Automation Testing Real Time Interview Questions

With answers

Part 1

By: Jaikishan Mohanty

1. Can you brief me about yourself?

Hi, my name is Jaikishan. I started my career as a Testing Executive 4.5 years back with ABC company currently I am working as Test Engineer.

My responsibility is to understand Business Requirement Specification and High-Level scenarios and to convert them into test cases & Automation scripts if required. Execution of test cases and reporting of defect to the developer if there any and get them fixed. I have experience on Functional, Automation, Regression, Smoke, Sanity, Web accessibility, Web Analytics, Mobile Testing.

In my previous project I have worked on Automation testing where we have used Selenium with java and TestNG Cucumber framework for BDD approach. We have used Page object model where we have separated our test cases with page objects, and we performed testing on the same. For build management tool we are using Maven for version controlling we are using Git and for automating our jobs for nightly run or any schedule we are using Jenkins,.

For defect management & test case management we have used JIRA, TEST RAIL & HP ALM. I have worked on tools like BrowseStack, DeviceAnywhere, Toadsql,

I am working on Agile environment we have daily standup call and we have 2-week sprint cycle. I am part of 8-member team out of which we are 3-Tester, 2- dev, 1- manager, 1-scrum master

2. Tell me your Day to Day activities as QA?

First thing I do after login in my system. I check the active sprint in Jira for our project code. There I can see my assigned open tasks. After that I will check my mail if there is any important mail I need to take action on. Then we have our daily scrum meeting where we used to tell our previous day actions what we did, what we are planning for today and if we have any blocker to discuss. Product owner and scrum master help us to resolve that blocker. After that I need to take the pending task and do needed action whether creating test case, Execution, Defect retesting if any.

3. Do you have created framework from scratch, or you have maintained that?

I have not created Framework from scratch by myself but yes, I was part of framework creation and created some part of it. 4. How much you rate yourself in Java out of 10?

Out of 10 I will rate myself 6 in java as QA Automation engineer.

5. Can you tell me Oops concepts and relate it with your Framework?

We have Polymorphism, Inheritance, Encapsulation and Abstraction in Oops. So, we will start with

1) **DATA ABSTRACTION**: Data Abstraction means to handle complexity by hiding unnecessary details from the user. In java, abstraction is achieved by interfaces and abstract classes. We can achieve 100% abstraction using interfaces.

In Selenium, WebDriver itself acts as an interface. Consider the below statement:

WebDriver driver = new ChromeDriver();

We initialize the Chrome Browser using Selenium Webdriver. It means we are creating a reference variable (driver) of the interface (WebDriver) and creating an Object. Here WebDriver is an Interface and ChromeDriver is a class.

We can apply Data Abstraction in a Selenium framework by using the Page Object Model design pattern. We define all our locators and their methods in the page class. We can use these locators in our tests but we cannot see the implementation of their underlying methods. So we only show the locators in the tests but hide the implementation. This is a simple example of how we can use Data Abstraction in our Automation Framework.

- 2) **ENCAPSULATION**: Encapsulation is defined as the wrapping up of data under a single unit. It is the mechanism that binds together code and the data it manipulates. Encapsulation can be achieved by: Declaring all the variables in the class as private and writing public methods in the class to set and get the values of variables. All the classes in an Automation Framework are an example of Encapsulation. In Page Object Model classes, we declare the data members using @FindBy and initialization of data members will be done using Constructor to utilize those in methods.
- 3) INHERITANCE Inheritance is the mechanism in java by which one class is allowed to inherit the features (fields and methods) of another class. We can apply Inheritance in our Automation Framework by creating a Base Class to initialize the WebDriver interface, browsers, waits, reports, logging, etc. and then we can extend this Base Class and its methods in other classes like Tests or Utilities. This is a simple example of how we can apply Inheritance in our framework.

4) **POLYMORPHISM** Polymorphism allows us to perform a single action in different ways. In Java polymorphism can be achieved by two ways: –

Method Overloading: When there are multiple methods with same name but different parameters then these methods are said to be overloaded. Methods can be overloaded by change in number of arguments or/and change in type of arguments. In Selenium Automation, Implicit wait is an example of Method Overloading. In Implicit wait we use different time stamps such as SECONDS, MINUTES, HOURS etc. –

Method Overriding: It occurs when a derived class has a definition for one of the member functions of the base class. That base function is said to be overridden. In Selenium Automation, Method Overriding can be achieved by overriding any WebDriver method. For example, we can override the findElement method In assertion we have used overload because in assertion we used to like asset.true(actual, expected) and second time we can use same assert.true(actual, expected, message).

6. How can you use interface and how it is different from Abstract class?

Abstract class may have Abstract and concrete methods, and there is not any compulsion in adding abstract method in abstract class. But in Interface, we do have only abstract methods and we don't need to write abstract keyword in Interface this is by default public and abstract.

7. What do you mean by Static keyword in Java?

Static means it is at class level not at instance level, we have static method, static variable & static inner class. When we have any variable as static so it will remain same for all the instance of our classes, and static/Private/Final methods can't be over-ridden like if we have initialized any method as Static so we cannot override it in any child class.

8. How to call static method and variable in java?

Direct calling, Calling by class name.

9. Can I access Static method by using object reference?

Yes we can, but we got one warning that you need to access it via Direct or By class name.

10. How to call non-static method and variable in java?

For calling non static method we need to create object first.

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THANK YOU

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