**Automation Testing Interview Questions**

**1) What is Automation testing?**

**2) Can list out some disadvantages of manual testing?**

**3) When will you automate a test?**

**4) When will you not automate testing?**

**5) What are the advantages of automation testing?**

**6) What are the steps involved in the Automation Process? (QTP for standalone applications to do automation test)**

**1. Select correct automation tools / framework**

**2. Scope of automation**

**3. Plan how to execute , time, deliverable, environment, strategy – test plan etc**

**4. develop script**

**5. Execute and maintain the scripts**

**7) What are the types of the framework used in software automation testing?**

**BDD, DD, Robot Framework**

**8) What are the most popular tools for automation testing?**

**Appium, Selenium Web driver, QTP,**

**9) Tell me what you know about Selenium**

Set of tools to communicate that consists of Selecium IDE, Selenium Web server, Selenium Grid, Supports C#, Java, Python and Javascript , popular browser used are firefox, chrome, edge, safari

**10) How Selenium interacts with the Web page?**

**Automation Script 🡪 through JSON Protocol 🡪Driver 🡪browser**

**11) What is a framework?**

**Framework is the structure which is used to build software on and to maintain code, the supporting libraries and other necessary folders.**

**Maven is a build automation tool for the Java based projects. (quick**

**12) What is the structure of a framework that you worked with?**

**Intellij / Java/ Cucumber / BDD Framework**

**13) What is Cucumber?**

**FRAMEWORK THAT SUPPORTS BDD by which we specify the feature/scenario using Gherkins**

**14) What language is used by Cucumber?**

**Gherkin – simple representation in english**

**15) What is meant by a feature file?**

High level description of the scope of test case

# **16) What is Scenario in Cucumber Testing?**

Scenario 🡪 like a test case 🡪 includes steps to do and conditions

**17) What are the various keywords that are used in Cucumber for writing a scenario?**

**GIVEN, WHEN, THEN, AND and BUT**

**18) What is the purpose of a Scenario Outline in Cucumber?**

**To repeat the same steps with different data from Examples (data provided),**

**19) What is the use of Background keyword in Cucumber?**

Like precondition. Before executing the scenario in the feature , the steps in the background will be executed. **Background in Cucumber** is used to define a step or series of steps that are common to all the tests in the feature file.

**20) What is the purpose of the Step Definition file in Cucumber?**

Step definition actually contains the code which is to be performed for each step written in Gherkins. A step definition file in Cucumber holds the test method and code which are mapped to the Gherkin test case steps on the feature file. In the feature file each test case step once executed will have a matching step definition to execute.

**21) What are the major advantages of the Cucumber framework?**

### **It allows the test script to be written without knowledge of any code, it allows the involvement of non-programmers as well. It serves the purpose of end-to-end test framework unlike other tools. Due to simple test script architecture, Cucumber provides code reusability.**

### **22) What are the challenges and limitations of Selenium WebDriver?**

1. Reports cannot be done through Selenium, but third party tools like testNG and Extent reports are supported by Selenium and can be used as workaround.

2. Only web applications can be tested and not the standalone applications / mobile applications

3. Hard to handle dynamic elements, captcha, pop up windows , page load (implicit wait), explicit wait for the element to be loaded.. fluent wait

**23) What is the DOM?**

Represent the documentation of the html page by which browser understand

Provides the hierarchy of the page

The Document Object Model (DOM) is **a programming API for HTML and XML documents**. It defines the logical structure of documents and the way a document is accessed and manipulated.

**24) What is meant by locator in Selenium? What Selenium locators do you know? What tools did you use to locate Web Elements?**

1. Locator is to locate the web elements in the page.

2. findElement by id, by name, by tag name , by xpath, by css selector, linktext, partial link text

3. developer tool, chropath extension for chrome, firebug for firefox

**25)What is an ID selector and how is it used?**

WebElement we = driver.findElement(ById(“id of element”));

**26) What is a Name selector and how does it differ from an ID selector?**

WebElement we = driver.findElement(ByName(“name of element”));

**27)What is the use of X-path?**

To locate the webElement, we use either absolute path / relative path

**28) Explain the difference between single and double slash in X-path?**

**/ -- > start from root element (absolute xpath)**

**// 🡪 start from parent element (relative xpath)**

**29) How to enter the string in the textbox in selenium?**

**sendkeys**

**30) What «find» methods do you know?**

#### findElement , findElements

#### 31) Explain how to iterate through options in test script?

#### List<WebElement> listname = driver.findElements(By.xpath(“relative path of sleelct ”));

**32) What is “public” in Java? What are other access modifiers in Java?**

**public, protected, default, and private**

* **Private**: We can access the **private modifier**only within the same class and not from outside the class.
* **Default:** We can access the **default modifier**only within the same package and not from outside the package. And also, if we do not specify any access modifier it will automatically consider it as default.
* Protected: We can access the protected modifier within the same package and also from outside the package with the help of the child class. If we do not make the child class, we cannot access it from outside the package. So inheritance is a must for accessing it from outside the package.
* Public: We can access the public modifier from anywhere. We can access public modifiers from within the class as well as from outside the class and also within the package and outside the package.

**33) WHAT IS THE DIFFERENCE BETWEEN**

**“equals()” AND “==“ IN JAVA?**

### **Equals() 🡺** compares the contents **🡪 method**

== 🡪 **Compares the object** references🡪operator

### **34) How to pause a test execution for 5 seconds at a specific point?**

Thread.sleep()

**35) What types of waits are in Selenium?**

//check ////////

Implicit , explicit and fluent & Thread.sleep

On page loading, use implicit time out

Use explicit time out 🡪 when certain condition will occur with default checking of condition

Fluent 🡪 When certain condition is met and you can specify frequency using polling Every option

### **36) How to verify that certain text is displayed on the web page?**

***Webelement.isDisplayed()***

### **37) How to fetch the current page URL in Selenium?**

getDriver().getCurrentURL()

### **38) How can we maximize browser window in Selenium?**

*getDriver*().manage().window().maximize();

### **39) What is the alternative to**driver.get()**method to open an URL using Selenium WebDriver?**

1. driver. navigate(). GoToUrl("some url")

### **40) What are the Open-source Frameworks supported by Selenium?**

Datadriven, Keyword driven, BDD, Hybrid test framework

### **41) What is version control and its uses?**

GIT, to maintain code / other important documents , it will be updated in the common repository which every one in team can pull , change contents, push and commit and merge the code. Sometimes mergeconflicts has to be handled. This ensures all the updated code is avaible in the common place to be used by everyone.

**42) What is Git?**

**Version control system used to maintain the code**

**43)** **What Is meant by Continuous Integration?**

**Commiting all the code into single repository**

### **44) What is the function of CI (Continuous Integration) server?**

1.    The maintenance of a code repository

2.    Automating the build process

3.    Making the build self-testing

4.    Everyone committing to the baseline every day

.    Every commit to baseline should be built

6.    Keeping the build fast

7.    Testing in a clone of the production environment

8.    Make it easy to get the latest deliverables

9.    Everyone can see the results of the latest build

10.    Automatic deployment

* Developers input code into their private terminals.
* After that is done, they commit the changes to the shared repository.
* The CI server monitors the repository and analyzes changes as they occur.
* Continuous Integration builds the system and runs unit and integration tests.
* The server also releases deployable artefacts for testing.
* The CI server assigns a build tag to the version of the code it just built.
* The Continuous Integration server gives the team reports of the successful build.
* If the build or tests fail, the server alerts the development team.
* The team will fix the issues as soon as is possible.
* It continues to integrate and run tests throughout the entire project.

### **45) Have you created any Framework?**

No , but we have used the one which is existing

### **46) How many test cases did you automate per day?**

Depends on the complexity, length, time spent on that feature

Max 5

<https://leetcode.com/>

start searching like “coding interview”

<https://developer.mozilla.org/en-US/>

testNG

1. Whatis testNG and what is the diff <> testNG and Junit ?
2. invocationCount = 5 🡪 Execute 5 times the same test case
3. assert(False) 🡪 manually mark test case as fail
4. timeout attribute 🡪 manually fail the case 🡪 check @timeout =0
5. skip a test case 🡪 use annotation @enabled = false

using a skip exception 🡪 Check

1. Listener annotation 🡪 itestListener interface 🡪 conditions (on test success / on test failure )
2. Running test cases in parallel 🡪 attribute parallel = methodname at class level or test level 🡪 Check
3. Difference <> factory and Dataprovider annotation
4. Most commonly used annotations @test, @before class @afterclass @beforetest @after test @beforemethod @aftermethod @beforesuite @aftersuite
5. @beforesuite @aftersuite🡪explain
6. Challenges in selenium
   1. Images based automation not possible in selenium , Sequally an open source can be integrated with selenium available
   2. No desktop automation , use power shell with selenium
7. Locator 🡪 text of attribute 🡪 @contains
8. @text
9. Absolute and relative xpath
10. Move to the parent of child path , child path /parent tag
11. Cssselector 🡪 explain
12. webDriver chrome = new ChromeDriver();

webdriver is an interface and chrome driver is a class

1. html unit driver is fastest among the drivers..
2. difference between xpath and css selector

xpath can move upwards in the document , but css go downwards

1. get and navigate differences

get waits for the page to be loaded and navigate does not wait for the page to be loaded

navigate.to() , navigate.forward () and back() can be done in navigate but cannot be done in get

1. Check a checkbox in selenium 🡪 checkbox.Select = true;
2. Switch multiple windows in selenium 🡪 getwindowhandles 🡪 return set
   1. Driver.switch.to.window(“”)
3. How to refresh the browser
   1. Driver.navigate.refresh()
   2. Driver.sendkeys(“F5”)
   3. Driver.getcurrentUrl()
4. Super keyword 🡪 refers to the parent class 🡪 explain
5. Mocha --? Javascript test framework for nodejs
6. What is Page object model , page factory BDD, Keyword driven model, Data driven model