JAVA FAQs

1. What is oops ?

Ans.

Object Oriented Programming Language and Systems:

1.object 2.class 3.Abstraction 4.encapsulation 5.Inheritance 6.polymorphism

2.Why interface when we have abstract class

Ans.

If we don’t know anything about the implementation we go for interface. It is also known as 100% abstraction.

If we known partially about the implementation then we go for Abstract class.

3.Find the count of repeated letters aaeerrtthhoouuuj……aed….

Ans.

4.find the least product from the [-1,-12,3,4,8,9,21]

Ans.

1. **public** **class** SmallestInArrayExample{
2. **public** **static** **int** getSmallest(**int**[] a, **int** total){
3. **int** temp;
4. **for** (**int** i = 0; i < total; i++)
5. {
6. **for** (**int** j = i + 1; j < total; j++)
7. {
8. **if** (a[i] > a[j])
9. {
10. temp = a[i];
11. a[i] = a[j];
12. a[j] = temp;
13. }
14. }
15. }
16. **return** a[0];
17. }
18. **public** **static** **void** main(String args[]){
19. **int** a[]={-1,-12,3,4,8,9,21};
20. System.out.println("Smallest: "+getSmallest(a,7));
21. }}

5.program to find length of a string without using predefined

Functions

Ans.

class LenghtOfStringMain{

public static void main(String args[]){

String helloWorld="This is hello world";

System.out.println("length of helloWorld string :"+getLengthOfStringWithCharArray(helloWorld));

}

public static int getLengthOfStringWithCharArray(String str)

{

int length=0;

char[] strCharArray=str.toCharArray();

for(char c:strCharArray)

{

length++;

}

return length;

}

6.difference between web application and API

Ans.The only difference is that a **Web** service facilitates interaction between two machines over a network. An **API** acts as an interface between two **different applications** so that they can communicate with each **other**. ... **Web** service also uses SOAP, REST, and XML-RPC as a means of communication.

7.Different sorts in data structures and algorithms

Ans.

8.Difference between Array and Array list

Ans.An array is basic functionality provided by Java. ArrayList is part of collection framework in Java. Therefore array members are accessed using [], while ArrayList has a set of methods to access elements and modify them.

// A Java program to demonstrate differences between array

// and ArrayList

import java.util.ArrayList;

import java.util.Arrays;

class Test

{

public static void main(String args[])

{

/\* ........... Normal Array............. \*/

int[] arr = new int[2];

arr[0] = 1;

arr[1] = 2;

System.out.println(arr[0]);

/\*............ArrayList..............\*/

// Create an arrayList with initial capacity 2

ArrayList<Integer> arrL = new ArrayList<Integer>(2);

// Add elements to ArrayList

arrL.add(1);

arrL.add(2);

// Access elements of ArrayList

System.out.println(arrL.get(0));

}

}

9.When to use Array list and when to use linked list

Ans.

Accessing elements are faster with ArrayList, because it is index based.But accessing is difficult with LinkedList. It is slow access. This is to access any element, you need to navigate through the elements one by one. But insertion and deletion is much faster with LinkedList, because if you know the node, just change the pointers before or after nodes. Insertion and deletion is slow with ArrayList, this is because, during these operations ArrayList need to adjust the indexes according to deletion or insertion if you are performing on middle indexes. Means, an ArrayList having 10 elements, if you are inserting at index 5, then you need to shift the indexes above 5 to one more.

11.Palindrome of a number

Ans.

12.Fibanocci using recursion

Ans.

13.Access Modifiers

Ans. There are 4 types of java access modifiers:

1. Private - The scope of private access modifier is only within the classes.Note: Class or Interface cannot be declared as private
2. Default - The scope of default access modifier is limited to the package only. If we do not mention any access modifier, then it acts like a default access modifier.
3. Protected - The scope of protected access modifier is within a package and also outside the package through inheritance only.Note: Class cannot be declared as protected
4. Public - The scope of public access modifier is everywhere. It has no restrictions. Data members, methods and classes that declared public can be accessed from anywhere.

14.when and where the word final is used in java

Ans.final can be used for Variables, methods, classes.

Final variable it cannot be changed

Final Method cannot be overloaded

Final Class cannot be inherited by child class

15.difference between final and finally

Ans. Final variable it cannot be changed

Final Method cannot be overloaded

Final Class cannot be inherited by child class

Finally is associated with Try catch block for maintaining clean up code.

Eg: for DB connections closing ,

22.Find largest and smallest number in a sequence

Ans.public class FindLargestSmallestNumber {

public static void main(String[] args) {

//numbers array

int numbers[] = new int[]{55,32,45,98,82,11,9,39,50};

//assign first element of an array to largest and smallest

int smallest = numbers[0];

int largetst = numbers[0];

for (int i = 1; i & lt; numbers.length; i++) {

if (numbers[i] & gt; largetst)

largetst = numbers[i];

else if (numbers[i] & lt; smallest)

smallest = numbers[i];

}

System.out.println("Largest Number is : " + largetst);

System.out.println("Smallest Number is : " + smallest);

}

}

23.Serialization

Ans.

24. Explain abstraction concept with example

Ans.

**Abstraction** is a process of hiding the implementation details and showing only functionality to the user.

Another way, it shows only essential things to the user and hides the internal details, for example, sending SMS where you type the text and send the message. You don't know the internal processing about the message delivery.

There are two ways to achieve abstraction in java

1. Abstract class (0 to 100%)
2. Interface (100%)

25. Explain inheritance concept with example

Ans. **Inheritance in Java** is a mechanism in which one object acquires all the properties and behaviors of a parent object.you can reuse methods and fields of the parent class. Moreover, you can add new methods and fields in your current class also.

Inheritance represents the **IS-A relationship** which is also known as a *parent-child* relationship.

* For Code Reusability.

programmer is a employee .

26. Explain method overloading and overriding with example

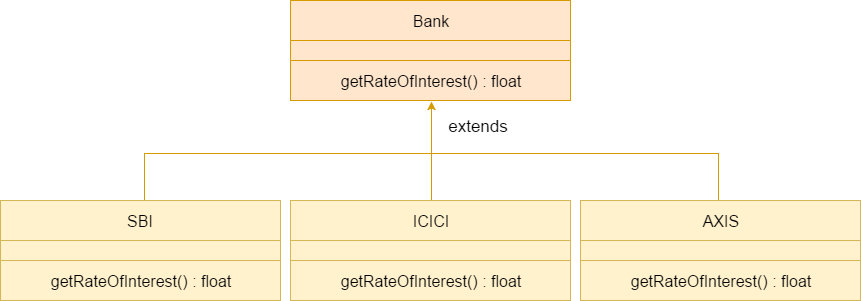
Ans. multiple methods having same name but different in parameters, it is known as **Method Overloading**.

Suppose you have to perform addition of the given numbers but there can be any number of arguments, if you write the method such as a(int,int) for two parameters, and a(int,int,int)

If subclass (child class) has the same method as declared in the parent class, it is known as **method overriding in Java**.

Method overriding is used to provide the specific implementation of a method which is already provided by its superclass.

Method overriding is used for runtime polymorphism



### Can we override static method?

No, a static method cannot be overridden. It can be proved by runtime polymorphism, so we will learn it later.

### Why can we not override static method?

It is because the static method is bound with class whereas instance method is bound with an object. Static belongs to the class area, and an instance belongs to the heap area.

### Can we override java main method?

No, because the main is a static method.

27. Example inheritance with example

Ans. same as above

28. What is interface ? Explain with live example

Ans. It is blueprint of a class. It has static constants and abstract methods.

The interface in Java is *a mechanism to achieve abstraction*. There can be only abstract methods in the Java interface, not method body. It is used to achieve abstraction and multiple inheritance in Java.

29.What is method binding

Ans.

30.Types of exception handling

Ans.

31.Why do we need public static void main to run java program

Ans.

32.When do we use static for methods

Ans. If we want the method to be common to all the objects.

We can call the method without creating any object.

33.When do we use void for methods

Ans. When the method is not returning any value.

34.Diffence between object and class

Ans.

35.What is constructor

Ans. In Java, a constructor is a block of codes similar to the method. It is called when an instance of the object is created, and memory is allocated for the object.

It is a special type of method which is used to initialize the object.

**36. What is hashmap and hashset ? Explain ?**

Ans.

**37. Where do you use hashmap ?**

Ans.

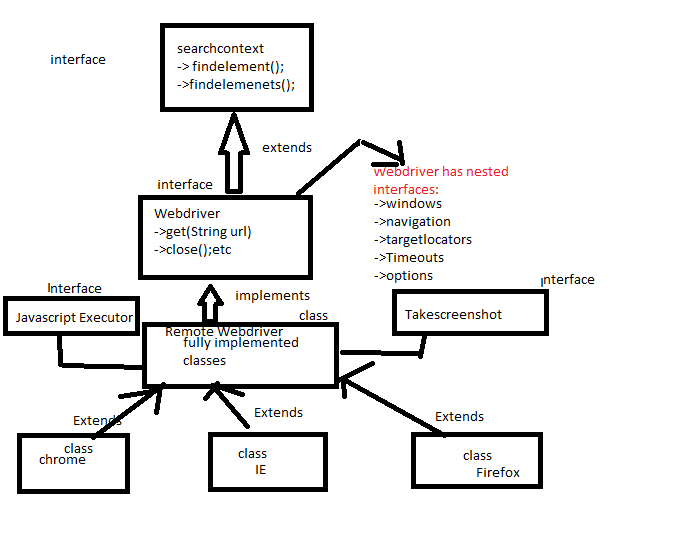
Selenium FAQs

#Cognizant #Hyderabad #Selenium #java #InterviewExperience #2Years

Webdriver architechture:

-------------------------

<http://makeseleniumeasy.com/2017/04/02/hierarchy-of-selenium-classes-and-interfaces/>



**1. Tell me about yourself**

Ans.

**2. What are the selenium components and which components are you using ?**

Ans. The components of selenium are

a.Selenium IDE

b.Selenium RC

c.Selenium Webdriver

d.Selenium Grid

I am using Selenium Webdriver and sometimes Selenium Grid

**3. How do you inspect elements ?**

Ans. Elements can be inspected by Firebug for Firefox and by Chropath plugin for Chrome with the help of the selenium Locators from the inspecting window of webpage.F12 will help in popping up the Inspect window.

**4. What are those locators ?**

Ans. The different locators in selenium are

a.ID

b.Name

c.Link Text

d.CSS Selector

e.DOM

f.XPATH

g.UI-Element

**5. Write a syntax for xpath ?**

Ans.//<tagname>[@<attributename>='<attributevalue>']

//<tagname>[contains(@<attributename>,'<attributevalue>')]

//<tagname>[contains(text(),'<text>')]

**6. Write a syntax to initialise webdriver ?**

Ans. import org. openqa. selenium. WebDriver;

System. setProperty("webdriver.chrome.driver", "path of the exe file\\chromedriver.exe");

WebDriver obrw =new ChromeDriver();

**7. Explain absolute and relative xpath with example**

Ans.**Absoute Path :** It is also called complete or full XPath. Absolute XPath starts from <html> tag or it starts from single slash(/).

**Relative Path :** Path starts from the middle of the HTML DOM structure. It starts with the double forward slash (//), which means it can search the element anywhere at the webpage.



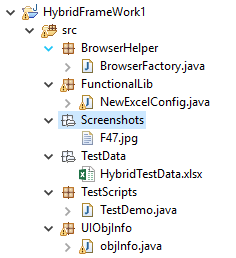
**8. Explain about your project and framework**

Ans.<Discuss abt the current project>

Framework : The framework is Hybrid Framework which is a combination of both Data driven and Keyword driven frameworks.

we can build a Hybrid framework by storing the methods to execute in an excel file (keyword driven approach) and passing the test data from the same excel with different sheet.

Below is the hybrid framework at a glance



We can further explain the folder structure.

**9. How do you get the data from excel sheet**

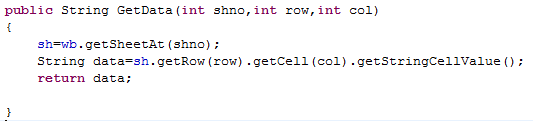
Ans. We can get the data from excel sheet either by using JXL or Apache POI.

A config like java file is written where it contains methods to Read And Write to a excel File.

Config.java

Workbook wb;

Sheet sh;



After writing the above method we can just read the excel and get the data.

Test.java

Create an object to the above class and use the method GetData() to get the data

Config con=new Config();

con.readExcel("D:\\Sel Projects\\HybridFrameWork\\src\\TestData", "HybridTestData.xlsx", "Login");

con.GetData(0,1,0) → Sheet no,Row and Column in the excel

**10. Where do you use java in selenium webdriver**

Ans.

**11. Write a basic selenium script**

Ans. import org. openqa. selenium. WebDriver;

System. setProperty("webdriver.chrome.driver", "path of the exe file\\chromedriver.exe");

WebDriver obrw =new ChromeDriver();

obrw.get(“<https://www.google.com>”);

obrw.findElement(By.xpath(“//input[@title='Search']”).sendKeys(“Selenium”));

obrw.findElement(By.xpath(“//div[@class='FPdoLc VlcLAe']//input[@value='Google Search']”)).click;

obrw.close();

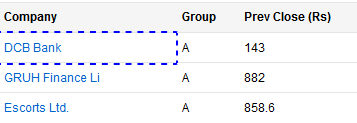
**12. Write a syntax to select value from drop-down**

Ans. Select oSelect = new Select(obrw.findElement(By.id("Country")));

oSelect.selectByVisibleText("India");

**13. Write syntax to get the text from table**

Ans. To get the data of 1st row 1st col cell from the below table



Step 1 : Find the xpath to the particular row and column of the table

Step 2: orbw.findElement(By.xpath(“//\*[@id='leftcontainer']/table/tbody/tr[1]/td[1]”)).getText();

**14. What are the exception you get in selenium**

Ans.

a.TimeoutException: Thrown when there is not enough time for a command to be completed.

b.UnexpectedTagNameException: Happens if a support class did not get a web element as expected.

c.NoSuchAttributeException: Occurs when the attribute of element could not be found.

d.NoSuchElementException: Happens if an element could not be found.

e.NotFoundException: This exception is subclass of WebDriverException. It happens when an element on the DOM does not exist.

**15. What is implicit wait, explicit wait, webdriver wait, thread.sleep**

Ans.

***Implicit Wait***

The implicit wait will tell to the web driver to wait for certain amount of time before it throws a "No Such Element Exception". The default setting is 0. Once we set the time, web driver will wait for that time before throwing an exception.

Syntax:

obrw.manage().timeouts().implicitlyWait(10,TimeUnit.SECONDS) ;

***Explicit Wait***

The explicit wait is used to tell the Web Driver to wait for certain conditions (Expected Conditions) or the maximum time exceeded before throwing an "ElementNotVisibleException" exception.

The explicit wait is an intelligent kind of wait, but it can be applied only for specified elements.

WebDriverWait wait=new WebDriverWait(obrw, 20);

wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//input[@title='Search']")));

***Thread.sleep***

Thread.sleep causes the current thread to suspend execution for a specified period.

sleep() methods accept duration in miliseconds. ( 1 s= 1000 ms).

The disadvantage of using Thread.sleep() if sleep(500) is given to the webdriver to wait for a particular webelement and if the webelement is found with in 1ms then webdriver will still continue waiting for 4 more seconds.

**16. Write syntax for webdriver wait**

Ans. Explained in 17 under Implicit & Explicit Wait.

**17. Difference between implicitly, explicitly, webdriver wait and thread sleep**

Ans.Explained in 17 under Implicit & Explicit Wait&Thread sleep

**18.How to launch chrome**

Ans. Refer 6

**19. Which framework are you using in your project**

Ans.Refer 8

**20. Are you using any integration tool ?**

Ans. Can be explained about AutoIT for automating/Integrating Desktop Applications with Selenium

**21. What is Jenkins ?**

Ans.**Jenkins** is a **Continuous Integration (CI)** server or tool which is written in java. It provides Continuous Integration services for software development, which can be started via command line or web application server. And also, it is free software to download and install.

**22. Where do you upload test results ?**

Ans.

**23. Which java & selenium version are you using ?**

Ans.Java 1.8.0\_144

Selenium : Between 3.3 to present 3.141.59 can be explained any one or two versions

**24. How do you handle if xpaths are changing dynamically ?**

Ans.

**Option 1 :** Look for any other attribute which Is not changing every time In that div node like name, class etc. So If this div node has class attribute then we can write xpath as bellow.

//div[@class='post-body entry-content']/div[1]/form[1]/input[1]

**Option 2 :** We can use absolute xpath (full xpath) where you not need to give any attribute names In xpath.

/html/body/div[3]/div[2]/div[2]/div[2]/div[2]/div[2]/div[2]/div/div[4]/div[1]/div/div/div/div[1]/div/div/div/div[1]/div[2]/div[1]/form[1]/input[1]

**Option 3 :** We can use starts-with function. In this xpath's ID attribute, "post-body-" part remain same every time.

//div[starts-with(@id,'post-body-')]/div[1]/form[1]/input[1]

**Option 4 :** We can use contains function. Same way you can use contains function as bellow.

div[contains(@id,'post-body-')]/div[1]/form[1]/input[1]

**25.How to navigate to different frames**

Ans.

**26.Difference between IDE,RC and web driver**

Ans.

|  |  |  |
| --- | --- | --- |
| **Selenium IDE** | **Selenium RC** | **Selenium WebDriver** |
| It only works in Mozilla browser. | It supports with all browsers like Firefox, IE, Chrome, Safari, Opera etc. | It supports with all browsers like Firefox, IE, Chrome, Safari, Opera etc. |
| It supports Record and playback | It doesn’t supports Record and playback | It doesn’t supports Record and playback |
| Doesn’t required to start server before executing the test script. | Required to start server before executing the test script. | Doesn’t required to start server before executing the test script. |
| It does not supports listeners | It does not supports listeners | It supports the implementation of listeners |

**27.How do u scroll down in selenium**

Ans.JavascriptExecutor js = (JavascriptExecutor) obrw;

js.executeScript("window.scrollBy(0,1000)");

(This will scroll down the page by 1000 pixel vertical)

**28.What is ur frame work**

Ans.Refer 8

**29.What is ur page object model**

Ans.

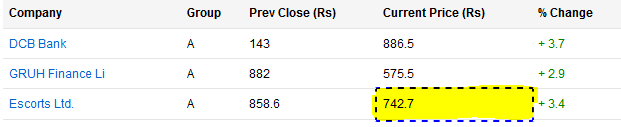
**30.how do you switch to new window that opens when u click on an element**

Ans.

**31.Write xpath for 3 rd row 4 th column element in a table**

Ans.

Consider the below table



Xpath for 3rd row 4th column element is

//\*[@id='leftcontainer']/table/tbody/tr[3]/td[4]

**32.How do u maximize the browser**

Ans.obrw.manage().window().maximize();

**33.Different ways to identify web element**

Ans. The different ways to identify web element in selenium are

a.ID

b.Name

c.Link Text

d.CSS Selector

e.DOM

f.XPATH

g.UI-Element

**34.Which tool did u use to identify web element**

Ans.Firepath in Firefox,Chropath in Chrome browser.

**35.Selenium code to take screenshot**

Ans.

TakesScreenshot oscn=(TakesScreenshot)obrw;

File ophyloc=oscn.getScreenshotAs(OutputType.FILE);

File odestloc=new File("D:\\Sel Projects\\SampleJavaProj\\Screenshots\\Login.png");

FileUtils.copyFile(ophyloc, odestloc);

System.out.println("Screenshot taken");

**36.How do you enter authentication credentials using selenium**

Ans.To do this we pass username and password with the URL

http://<myUserName>:<myPassword>@softwaretestingmaterial.com

**37.Program to read test data from Excel**

Ans.

**38.Different types of automation framework**

Ans. Data Driven

Keyword Driven

Hybrid

**39.Annotations in TestNG**

Ans**.** @Before Suite,@After suite, @BeforeClass, @AfterClass, @BeforeTest, @AfterTest, @BeforeMethod,@AfterMethod,@Test,@BeforeGroups,@AfterGroups,@DataProvider,

@Listeners,@Parameters

**40.How to enter text into textbox**

Ans**.** Get the property of the textbox and use SendKeys to enter the text.

Refer 11.

**41.Where did u use interface concept in ur selenium framework**

Ans**.** Simple example of Interface In selenium WebDriver Is WebDriver Interface. When you are Initializing any browser using selenium WebDriver, You are writing statements like bellow.

WebDriver driver = new FirefoxDriver();

**Or**

WebDriver driver = new ChromeDriver();

Here, WebDriver Is Interface and FirefoxDriver and ChromeDriver are the class files where WebDriver Interface Is Implemented.

So if someone asks you,Where you have used interface in your selenium project, You can simply say while initializing any browser using selenium webdriver.

**42.How to handle alerts**

Ans**. //Get a handle to the open alert, prompt or confirmation**

Alert alert = driver.switchTo().alert();

*Alert is an interface. There below are the methods that are used*

**//Will Click on OK button**.

alert.accept();

**// Will click on Cancel button.**

alert.dismiss()

**//will get the text which is present on the Alert.**

alert.getText();

**//Will pass the text to the prompt popup**

alert.sendkeys();

**43.Waits**

Ans. Refer 15

**44.How to read XML**

Ans**.**

**45.Difference between driver.close and driver.quit**

Ans. **driver.close()** will just closes the current browser window which is in focus where as **driver.quit()** will closes the all browser windows and terminates the webdriver session.

**46.How to handle window based popups**

Ans**.**

**47.Can Captcha be automated using selenium**

Ans**.**

**48.How to select dropdown**

Ans**.** Refer 12

**49. What are different types of waits and their usage**

Ans. Different web applications developed in Ajax or Javascript may load at different intervals of time. At some point of time if the webpage is taking more time to load then there may be chance of an Exception “ElementNotVisisbleExpection”.So,this can be resolved using Waits.

Fluent Wait :

The fluent wait is used to tell the web driver to wait for a condition, as well as the frequency with which we want to check the condition before throwing an "ElementNotVisibleException" exception.

Wait wait = new FluentWait<WebDriver>(driver)

.withTimeout(45, TimeUnit.SECONDS)

.pollingevery(5, TimeUnit.SECONDS)

.ignoring(NoSuchElementException.class);

WebElement foo=wait.until(new Function<WebDriver, WebElement>() {

public WebElement applyWebDriver driver) {

return driver.findElement(By.id("foo"));

}

});

Frequency is set to 5 seconds and the maximum time is set to 30 seconds. Thus this means that it will check for the element on the web page at every 5 seconds for the maximum time of 30 seconds. If the element is located within this time frame it will perform the operations else it will throw an" **ElementNotVisibleException**"

For Implicit and Explicit Wait Refer 15.

### **What is Page Factory?**

Ans.For every ‘page’ in the application, we create a Page Object to reference the ‘page’ whereas a ‘Page Factory’ is one way of implementing the ‘Page Object Model’.

### **What is the difference between Page Object Model (POM) and Page Factory?**

Page Object is a class that represents a web page and hold the functionality and members.

Page Factory is a way to initialize the web elements you want to interact with within the page object when you create an instance of it.

**Which dependency you are using for extent report creation?**

Ans.1 <dependency>

<groupId>com.relevantcodes</groupId>

<artifactId>extentreports</artifactId>

<version>2.41.2</version>

</dependency>

Ans.2

<dependency>

<groupId>com.aventstack</groupId>

<artifactId>extentreports</artifactId>

<version>3.0.0</version>

</dependency>

**What is the difference between Maven and java projects?**

1.if assertion fail it throws exception or error?

ans. it throws assertion error.

2.types of assertions?

ans.soft and hard assertion.

3.hard assertion purpose?

ans. hard assertion means even if a single assertion fail it terminate the program.

@Test

public void testhard(){

System.out.println("testhard started");

Assert.assertTrue(s.contains("sridhhar"),"s does not contain 'sridghar'");

System.out.println("testhard completed");

}

4.softassertion purpose?

ans.soft assertion means even if any verification fails it will continue the rest of the script and once scrpts completes then it fails the test.

it mean even if single validation fail script will be failed at last but excution npt stop.

do not forget to call assertall() method at last.

public class softassertiontest {

String s="hello sridhar";

@Test

public void testsoft(){

SoftAssert sa=new SoftAssert();

System.out.println("testsoft started");

sa.assertTrue(s.contains("sridhhar"),"s does not contain 'sridghar'");

System.out.println("testsoft completed");

sa.assertAll();

}

}

5.how to run the failed testcases using testng?

ans.rnning the failed test cases in two ways.

1.create a pacekage and create classes

fail the test cases using assertion .using below assertion

script:

public class test2 {

@Test

public void testhard2(){

System.out.println("testhard2 started");

Assert.assertTrue(false);

System.out.println("testhard2 completed");

}

}

convert the package into xml file give any name for suitename and testname, location of xml file .click n finish.

run the created xml and observe the suit is failed .

refresh the project and obeserve under test-output folder the

results will be stored in the suit which we have provide.

under suit failed testcasee xml is displayed.

go to failed test cases and make assertion is true.

and run the failed testcase.xml under testoutput folder. then observe the failed test only executed.

2.create a class and write the script as below.and change the script for the failed test case and runthe below script.

package runningfailedtestcases1;

import java.util.ArrayList;

import java.util.List;

import org.testng.TestNG;

public class Testrunner {

public static void main(String[] args) {

TestNG runner=new TestNG();

List<String>list=new ArrayList<String>();

//add the failed test cases xml under test output folder.

list.add("E:\\testworkspace1\\testngtotal\\test-output\\failedtestsuit\\testng-failed.xml");

runner.setTestSuites(list);

runner.run();

}

}

6.what is listners and how to use the listeners?

ans.listenres are the very importent features of testNg which allows you to customized logs or reports og testNg.

we can implements the listners in class level and suit level also.

ex for class level:

@Listeners(listenerstest.Testnglistners.class)

public class Testcaseforlistener {

public WebDriver dr;

@Test

public void test1(){

dr=new ChromeDriver();

dr.get("https://sonnysdirect.com");

dr.manage().window().maximize();

String s=dr.getTitle();

dr.quit();

}

ex for suite level:

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE suite SYSTEM "http://testng.org/testng-1.0.dtd">

<suite name="Suite">

<listeners>

<listener class-name="listenerstest.Testnglistners"/>

</listeners>

<test thread-count="5" name="Test">

<classes>

<class name="listenerstest.Testcaseforlistener"/>

</classes>

</test> <!-- Test -->

</suite> <!-- Suite -->

Manual Testing FAQs

1.Bug life cycle

Ans.

2.Priority and severity

Ans.**Severity –** Represents the gravity/depth of the bug.

* **Priority –** Specifies which bug should get fixed first.
* **Severity –** Describes the application point of view.
* **Priority –** Defines the user’s point of view.

3.RTM

Ans.

4.Diff between functional,Regression,Integration

Ans.

5.Diff between sanity and smoke

Ans.

6.Test Cases for a given scenario

Ans.

7.If submit button doesn’t work in ur system but it works in others

what’s ur next step

Ans.

8.pesticide paradox

Ans.if prepared test cases not able to find the defects add few more test cases if required modified existing test cases for better testing.

9.Diff tools used for testing

Ans.

10.Difference btw verification n validation

Ans.

11.White box,black box,grey box

Ans.

12.UAT and types

Ans.

13.test entry and exit criteria

Ans.

**Entry criteria –** It is a process that should run when a system begins. It includes the following artifacts.

* SRS (Software Requirement Specification)
* FRS (Functional Requirement Specification)
* Use case
* Test-Case
* Test-plan

**Exit Criteria –** It signals when the testing should complete and when should the product be ready to release. It includes the following artifacts.

* Test Summary Report
* Metrics
* Defect Analysis report

14.Functional and non functional

Ans.

15.Boundary value analysis

Ans.

16.SDLC

Ans.

17.Agile model flow

Ans.

18. What is retesting and regression testing ?

Ans.

19. What is smoke testing?

Ans.

20. How do you get know if the developer has fixed the issues or not ?

Ans.

21. What are roles and responsibilities ?

Ans.

22. Have you ever written test cases in your projects ?

Ans.

23. Explain defect life cycle

Ans.

24. What is the need of having a test case?

Ans. To track the status of the case in our previous executions and to verify whether any corner cases that were missed.

25. **What are the fields in a bug report?**

Ans.

**1.** A unique ID

**2.** Defect description – a short describing what the bug is

**3.** Steps to reproduce – details about how to arrive at the error, exact test data, the time at which defect was found(if applicable) environment – any information that will help re-encounter the issue

**4.** Module/section of the application (if applicable)

**5.** Severity

**6.** Screenshot

**7.** Responsible QA – in case of any follow-up questions regarding this issue

26. **How to test a customer facing software?**

Ans. With any application that we test, we are trying to see if a certain set of requirements are met by the application or not. But when it comes to a user-facing site, apart from concentrating on functionality, we also have to look into few the usability features, may be performance and security aspects also to a certain extent.

**The first level of testing is** – Does the site satisfy its functional requirements.

**Example:** if it is a loan management site, we need to look at – are the new customer able to apply for a loan, are the existing customer able to access their loan info, is the interest % applied to the loan amount correct, etc.

**The next level of testing is** – how easy is it to use the site, do the options make a logical sense and meet the expectations of the user or not.

**For example,** if the user has to be pass 3-4 screens to submit the basic information they are going to be annoyed, so such issues have to be addressed.

**Another** **example,** after entering username and password, the user might click on tab- which means the control should go to “Sign in” button, instead if it’s going to cancel, the user is going to be really annoyed and the experience of using the site is going to be compromised. Such issues have to be caught.

[**Performance testing**](https://www.softwaretestinghelp.com/introduction-to-performance-testing-loadrunner-training-tutorial-part-1/) to the complete extent might not be in scope but simple situations like, how long does the search results take to be displayed and how much time does it take for the system to retrieve a customer info at the peak hour – these are some example of the kind of things we would want to keep an eye on.

**Security** – for sites where there is a secure login to access the site, the minimum functionality around it has to be tested. **For example**, if I leave the site idle for more than 10 minutes, is it auto logging out or not. Something as basic as that should be focused on.

27. **How to overcome the challenge of not having input documentation for testing?**

IF the detailed standard documentation like BRD and FSD are unavailable, the tester will have to depend on some point of reference.

**a)** Screenshots

**b)** A previous version of the application

**c)** Wireframes …etc

Another factor that helps immensely, is to talk to the developers or the business analysts (when available) to get a confirmation on our understanding or clarifications in case of doubts.

When none of these situations works, we can just conceptualize the application based on our previous IT application experience and create the basic set of test scripts. When testing phase comes up, we can set up a portion of test cycle time and do some test case management (make the already created scripts perfect) so we have the doc for the next phases.

28. **How to get** [**maximum productivity**](https://www.softwaretestinghelp.com/how-to-improve-your-testing-skills-and-beat-the-competition/) **from an offshore team?**

The key is to make sure that all the testers know about all the modules and that there is no knowledge concentration in one place. Involving everyone in test script peer reviews, defect meetings, and KT sessions is going to ensure that everyone is aware of the application to the best extent possible.

Also, by encouraging the concept of teamwork we can have the team members collaborate, help and aid each other for better productivity.

Regular follow up meetings also help the process very much.

29. **What are the Roles and Responsibilities of an onsite coordinator? Does he/she test too?**

The onsite coordinator is a point of contact for the offshore team and to the client for any information regarding the testing engagement.

**This job includes:**

* KT from and to offshore and clients
* Getting the environment to test all ready
* Sanity testing, smoke testing
* Testing – the key functionality.
* Bug review – found by the offshore team
* Bug assigning to the respective dev
* Presenting metrics
* Providing sign off

Yes, even an onsite coordinator has to test.

30. **Inconsistent bugs – Why onsite can find it but offshore can’t and vice versa – How to handle this situation?**

Every bug has to be noted and analyzed – whether it is encountered at onsite or offshore, whether repeatable or not. A real value-add to a tester’s job is when we involve ourselves in the Root Cause Analysis process for a bug rather than simply reporting it.

**Some of the ways we can handle this situation are:**

**#1.** All the onsite and offshore team members should follow a guideline that screenshots had to be taken for every error that we encounter – repeatable or not

**#2.** If there are logs, system files or anything like that, that might help us find any evidence of the issue- we should try to find it

**#3.** Despite all these steps, if we still can’t tell why and when the problem occurs- we should report it to the developer all the same – with as much information as we can.

31. **Video/audio related testing – What does this include?**

How to test an application having video or audio?

**`Here are the important points to consider:**

– Access levels (restricted or not – password controlled)

– Different kinds of environments

– Browser compatibility

– Screen resolutions

– Internet connection speeds

– The specific options on a video – like play, stop, mute etc.

– Video by size

– Response to the videos – comments (limitations on the comment length and number of comments it can take)

– Video responses to the videos

– Interface with social networking sites – interoperability

– Buffering speed

– Embedding the video

32. **Mobile Application Testing – What does it include briefly?**

**Mobile App Testing Important Test Scenarios:**

– Check if the app works well with multiple carriers and multiple devices

– Usability of the features in a mobile screen

– Testing it on different mobile platforms – like Android and iOS

– Installations, uninstalling, launching the app with network and without a network, testing functionality

– Network connections –WiFi, 2G, etc.

– Logs at iOS iPhone configuration utility for Android Monitor.bat can be used for debugging

That was it. Now, wasn’t that simple.

33. **How to handle a situation when you don’t have time for complete testing**

When we do not have enough time to test, you might want to perform a risk analysis and determine which modules/areas of your AUT are prone to the highest risk and are critical to the success of the product and handle them first. Going the exploratory route instead of documenting the test cases is another way, but it is risky for sure

34. **What is the Best Moment in Your Testing Life?**

**35. Do you remember your Manager appreciate you for your work. Tell me any short incident?**

**36. How you performed as a troubleshooter in your last job? Any event you remember?**

**37. Which is the Best Module you ever tested, and why is it the best?**

**38. Have you helped you/r Team in Risk Management? How, any example?**

**39. Tell me which one the Most Critical Bug you find in your life? What was the Severity? How it influenced the AUT?**

**If you haven’t guessed it already, this question is to assess how well you understand the criticality and severity parameters for an issue. You might want to again cite examples from your experience. Usually critical issues are the ones that might block the testing or cause data leaks or security breaches etc.**

**40. Which is the best workaround you suggested that solved a big problem – following which you and your team had some time to relax (no delay to the release date)? Did it happen any time? If yes can you share it with me?**

**This question in my opinion sounds a little conspiring and a conspiracy is never good news. So refrain from answering this question entirely. You can say that you have helped in solving issues whenever you can and in whatever capacity you could (if you have a specific example, go ahead and give it) but when you were done earlier than needed, you communicated the same and picked up few other pending tasks to utilize the excess time you have. Questions like that are to test your integrity and professional commitment.**

**41. How to handle the low frequency issues during your testing?**

**By low frequency, I hope you mean the issues that cannot be reproduced consistently over time. If a issue is not coming up every time we repeat the same sequence of steps, we do some digging around to see if we can find any evidence to the occurrence of the bug(logs or failure messages) and if nothing else works, we report it all the same. As testers, we cannot leave anything without reporting.**

**42. How to coach a newer beginning in testing scope?**

**This question is to assess your leadership skills. The best way is to provide the newcomers with all documentation, necessary accesses, arrange hands on KT sessions, introduce them to the point of contacts to all the components of the projects, give them small tasks to test their understanding and to eventually ease their way into the testing project.**

**43. How to improve skills designing test cases and make sure high coverage rate?**

**Test designing is successful when the requirements are analyzed and understood completely. To ensure 100% test coverage is achieved, you should not miss out on creating test cases for any requirements and from time to time we can check ourselves with the help of a** [**traceability matrix**](https://www.softwaretestinghelp.com/requirements-traceability-matrix/)**.**

**44. The following is an issue found when exploring an application- There are no**

**limits to any of the fields in the create account page- What does this mean?**

**This could mean two things, one- it is a bug. Two- it might allow you to enter as many characters as you like, but might perform the validation when submitting the page.**

**45. If you found that login does not have the missing “Forgot password” option- while exploratory testing, how would you report it?**

**A bug is a bug, no matter how you find it. Reporting this issue, is not going to be any different than reporting one that you found via a test case.**

**46. What are the essential qualities of an experienced QA or Test Lead?**

**Every QA or Test Lead should have the following qualities.**

**1. Well-versed in Software testing processes.**

**2. Ability to accelerate teamwork to increase productivity.**

**3. Improve coordination between QA and Dev engineers.**

**4. Provide ideas to refine the QA processes.**

**5. Ability to conduct RCA meetings and draw conclusions.**

**6. Excellent written and interpersonal communication skills.**

**7. Quick learner and able to groom the team members.**

**47. How do you test a product if the requirements are yet to freeze?**

**If the requirement spec is not available for a product, then a test plan can be created based on the assumptions made about the product. But we should get all assumptions well documented in the test plan.**

**48. How will you tell if enough test cases have been created to test a product?**

**First of all, we’ll check if every requirement has at least one test case covered. If yes, then we can say that there are enough test cases to test the product.**

**49. If a product is in production and one of its modules gets updated, then is it necessary to retest?**

**It is advisable to perform regression testing and run tests for all of the other modules as well. Finally, the QA should carry out System testing**

**50. What are the different types of Severity?**

**The severity of a bug can be low, medium or high depending on the context.**

* **User Interface Defect – Low**
* **Boundary Related Defects – Medium**
* **Error Handling Defects – Medium**
* **Calculation Defects – High**
* **Misinterpreted Data – High**
* **Hardware Failures – High**
* **Compatibility Issues – High**
* **Control Flow Defects – High**
* **Load Conditions (Memory leakages under load testing) – High**

**51. What is the test strategy?**

**Test strategy is an approach to carry out the testing activity. It covers the following.**

* **Test team Roles and Responsibilities**
* **Testing scope**
* **Test tools**
* **Test environment**
* **Testing schedule**
* **Associated risks**

**52. Beside test case & test plan, what documents a tester should produce?**

**Here are a few other documents to prepare.**

* **Testing metrics**
* **Test design specs**
* **End-to-end scenarios**
* **Test summary reports**
* **Bug reports**

**53. What is Risk Analysis?**

**Risk analysis is a technique to identify the things that can go wrong in a software development project. They can negatively impact the scope, quality, timeliness, and cost of a project.**

**However, everyone involved in the project has a part in minimizing the risk. But it’s the leader who ensures that the whole team understands the individual role in managing the risk.**

**54.Static testing (verification): it is a process of checking are we developing the right product are not it is also called verification.**

**55.Dynamic testing: it is a process of checking developed code and developing application is working as expected are not.**

**56. Project :If a software application design for a specific customer then it is called Project.**

**57. product:If a software application designs for multiple customers then it is called product**

**58. Cost of fixing defects:-**

**->Defects may occurs due to wrong requirement. Wrong design & wrong coding to reduce the defects which are occurred due to wrong coding will take minimal cost of to resolve the defects which are occurred due to wrong requirement will take huge cost.**

**->in now a days application like banking /insurance /retails& maintaining most of the defects will occurs due to wrong requirements .Hence testing should be performed right from the requirement to minimize cost of fixing defects.**

**59. Defect clustering:**

Sometimes a small functionality may produce some defects when compared with a bigger functionality.

Ex: in a banking application online payment is small functionality when compare to the registration. But here online payment business is complex then customer registration business logic .Hence changes of finding defects will be more at online payment. in this scenario we have to test online payment first later customer registration.

**60.Verification:** it is a process of checking are we developing right product or not.

**61. Validation:** it is a process of checking the developed projects right or not.

**62.Exhaustive testing is impossible:** if we test a functionality with all possible input conditions then it is called exhaustive testing.