100 Best Selenium Job Interview Questions & Answers



100 Best Selenium Job Interview Questions & Answers

This article will be useful for all who are planning to get a testing or test automation job. More than 100 most popular Questions & Answers from Selenium Job Interviews have been compiled here.

1) What is Automation Testing?

Automation testing is a process in which software tools execute pre-scripted tests on a software application before it is released into production. Special software is used to control the test execution, actual outcomes and predicted outcomes comparison, the test preconditions setting up, and other test control and test reporting functions.

2) What are the main advantages of Automation Testing?

Regression testing coverage, test engineer productivity, consistency in testing, test cases reusability, reduced software maintenance cost, increased test effectiveness, reduction of the test interval, reducing human-generated errors.

3) So, what is Selenium?

Selenium is a robust test automation suite designed in a way to support and encourage automation testing of functional aspects of web-based applications and a wide range of browsers and platforms.

4) What are the main advantages of Selenium?

• Selenium is a free and open source. You don't need to spend any licensing cost to use it





- Companionity with the main platform (willdows, wat Os, Linux etc.)
- Huge amount user base and helping communities
- Automation scripts creating ability for non-programmers as well as for programmers
- Testing distribution support
- Regular and fresh repository developments

5) What Selenium components do you know?

Selenium is a suite of tools for automated web testing. It is composed of:

- **Selenium IDE (Integrated Development Environment)**. It is a tool for recording and playing back. It is a Firefox plugin.
- **WebDriver and RC**. It provides the APIs for a variety of languages like Java, .NET, PHP, etc. They work with most of the browsers.
- **Grid:** you can distribute tests on multiple machines so that test can be run parallel which helps cutting down the time required for running test suites in the browser.

6) How many types of Webdriver APIs are available in Selenium?

The list of driver classes could be used for the browser automation.

- AndroidDriver,
- ChromeDriver,
- EventFiringWebDriver,
- FirefoxDriver,
- HtmlUnitDriver,
- InternetExplorerDriver,
- iPhoneDriver,
- iPhoneSimulatorDriver,
- RemoteWebDriver

7) Does the Selenium have any limitations?



- Mobile applications cannot be tested using Selenium
- Desktop applications cannot be tested using Selenium
- Captcha and Bar code readers cannot be tested using Selenium
- User should use third-party tools like TestNG or jUnit to write test scripts and generate reports
- Programming language knowledge is required to create robust scripts in Selenium WebDriver

8) What is Selenium IDE?

Selenium IDE is a plug-in used to record and replay tests in Firefox browser. Scripts may be automatically recorded and edited manually providing auto-completion support and the ability to move commands around quickly.

9) What is Selenese?

Selenese is the language which is used to write test scripts in Selenium IDE.

10) What kinds of test types are supported by Selenium?

- 1. Functional Testing
- 2. Regression Testing
- 3. Sanity Testing
- 4. Smoke Testing
- 5. Responsive Testing
- 6. Cross Browser Testing
- 7. UI testing (black box)
- 8. Integration Testing

are supported by Selenium.

11) What are the different types of locators in Selenium?



rai liailiiki ext, Aralii, Coo Delectoi, <mark>Poivi</mark>.

12) What automation tools could be used for post-release validation with continuous integration?

Automation tools could be used for post-release validation with continuous integration: CruiseCont, Hudson, Jenkins, Quick Build.

13) Explain the meaning of assertion in Selenium and what are the types of assertion?

Assertion is used as a verification point. It verifies that the application state conforms to the expectation. The types of assertion are "assert", "verify" and "waifFor".

14) Explain the difference between assert and verify commands?

Both of them check if the given condition is true or false. Unlike to "assert", "verify" will not stop the test case execution if the test case fail.

15) What is a XPath?

XPath is a language that describes a way to locate and process items in Extensible Markup Language (XML) documents by using an addressing syntax based on a path through the document's logical structure or hierarchy.

16) What is an Absolute XPath?

Absolute XPath is the direct way to find the element. It has a disadvantage. XPath gets failed if there are any changes made in the path of the element.

html/body/div[3]/div/div[1]/div/div[1]/div/input - Absolute XPath example.

17) What is a Relative XPath?



to write rong Aratii. Example or Nelative Aratii - //Input[@iu- email].

18) What is the difference between single slash (/) and a double slash (//) in XPath?

A single slash (/) is used for creating XPaths with absolute paths beginning from the root node.

Double slash (//) is used for creating relative XPath to start selection from anywhere within the root node

19) How could the web element attributes be inspected in order to use them in different locators?

Firebug is a Firefox plugin that provides various development tools for debugging applications.

From an automation perspective, Firebug is used specifically for inspecting web-elements in order to use their attributes like id, class, name etc. in different locators.

20) Give an example of the languages supported by WebDriver.

Java, C#, Python, and Ruby, are all supported directly by the development team. There are also PHP and Perl WebDriver implementations.

21) How can we launch different browsers in Selenium WebDriver?

We should create an instance of a driver of a particular browser:

1. WebDriver driver = new FirefoxDriver();

сору

22) What the WebDriver supported Mobile Testing Drivers do you know?

Mobile Testing Drivers supported by the WebDriver are: AndroidDriver, IphoneDriver, OperaMobileDriver.



Using CSS selector we can only move downwards in the document, using XPaths we traverse up in the document.

24) How can you find if an element is displayed on the screen?

There are different methods, which help user to check the visibility of the web elements: **isDisplayed()**, **isEnabled()**, **isSelected()**. These web elements can be buttons, drop boxes, checkboxes, radio buttons, labels etc.

25) What is the difference between "type" and "typeAndWait" command?

If you need to type keyboard key values into a text field of the web application, "type" command will be used. Another reason for its usage is selecting values of the combo box. "typeAndWait" command is used when your typing is completed and software web page start reloading.

26) How can the user get a text of a web element?

User can retrieve the text of the specified web element by using get command. It doesn't require any parameter but returns a string value.

1. String Text = driver.findElement(By.id("Some Text")).getText()

copy

is an example of it.

27) How a text written in a text field could be cleared?

A text written in a text field could be deleted by using the **clear()** method.

28) How to check a checkBox in Selenium?





29) How to verify if the checkbox/radio is checked or not?

isSelected() method is used to verify if the checkbox/radio is checked or not. An example -

driver.findElement(By.xpath("XPath of the checkbox/radio button")).isSelected();

30) What is the alternate way to click on login button?

submit() method could be used as the alternate way to click on login button, but only if attribute type=submit.

31) How to select a value in a dropdown?

WebDriver's Select class is used to select value in the drop down.

```
1. selectByVisibleText: copy
```

- 2. Select selectByVisibleText = new Select
 (driver.findElement(By.id("id_of_some_element")));
- selectByVisibleText.selectByVisibleText("some_visible_text");

32) Explain the difference between close and quit command.

If you need to close the current browser having focus **driver.close()** is used. If you need to close all the browser instances **driver.quit()** is used.

33) What is the difference between setSpeed() and sleep() methods?

Both of these methods delay the speed of execution. The main difference between them is setSpeed sets a speed while will apply delay time before every Selenium operation takes pl thread.sleep() will set up wait only for once.



- **sleep(5000)** It will wait for 5 seconds. It is executed only once, where the command is written.
- **setSpeed("5000")** It also will wait for 5 seconds. It runs each command after setSpeed delay by the number of milliseconds mentioned in set Speed.

34) What are the different types of navigation commands?

- navigate().back() command takes user back to the previous webpage in the web browser's history. An example: driver.navigate().back();
- navigate().forward() lets the user to navigate to the next web page with reference to the browser's history. An example: driver.navigate().forward();
- According to navigate().refresh() command user can refresh the current web page there by reloading all the web elements. An example: driver.navigate().refresh();
- User can launch a new web browser window and navigate to the specified URL by executing
 navigate().to() An example:
 - 1. driver.navigate().to("https:// thinkmobiles.com/");

35) What is the difference between findElement () and findElements ()?

Both of them let user to find elements in the current web page matching to the specified locator value. But if you use **findElement()**, only the first matching element would be fetched. An example:

1. WebElement element = driver.findElements(By.xpath("//div[@id='example']//ul//li" copy

If you use **findElements()**, the all matching elements would be fetched and stored in the WebElements list. An example:

1. List elementList = driver.findElements(By.xpath("//div[@id='example']//ul//li")) copy

36) Can Selenium handle Windows based pop-up?





37) How can we handle Web-based pop-up?

There are four methods of the effective Web-based pop-up handling:

- string **getText()** method returns the text displayed on the alert box
- void accept() method clicks on the "Ok" button as soon as the pop-up window appears
- void dismiss() method clicks on the "Cancel" button as soon as the pop-up window appears
- void sendKeys(String stringToSend) method enters the specified string pattern into the alert box

38) Do you know a way to refresh browser by using Selenium?

The list of commands to refresh a page in Selenium:

- navigate().refresh()
- getCurrentUrl()
- navigate().to(driver.getCurrentUrl())
- sendKeys(Keys.F5)

39) How can we maximize browser window in Selenium?

driver.manage().window().maximize(); //command is used to maximize browser window copy
 Selenium

40) How can we find the value of different attributes like name, class, value of an element?

 getAttribute("{attributeName}") //method is used find the value of different copy attributes of an element

41) Could cookies be deleted in Selenium?



42) How to perform right click using Selenium WebDriver?

The next Actions class is used to perform right click:

```
    Actions act = new Actions(driver); // where driver is WebDriver type
    act.moveToElement(webElement).perform();
    act.contextClick().perform();
```

43) How do perform drag and drop using Selenium WebDriver?

The next Actions class is used to perform drag and drop:

```
    Actions builder = new Actions(driver);
    Action dragAndDrop = builder.clickAndHold(SourceElement)
    moveToElement(TargetElement)
    release(TargetElement)
    build();
    dragAndDrop.perform();
```

44) How to check if an element is visible on the page?

The return method type is logical. If it returns true then element is visible otherwise it is not. **isDisplayed()** method could be used for it:

```
1. driver.findElement(By.id("id_of_element")).isDisplayed();
```

45) How to check if a button is enabled on the page?

isEnabled() method could be used for it:

1. driver.findElement(By.id("id_of_element")).isEnabled();



Selenium supports different mouse actions, such as:

- click(WebElement element)
- contextClick(WebElement element)
- doubleClick(WebElement element)
- mouseUp(WebElement element)
- mouseDown(WebElement element)
- mouseMove(WebElement element)
- mouseMove(WebElement element, long xOffset, long yOffset)

47) Can you write the code to double click an element in Selenium?

Code to double click an element in Selenium:

```
    Actions action = new Actions(driver);
    WebElement element=driver.findElement(By.id("elementId"));
    action.doubleClick(element).perform();
```

48) How to mouse hover an element in Selenium?

Code to mouse hover over an element in Selenium:

```
    Actions action = new Actions(driver);
    WebElement element=driver.findElement(By.id("elementId"));
    action.moveToElement(element).perform();
```

49) What kind of keyboard operations can be performed in Selenium?

Selenium lets to perform different kinds of keyboard operations, such as:

.pressKey("non-text keys") is used for keys like control, function keys etc that are non



releasing a key nom keyboard event

 .sendKeys("sequence of characters") is used for passing character sequence to an input or textbox element.

50) What is JUnit? And what is JUnit Annotation?

JUnit is an open source Java applications testing framework, introduced by Apache. A process of adding a special form of syntactic metadata to Java source code is called annotation. JUnit Annotations are: variables, parameters, packages, methods and classes.

51) What is TestNG and why is it better than JUnit?

TestNG is a testing framework inspired from JUnit and NUnit in a way to use the merits by both the developers and testers. Here are some new functionalities that make it more powerful and easier to use, such as:

- test that your code is multithread safe
- support for data-driven testing
- support for parameters
- a variety of tools and plug-ins support (Eclipse, IDEA, Maven, etc...)
- default JDK functions for runtime and logging
- dependent methods for application server testing
- flexible test configuration

52) What kinds of annotations are used in TestNG?

The following kinds of annotations are used in **TestNG**:

- Test
- BeforeSuite
- AfterSuite
- BeforeTest



- DEIUIECIASS
- AfterClass
- BeforeMethod
- AfterMethod

53) How to set test case priority in TestNG?

TestNG "Priority" is used to schedule the test cases. In order to achieve, we need to add an annotation as @Test(priority=??). The default value will be zero for priority. If you don't mention the priority, it will take all the test cases as "priority=0" and execute.

The example below shows the usage of the priority for test cases.

As we have not defined the priority for test case "Registration", it will get executed first and then the other test cases based on priority.

```
    import org.testng.annotations.Test;

 2. public class testNGPriorityExample {
 3. @Test
 4. public void registerAccount()
 5. {
 6. System.out.println("Create an account");
 7. }
 8. @Test(priority=2)
 9. public void sendEmail()
10. {
11. System.out.println("Confirm your email");
12. }
13. @Test(priority=1)
14. public void login ()
16. System.out.println("Execute login after confirmation");
17. }
18. }
```



сору

```
3. @Test
4. public void registerAccount() {
5. System.out.println("Create an account");
6. }
7. @Test(priority=2)
8. public void sendEmail() {
9. System.out.println("Confirm your account");
10. }
11. @Test(priority=1)
12. public void login() {
13. System.out.println("Execute login after confirmation");
14. }
15. }
```

54) Explain how you can find broken images in a page using Selenium Web driver?

You have to follow the next steps to find broken images in a page using Selenium Web driver:

- get XPath and get the all links on the page using the tag name
- click on every link on the page
- look for 404/500 in the target page title

55) Can captcha and bar code reader be automated by using Selenium?

Neither captcha, no bar code reader can be automated by using Selenium.

56) How to verify tooltip text using Selenium?

The tooltip text in Selenium could be verified by fetching the value of 'title' attribute. An example:

1. String toolTipText = element.getAttribute("title");



linkText() and partialLinkText() are used for link location.

The examples:

```
1. WebElement link1 = driver.findElement(By.linkText("some_link_test"));
```

2. WebElement link2 = driver.findElement(By.partialLinkText("some_link_part_text"));

58) Can we find all links on a web page?

As all links are of anchor tag 'a', so we can find all of them on a web page by locating elements of tagName 'a':

```
1. List links = driver.findElements(By.tagName("a"));
copy
```

59) How can we capture screenshots in Selenium?

We can take the screenshots in selenium by using getScreenshotAs method of **TakesScreenshot** interface:

FileUtils.copyFile(scrFile, new File("C:\\screenshot1.jpg"));

60) Explain how colors could be handled in Selenium WebDriver?

To handle colors could be handled in Selenium WebDriver by using **Use getCssValue(arg0)** function to get the colors by sending 'color' string as an argument.

61) How many exceptions do you know in Selenium WebDriver?

There are 5 different exceptions Selenium WebDriver:



- NOSuchielenhentexception
- NoSuchWindowException
- TimeoutException
- WebDriverException

62) How will you use Selenium to upload a file?

File uploading action could be performed by using **element.sendKeys("path of file")** on the webElement of input tag and type file: < name="fileUpload" type="file" />

63) What is Robot API?

Robot API is used to control keyboard or mouse to interact with OS windows like Download pop-up, Alerts, Print Pop-ups, etc. or native Operation System applications like Notepad, Skype, Calculator, etc.

64) What methods of Robot Class do you know?

Some commonly and popularly used methods of Robot Class during web automation:

• keyPress(): method with press down arrow key of Keyboard

Example:

keyPress(KeyEvent.VK_DOWN)

copy

• keyRelease(): method with release down arrow key of Keyboard:

Example:

robot.keyRelease(KeyEvent.VK_DOWN)



Example:

mouseRelease(InputEvent.BUTTON3_DOWN_MASK)

сору

• **mouseMove()** method will move mouse pointer to the specified X and Y coordinates.

Example:

```
1. robot.mouseMove(point.getX(), point.getY())
```

сору

• mousePress() method will press the right click of your mouse.

Example:

robot.mousePress(InputEvent.BUTTON3_DOWN_MASK)

сору

65) How to execute JavaScript in Selenium?

JavaScriptExecuter is used for JavaScript execution in Selenium.

A simple example:

```
    WebDriver driver = new FireFoxDriver();
    if (driver instanceof JavascriptExecutor) {
    ((JavascriptExecutor)driver).executeScript("{JavaScript Code}");
    }
```

66) Which package can be imported while working with WebDriver?

org.openqa.selenium java -cp bin;jars/* org.testng.TestNG testng.xml



You can get the width of the textbox by using the following command:

```
1. driver.findElement(By.xpath("xpath of textbox ")).getSize().getWidth();
```

2. driver.findElement(By.xpath("xpath of textbox ")).getSize().getHeight()

68) Which web driver implementation is the fastest?

The fastest **WebDriver** is **HtmlUnitDriver**. Differing of other drivers (FireFoxDriver, ChromeDriver etc), it's non-GUI, while running no browser gets launched.

69) What is the purpose of deSelectAll() method?

It is used to deselect all the options which have been selected from the drop-down list.

70) How can you switch back from a frame?

defaultContent() method is used to switch back from a frame.

71) How to login into any site if it's showing any authentication pop-up for username and password?

You should pass the username and password with URL:

https://username:password@url

https://creds:test@www.test.com

72) What is the purpose of getOptions() method?

getOptions() is used to get the selected option from the drop-down list.



You can get the browser address using these commands. But if you use getWindowHandle(), you'll get the address of the current browser where the control is and return type is a string. So, if you use getWindowHandles(), you will get the address of all the open browser and its return type is an iterator.

74) Explain how you can use recovery scenario with Selenium?

You can use recovery scenario in accordance with the programming language.

If it is Java then you can use exception handling to overcome same.

75) How do you send ENTER/TAB keys in WebDriver?

use **click()** or submit() methods are used for ENTER. But, don't forget that **submit()** method is used only if type='submit'.

You can use Actions class act.sendKeys(Keys.ENTER) for TAB.

76) How to Handle Alerts in Selenium WebDriver?

Here are a few methods of Alerts handling which are widely used in Selenium Webdriver.

- **void dismiss()** is used to click on the 'Cancel' button of the alert.
- 1. driver.switchTo().alert().dismiss();

сору

- **void accept()** is used to click on the 'OK' button of the alert.
- 1. driver.switchTo().alert().accept();



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

• void sendKeys(String stringToSend) is used to send some data to alert box.

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

77) What is a data-driven framework?

The Data Driven test design framework follows a design paradigm where test logic is fixed but varies the test data. The data itself can be in different repositories like a simple .csv file, .json file or .xls sheet, or database and can add the tests merely updating those external files or DB (instead of placing in test code itself).

78) What is a keyword-driven framework?

The keyword driven framework is a methodology where actions or steps are treated as keywords. These keywords (like click, move, type etc.,) are stored in some external repositories along just like data (in .csv/.json/.xls/DB).

79) What is the hybrid framework?

The combination of data driven and keyword driven framework is called the hybrid. Here the operations/instructions/keywords in a separate repository (.csv/.xls/.json/DB) and data is in separate (.csv/.xls/.json/db from data provider) and the tests/driver would read both and perform the actual tests automatically. In this design, we get the best of both methodologies, and it is kind of practical in most of the automation cases.

80) What are the main advantages of Selenium Grid?





81) What is a hub in Selenium Grid?

Selenium Grid hub is a central point or a server that controls the test executions on the different machines.

82) What is a node in Selenium Grid?

Selenium Grid node is a hub attached machine, which has instances running the test scripts. Unlike a hub, there can be more than one nodes in Selenium Grid.

83) Could you explain the line of code Webdriver driver = new FirefoxDriver();.

'WebDriver' is an interface and we are creating an object of type WebDriver instantiating an object of FirefoxDriver class.

84) What is the purpose of creating a reference variable- 'driver' of type WebDriver instead of directly creating a FireFoxDriver object or any other driver's reference in the statement Webdriver driver = new FirefoxDriver();?

We can use the same variable to work with multiple browsers like ChromeDriver, IEDriver by creating a reference variable of type WebDriver.

85) How can you create HTML test report from your test script?

There are three ways of HTML test report creation:

- using inbuilt default.html to get the HTML report in TestNG
- with the ANT help in JUnit
- using XSL jar for converting XML content to HTML in own customized reports



There are some causes of Selenium WebDriver test to fail:

- SeleniumWebDriver element waiting to access did not appear on the web page and the operation timed out
- SeleniumWebDriver is trying to access not created element
- SeleniumWebDriver cannot locate the element, because the locator has been changed

87) Explain how can you debug the tests in Selenium IDE?

The tests could be debugged in such way:

- insert a break point from the location from where you want to execute test step by step
- run the test case
- test case execution will be paused at the given break point
- click on the blue button to continue with the next statement
- to continue executing all the commands at a time click on the "Run" button

88) What is the testng.xml file used for?

testng.xml file is used to configure the whole a test suite. Here we can create a test suite, create test groups, mark tests for parallel execution, add listeners and pass parameters to test scripts. It can be used for the further test suite triggering.

89) What is the difference between **@Factory and @DataProvider annotation**?

@DataProvider is concerned to individual test methods and run the specific methods for many times. **@Factory** method creates test class instances and runs all the test methods in that class with different data, sets.

90) In which format does source view show the script in Selenium IDE?



91) How could AJAX controls be handled in WebDriver?

AJAX allows the Web page to retrieve small amounts of data from the server without reloading the entire page.

The different wait methods should be applied for testing Ajax application:

- ThreadSleep
- Implicit Wait
- Explicit Wait
- WebdriverWait
- Fluent Wait

92) What is the FirefoxDriver, class or an interface? And which interface does it implement?

FirefoxDriver is a Java class. It implements all the methods available in the interface.

93) How can we make one test method dependent on other using TestNG?

We can make one test method run only after successful execution of dependent test method by using dependsOnMethods parameter inside @Test annotation in TestNG:

@Test(dependsOnMethods = { "preTests" })

94) How could you explain the main difference between WebDriver and RC?

Selenium WebDriver drives the browser using built-in support. RC injects JavaScript function into browsers when the page is loaded.

95) What is IntelliJ?



טטעוטוו נט שמים שבמון מווע בנווטצב.

96) What are the advantages of Using Git Hub For Selenium?

- Members of multiple people team working on the same project can update its details and inform other team members simultaneously
- You can build the project from the remote repository regularly by using Jenkins. This helps you
 to keep track of failed builds.

97) Can we use Selenium RC for tests driving on two different browsers on one operating system without Selenium Grid?

We can do it if JAVA testing framework is not used. If we use Java client driver of Selenium, instead of using Java testing framework, TestNG allows us not to use Selenium Grid.

98) How can we run test cases in parallel using TestNG?

You should just to add these two key value pairs in the suite to run the tests in parallel:

1. parallel="{methods/tests/classes}"

сору

2. thread-count="{number of threads you want to run simultaneously}".

99) How would you test your own element locator?

"Find Button" of Selenium IDE is used to test the locator. Clicking on this button, you will see on screen if your element locator is right or wrong.

Also, you can use "FirePath" plugin in FireFox

100) When AutoIT is used?

6

AutoIT is used to handle window GUI and non-HTML popups in the application.

JDBC (Java Database Connectivity) API is required for Database Testing in Selenium WebDriver.

102) What Java API is required for generating pdf reports?

Java API IText is required for generating pdf reports.

103) Explain why to choose Python over Java in Selenium.

Here are some points that favor Python over Java to use with Selenium:

- Python is simpler and more compact compared to Java
- Java uses traditional braces to start and ends blocks, whilePython uses indentation
- Java employs static typing, whilePython is dynamically typed
- Java programs tend to run slower compared to Python programs

104) How can you handle network latency using Selenium?

You can use **driver.manage().timeouts().pageLoadTimeout()**; for network latency

105) How can you run Selenium Server other than the default port 4444?

Selenium server could be run on java-jar selenium-server.jar-port other than its default port.

106) Explain how you can capture server side log Selenium Server?

To capture server side log in Selenium Server, you can use command: java –jar .jar –log selenium.log

107) What is a framework and what are the frameworks available in RC?



Cases. Nothe, John, Testing, Diohilie, Ropec, unit tests are some of the Hameworks available in RC.

108) Explain how can you insert a start point in Selenium IDE?

Selenium IDE can be set in two ways:

- in Selenium IDE right click on the command and the select "Set / Clear Start Point"
- press "S" key on the keyboard and select the command in Selenium IDE

109) What are the two modes of views in Selenium IDE?

Selenium IDE can be opened as a pop-up window or in side bar

110) What is Object Repository?

Object repository is an essential entity in any UI automation which allows a tester to store all object that will be used in the scripts in one or more centralized locations rather than scattered all over the test scripts.

No comments

Join the disscussion

SEND





EasyQA

Follow EasyQA

© 2017 by EasyQA. All rights reserved.









