**WEB DRIVER MOCK :**

1. **What is Automation?** testing the application using any external tool
2. **Advantages of Automation ?**
3. **When to automate and when not to automate ?**

when tight deadlines we cant to automation, when ever we need the human intervention like captcha one time pwds..( we have an alternate ways using java codes can be handled like sending the api calls to catcha or testing with constant captcha etc..)automations is avoided when there are any UI change is expected in near future..barcode readers can be automated, images or video previews all not well automated.

1. **What’s the difference between Assert and Verify in Selenium IDE?**

When assert fails it stops the executions , where as with verify failed statement won’t be executed but the remaining statements can be executed.

1. **Difference between the Sort Assert and Hard Assert ?**
2. **What all the element locaters are available with selenium web driver ?(OR) What are the locators available in web driver, which one you prefer?**

By Class takes 8 diff methods which take string input and return By object:

1. id (preferable one which is the fastest)
2. name
3. class
4. tag
5. linkText
6. partialLinkText
7. cssSelector
8. xpath
9. **I want to automate windows based application using selenium web driver…can I do that ?**

No, We can’t automate the windows based applications.. Only web based (Robot and autoIt-we can)

1. **What is FirePath and Fire Bug?**

Plugins added to the firefox browsers which helps in inspecting the elements and writing the xpath and css selectors.

1. **Xpath and CSS Selectors ?**

Xpath is inconsistent and behaves differently in diff browsers,limited to some browsers.. CSS selectors will work well on many browsers.

1. **How to get element attribute using selenium web driver ?**

Using getAttribute();

1. **How to store current URL using web driver?**

Ans : driver.getCurrentURL();

1. **How to double click on an element in web driver?**
2. **Difference between setSpeed() and sleep() ?**
3. **What is selenium what are the Selenium components?**

Selenium: 2004- Jason Huggins from thoughtworks.

Selenium is an open source tool to automate the web applications.

Components: - IDE, RC, Grid, Selenium web driver

1. **How you setup web driver in eclipse ?**

We can download the selenium jars from selenium.hq website and add the jars to the project buildpath

Need to give the driver executable file path (OR) using Maven project we can add the selenium stable version dependencies to the project.

1. **Why we need to set property?how you set the property?**

System.setProperty(“web.chrome.driver”,”Path of the driver executable file”);

1. **How do you get current title,page sourse and current url?**

driver.getTitle();

driver.getCurrentTitle();

driver.getCurrentUrl();

1. **How you write the method for maximising window ?**

Driver.window().maximise();

1. **What are advantages and disadvantages of WebDriver?**
2. **What are frequently faced exceptions, name them ...How you handle those exceptions**

Exception: something which is stopping the Execution of the programs, in selenium we come across multiple exceptions like .. ElementNotFoundException, StaleElementException, SocketException, ElementNotVisibleException …we can handle these exceptions using try and catch blocks using throw and throws ..finally

1. **Can we enter the test into textfields without using sendKeys method ?**

Using javaScriptExecitor we can send the text into thetextbox x

1. **What happens if you don’t have try catch, do you have try catch for every test case?**
2. **Difference between findElement and findElements?**
3. **diff b/n close and quit**
4. **Different waits in webdriver, differences**

Waits : Webdriver allows the programmer to wait for the element/elements to be located before throwing the exception like NoSuchElement/ElementNotFound exceptions…

1. Implicit wait – waits for entire time the browser is open by the driver…

It checks initially before the wait time for presence of element- if it do not find the element it will wait for given time and at the end of wait time it again checks for element (it do not check in between), if it finds the elemnt it return the element else it throws exception.

driver.manage().timeouts().implicitlyWait(20, TimeUnit.seconds);

1. Explicit Wait – waits for a specific condition or specific element for a given a amount of time before throwing the exception.

It checks in between the wait time for presence of element by default for every 500 ms and if it finds the element after this specific time it returns the element and do not wait further.

We can use until method with function/predicate or ExpectionConditions.

WebDriverWait wait = **new** WebDriverWait(driver,20);

WebElement element =wait.until(ExpectedConditions.*visibilityOfElementLocated*(By.*xpath*("//\*[text()='ASP.NET Web Forms']")));

a.FluentWait – it is similar to explicit wait but it allows to mention the frequency for which the element presence should be tested instead of going with WebDriver default frequency(500ms), along with wait time.

Also you can declare any specific exception to be ignored

20 secoonds – wait time

pollinEvery/frequency – 5 seconds

every 5 seconds it checks for the wait condition and do not for complete wait time if you find the element in between.

FluentWait<WebDriver> wait = **new** FluentWait<WebDriver>(driver)

.pollingEvery(10, TimeUnit.***SECONDS***)

.withTimeout(30, TimeUnit.***SECONDS***)

.ignoring(NoSuchElementException.**class**);

WebElement elem = wait.until(function);

1. **How do you handle multiple windows in WebDriver**
2. **How do you handle Alerts and iframes in WebDriver**
3. **How do you handle window pop ups in WebDriver**
4. **how to handle dropdowns, select some element in dropdown**
5. **how to get all option values in dropdown**
6. **How you handle mouse actions**
7. **what is Cross Browser testing, explain grid setup**
8. **How do you run grid in your project**
9. **How do you sort the search results or find max from results**
10. **How many regression test cases you run and how long it takes, how frequently you run**
11. **what are some challenges you faced in automation**
12. **If there is any production issue, how do you handle?**

**(need to sort accordting to topic copied from other file)**

**Interview Questions**

1. Explain about your recent project.

2. What are Actions in WebDriver.

To deal with mouse actions like click, context click, double click, key press, drag and drop, click and hold etc.

3. What is the use of Alert class.

To handle the pop ups.

Alert alert=driver.switch To().alert();

alert.accept();

alert.dismiss();

alert.sendKeys();

4.What are the components of API

* URL
* Method- GET,POST etc
* Required parameters
* Optional parameters
* Request
* Response

5.What is BDD

* BDD is Behavior Driven Development, that is developed from TDD(Test driven Development)
* BDD is a n extension to TDD.
* It focuses on what to test and not how to test.
* Uses plain English to explain what is the exact requirement.
* Uses Gherkin syntax
* There is no technical documentation, but will contain pure English and contain exact requirement that client has.

**6. What is a Feature file in Cucumber .**

Cucumber is an open source tool that supports BDD.

Feature file in Cucumber consists of a Feature, which is nothing but a simple requirement.

One Feature file can have multiple scenarios.

Client, Developer and tester will have the same feature file.

7**.Give a sample feature file for a Facebook login application**

Feature:Test Facebook Login Scenario

Scenario:Test login with valid credentials

Given open Firefox and start application

When I enter valid user name and valid password

Then user should be able to login successfully.

(You can add more scenarios)

(This will be converted to a step definition file)

**8.What are the challenges in testing API’s**

* Parameter combination: Each API will take various input parameters, and there will be huge number of combinations of input parameters- mandatory and optional parameters. Combination will get increased with more number of optional parameters.
* Sequence of API calls: All the sequence flows should be covered.
* Validation of parameters: Each parameter might be designed to carry a specific value and it should be validated. It can be a number range, max length restriction, acceptance of string/value etc.

**9. What is the difference between Get and Post.**

Get is used for retrieval, and Post is used for creating new resource.

Get has no request body, but Post has a request body.

Get is not used for retrieval of sensitive data, because it transfers data through URL parameters. Post is used for that purpose.

Get has certain restriction in length of characters that it can append in URL.

**10.What is the difference between Put and Post.**

Put is used for updating a resource, where as Post is used for creating a resource.

Put can be used to create a resource if it is not already present.

Post can be used to update a resource , if resource is already present.

Put and Post has request body.

**11.How did you do the API testing**

Manual testing using tools like Postman.

Automation using API’s HttpClient and RestAssured.

12. **What all you need to test in an API**

Status code, Status message, Header info-Content type, Content length,

Actual Response body- element presence,data order,count of data,element values.

Authentication-valid and invalid authentication keys.

Request Data validation-valid/invalid data,blank data,boundary values, mandatory/optional parameters.

End point testing

All crud operations

Security Testing

Performance Testing

**13. Explain the Rest Automation Framework.**

HTTPClient/Rest Assured and Java

TestNG

Apache POI for data driven testing(oauth details)

Apache log4j for logs.

Notes :

We have diff automation tools , among selenium is popular..it supports many languages

Selenium is an automation tool which used for automating the web applications.

Selenium is consists of four components :

1. **Selenium IDE:** is a plugin in the firefox browser ..scripts are automatically generated using the tool..we can add the plugin to the browser from seleniumhq site or we can directly download..the plugin will be added to the browser and its record and playback tool.Actions will be recorded.. it has three columns : command Target and value. We can save the testcases and we can assert and verfify the testcases. … : flexibility is less using IDE ..we can not use for data driven like multiple sets of the data..for regressions using Jenkins cant be done. It will helpful to get an understand of how things will work in automation.
2. **Selenium RC (Remote Control):** supports diff languages like web driver (java python ruby pearl and php). whatever the test scripts we write it will be converted into java script code and that JS code will be executed on the browsers, because of this feature it is little slow compared to web driver…there is an intermediate between our script and browser i.e RC … whenever we re executing the script we need to start and stop the server.
3. **Selenium Grid:** selenium grid helps to run the scripts on many servers, at the same time which cut down the time and run the scripts on many browsers or on the many operating systems. Selenium Grid allows you to run the tests on different machines against different browsers in parallel. Essentially it supports distributed test execution.It allows for running tests in distributed test execution environment.
4. **Web Driver:** latest version is selenium 3. It supports most popular browsers. It supports multiple languages (java, python, ruby, c#, JS and pearl). Depending on the language which we want to use for webdriver need to download the jar’s accordingly and add those jars to the classpath.

Whenever we want to automate, have to setup the environment(tools,jars,plugins..) that is required for automation

1. Ide(Eclipse, Intellij, jetBrains..)

2. Selenium jars( either download and add to java classpath / setup with Maven Buiold tool

Selenium WebDriver is an API which consists of selenium JAR’s and wendrider itself is an Interface