73.How can we perform Drop Down action ?

=====

*By using Select class.

74.Whether Select is a interface or class?

=====

*Select is a class.

75.Write a code to print all the options in DropDownList?

=====

*getOptions() method is used to print all options in dropdown.

76.Can we select multiple values in DropDownList?

=====

*Yes,we can select multiple values in DropDownList.

77.How will you select multiple values in DropDownList?

=====

*By checking where the Multiple tag is present or not.

78.What are the methods available in select?

=====

*selectByValue();
*selectByVisibleText();
*selectByIndex();
*getOptions();
*getAllSelectedoptions();
*getFirstselectedoptions();
*isMultiple();
*deSelectByValue();
*deSelectByVisibleText();
*deSelectByIndex();
*deSelectAll()

79.can we deselect the options in DropDownList?

=====

Yes, we can deselect the options in DropDownList.

80.Write a code to print selected options in DropDownList?

=====

*By using getAllSelectedoptions() method we can print selected options.
 Select refName = new Select();
 refName.getAllSelectedoptions();

81. Write the return type of all methods available in Select?

```
=====
*selectByValue()           -void
*selectByVisibleText()     -void
*selectByIndex()           -void
*getOptions()              -List<WebElement>
*getAllSelectedoptions()   -List<WebElement>
*getFirstselectedoptions() -WebElement
*isMultiple()              -boolean
*deSelectByValue()         -void
*deSelectByVisibleText()   -void
*deSelectAll()             -void
*deSelectByIndex          -void
```

82. What is the purpose of windows Handling?

```
=====
*Whenever we want to switch to next window or perform action in new window we have to use window handling.
*Simply use to maintain the multiple windows.
```

83. Write a code to perform windows Handling?

```
=====
*driverRefName.switchTo().getWindowsHandles();
```

84. What are the different types of arguments you pass in windows()?

```
=====
*id
*url
"title"
```

85. Write a code to switch to 8 th child window?

```
=====
List<String> allWindowsId=(List<String>)driver.getWindowHandles();
driver.SwitchTo().window(allWindowsId.get(7));
```

86. What is the mean by webtable?

```
=====
*Table present in webpage is webtable.
*It starts and ends with <table> and</table>.
*The web table contain <tr> <td> <th> tags.
```

87. Write a code to display all the Column Name in table?

```
=====
*List<WebElement> rowRef=driver.findElements(By.tagname("tr"));
for(int i=0;i<ref.size();i++)
{
List<WebElement> heaRef=driver.findElements(By.tagname("th"));
String name= heaRef.getText();
sysout(name);
}
```

88. Write a code to display all the data in table?

```
=====
List<WebElement> rowRef=driver.findElements(By.tagname("tr"));
for(int i=0;i<ref.size();i++)
{
List<WebElement> heaRef=driver.findElements(By.tagname("td"));
for(int j=0;j<heaRef.size();j++){
String name= heaRef.get(j).getText();
sysout(name);
}
}
```

89. What are the use of wait?

=====

*Wait operation used to wait the script for some time to load the webelements

90.What are the types of wait?

=====

- *Implicit wait
- *Explicit wait
- *Fluent wait

91.What are the difference between implicit wait and explicit wait?

=====

Implicit wait:

- *It make the whole webdriver wait for that particular time we mention.

*driver.manage().timeouts().implicitlyWait(10, TimeUnit.SECONDS)

Explicit wait:

- *It make the particular webelement wait for that particular time we mention.

*We can also mention the condition for which the webelement will wait.

*WebDriverWait wait = new WebDriverWait(driver, 10);

WebElement element = wait.until(ExpectedConditions.somecondition(By.id("someid"))));

92.What are the difference between getWindowHandle() and getWindowHandles()?

=====

*getWindowHandle() is used to represent the parent window.

*getWindowHandles() is used to represent the child windows.

93.Write a method to print the first selected option in drop down?

=====

*getFirstSelectedOption() method used to print the first selected option in drop down.

94.What is mean by alert?

=====

*Alert is like the pop up displayed in the webpage.

*For handling popup we have to use Alert interface.

95.What are the methods available in alerts?

=====

- *accept();
- *dismiss();
- *sendKeys();

96.Whether alert is a class or interface?

=====

*Alert is a interface.

97.Explain each word in WebDriver driver=new ChromeDriver();?

=====

- *WebDriver -->Interface
- *driver -->reference name
- *new -->Keyword
- *ChromeDriver-->Class name

98.What is mean by default content in frames?

=====

*It will go to main frame.

99.What are the different types of arguments we can pass in frames?

=====

- *WebElement
- *Name
- *Id
- *Index

100.What is the purpose of isDisplayed(),isSelected(),isEnabled()?

=====

*isDisplayed()-To check whether WebElement is hidden or not.

*isSelected() -To check whether checkbox ,radio box is selected or not.

*isEnabled() -To check whether button and textbox is edited or not.

101.What is mean by Fluent Wait?

=====

- *Each FluentWait instance defines the maximum amount of time to wait for a condition, as well as the frequency with which to check the condition.
- *The user may configure the wait to ignore specific types of exceptions whilst waiting, such as NoSuchElementExceptions when searching for an element on the page.

102.What is mean by following,sibling,child,parent,preceding in Xpath?

=====

- Following:
 - - - - -
 - *Selects all elements in the document of the current node.
- sibling:
 - - - - -
 - *Select the following siblings of the context node. Siblings are at the same level of the current node .
- Parent:
 - - - - -
 - *Selects the parent of the current node.
- Child :
 - - - - -
 - *Selects all children elements of the current node.
- Preceding:
 - - - - -
 - *Select all nodes that come before the current node.

103.What is the difference between window and alerts?

=====

- Alerts:
 - - - - -
 - *If we click a login or any button one pop-up will show like OK or Cancel.
 - *If we click OK or Cancel, then only it will move to home window.
 - *It has 3 types,
 - 1. Simple Alert
 - 2. Confirm pop-up
 - 3. Prompt pop-up
- Window:
 - - - - -
 - *If we click login button, one separate window will open.
 - *We have to switch from parent window to child window then only we can automate.
 - *Using window handling method we can switch.

104.What is the difference between partial link text and link text?

=====

- LinkText:
 - - - - -
 - *In linktext we take all text in the locator
 - *Example: WebElement web = driver.findElement(By.linkText("Product Category"));
- PartialLinkText:
 - - - - -
 - *In the partial link text we take partially in the text
 - *Example: WebElement web = driver.findElement(By.partialLinkText("Category"));

105.Where you used Interface in selenium?

=====

- *WebDriver
- *JavascriptExecutor
- *Alert
- *TakeScreenShot

106.What is broken link and how do you find it?

=====

- *Broken links are links or URLs that are not reachable.
- For checking the broken links, you will need to do the following steps.
 - - - - -
 - *Collect all the links in the web page based on <a> tag.
 - *Send HTTP request for the link and read HTTP response code.
 - *Find out whether the link is valid or broken based on HTTP response code.

*Repeat this for all the links captured.

107.What is framework, why we go for framework?

=====

*Framework is a code structure that helps to make code maintenance easy.

*Without frameworks, we will place the “code” as well as “data” in the same place which is neither re-usable nor readable.

*Using Frameworks, produce beneficial outcomes like increased code re-usage, higher portability, reduced script maintenance cost, higher code readability, etc.

108.What are the selenium commands?

=====

*Browser commands

*Browser navigation commands

*Web element commands

*Find element commands

*Check box & radio button

*Drop down and multiple select

109.What is the difference between get() and navigate()?

=====

*If we use get() method, it only launch the url.

*If we use navigate() method, we can perform back(), refresh() and forward() action.