

SDET Final Mock Question List

Java Basic

1. What is Optional, how do you use it?
2. What is a default method in an interface?
3. Difference between default and static methods in interfaces?
4. Can you have default and static methods in functional interfaces?
5. Please talk about Java 8 features.
6. What is a String pool?
7. What will happen when you use 'new' to create a String in Java?
8. What is the difference between ArrayList and LinkedList?
9. In what scenario do you want to use LinkedList and when do you want to use ArrayList?
10. What is an immutable class?
11. How do you make an immutable class?
12. What is the difference between == vs .equals()?
13. Can we only override the equals() method or only override hashCode() methods, why?
14. In HashMap what will happen if you just override hashCode() method without overriding equals() method of the key?
15. In HashMap what will happen if you just override equals() method without overriding hashCode() method of the key?
16. What is the difference between HashSet and TreeSet?
17. What is LinkedHashMap? In what scenario do you want to use it?
18. If you have an exception, how do you handle your exception?
19. How does HashMap implement the put() method?
20. If a HashMap has 16 buckets, how do you convert a large number to the bucket index?
21. What is polymorphism? How does Java implement polymorphism?

22. Why is Java not a pure OOP Language?
23. What collections have you used? What are the differences between them?
24. What is serialization in Java? How can we serialize and deserialize an object?
25. What are the differences between protected, private and default access modifiers in Java?
26. What is a Marker interface in Java?
27. What is the difference between static and non-static variables in Java?
28. What is the usage of the "final" keyword on a variable, method and a class?
29. When do we use interfaces and when do we use abstract class?
30. What is a Functional Interface?
31. Can you name some functional interfaces in Java and their usage?
32. Can we customize an exception?
33. How do you sort a collection of objects using customized orderings?
34. What is the difference between deep and shallow copy?

JUnit

1. Which version of JUnit are you using?
2. What is the difference between JUnit 4 and JUnit 5?
3. Can you explain the three components of JUnit5 and explain about their responsibilities?
4. What is DDT (Data Driven Testing) and why do we need it?
5. In JUnit 5, what is the execution order of test methods inside a test class by default?
6. In JUnit 5, how do you specify the execution order of test methods within a test class?
7. What is test case isolation and how does JUnit 5 perform test case isolation?
8. In JUnit 5, which methods must be declared as static by default?
9. In JUnit 5, what is the default lifecycle of a test instance?
10. In JUnit 5, what will happen if one assertion fails? Will the remaining assertions in

the same test method still be executed?

11. In JUnit 5, how to guarantee that all the assertions are executed regardless of assertions results
12. What is the difference between `assertTimeout()` and `assertTimeoutPreemptively()` methods in JUnit 5?
13. What is race condition and how to prevent it during parallel testing?

TestNG

1. Explain the hierarchy of a TestNG Suite
2. Can you tell me all the lifecycle annotations in TestNG?
3. Why do we need grouping in TestNG and how do you assign groups in TestNG?
4. Can I assign multiple groups to test methods?
5. What is dependency in TestNG?
6. What is the difference between dependency and priority in TestNG?
7. How to ignore all the test methods in a specified package.
8. What are listeners in TestNG?
9. Can you give me an example of using Listeners in UI Testing?
10. In TestNG, how to run the dataset provided by `DataProvider` in parallel?
11. Explain the difference between a test Level group and a suite level group in the TestNG.xml file?
12. How do you handle exceptions in TestNG? Explain at least two ways except for "try/catch block".
13. How do you generate a HTML report in TestNG?
14. How do you print messages in the HTML report?

Selenium WebDriver

1. What is Selenium WebDriver?
2. What should I do if I want to switch my browser from Chrome to Firefox during a UI Testing using Selenium WebDriver?

3. What is the difference between get() and navigate().to() in Selenium WebDriver?
4. What is implicit waiting in Selenium WebDriver? Why do we need this?
5. Can you explain different kinds of locators in WebDriver?
6. How do you select a specific option in a dropdown selectors using Selenium WebDriver? (At least two ways)
7. How do you handle an alert window that has cancel, accept and input text boxes?
8. How do you switch between different windows or tabs in Selenium WebDriver?
9. How do you upload a file using a file upload button in WebDriver?
10. In Selenium WebDriver, how do you store elements of a web table into a 2D array?
11. In Selenium, how do you perform drag and drop operations?
12. What is Actions class in Selenium? Tell me about some actions you can perform in Selenium.
13. How do you scroll up and down the webpages in Selenium?
14. Why can we convert an instance of class "WebDriver" to the class of "JavascriptExecutor"?
15. Can you explain different kinds of Waits in Selenium WebDriver?
16. How do you run your Selenium WebDriver code in a testing environment without Graphic Interfaces?
17. What are dynamic web elements and how do you handle dynamic web elements in Selenium WebDriver?
18. Can you explain necessary maven dependencies in a UI Testing framework?
19. Can you explain the process of building a UI Testing framework?
20. How to write a feature file using cucumber, can you give me an example?
21. What is Page Object Modeling?
22. How to initialize all the web elements in a page object model annotated with @FindBy?
23. Tell me about the four OOP principles you applied in your UI Testing framework.

24. Tell me about the design patterns you applied in your UI Testing framework

Cucumber

1. What is BDD (Behavior Driven Testing) and why is it so important?
2. How do you run all the testing scenarios in parallel using TestNG and Cucumber?

Testing Types & STLC

1. What is Functional Testing and Non-functional testing?
2. Can you tell me some types of functional and non-functional testing?
4. What is Scalability in web application development and how do you test it?
5. What is the V Model in Testing?
6. What is STLC and can you explain every stage of STLC?
7. What is Verification and Validation?
8. What is the difference between static and dynamic testing?
9. How do you perform static and dynamic testing?
10. What is RTM and why do we use it?
11. What is smoke, sanity and regression testing?
12. Can you tell me the difference between smoke, sanity and regression testing?
13. What is the defect life cycle?
14. What is the difference between severity and priority of a defect?
15. What is CI/CD pipeline and can you give me an example?
16. Where do you store the secrets of your application during the runtime?

Rest Assured

1. What is the purpose of given() and when() methods in Rest Assured?
2. How do you construct your request body in Rest Assured?

3. What are query and path parameters and how do you configure them in Rest Assured?
4. How does Rest Assured perform Serialization and Deserialization?
5. How do you extract partial information from the response body in Rest Assured?
6. How do you upload and download a file in Rest Assured?
7. Tell me about some common authentication and authorization methods you are familiar with.
8. What is Cookie, Session and Token?
9. Can you explain about the workflow of session based authentication?
10. Can you explain about the workflow of token based authentication?
11. Can you explain about the workflow of OAuth 2.0?
12. In Rest Assured, how do you reuse the common configurations of request headers and response assertions?
13. In Rest Assured, how do you manage your API endpoints?
(RequestSpecification, Enum, yaml)
14. How do you validate the structure of a json response?
15. If you are running a scenario outline in parallel and there's api chaining in every scenario, how do you keep your transferred property thread safe?

RESTful API & SOAP Web Services

1. What is idempotency from a RESTful service endpoint?
2. What is the difference between HTTP PUT and POST method?
3. What are commonly used status codes?
4. What is the difference between 401 and 403 error?
5. What is the difference between Authentication and Authorization?
6. Explain the process of using JWT token for authentication.
7. What is API chaining? Can you give me an example?

Scrum

1. What are the different roles in Scrum and explain the responsibilities of different roles in the scrum?
2. What is Product Backlog & Sprint Backlog?
3. What is a Sprint? Can you explain the activities that occur during a Sprint.
4. What is a backlog grooming/sprint planning meeting?
5. What is velocity in Scrum?

Appium

1. What is Appium and what is the difference between Appium and Selenium?
2. Can you explain the architecture of the Appium framework?
3. What is the difference between Native, Hybrid and Mobile Web Applications?
Can we perform UI testing using Appium?
4. What's the name for the corresponding automation driver if we want to execute our testing scripts on Android, iOS, Windows and MacOS platforms?
5. Can you give some examples of the locators we use in Appium?

6. If you have a dropdown list on an Android device, how do you scroll to a specific option?
7. If you have a dropdown list (pickerwheel) on an iOS device, how do you automatically scroll to a specific option?
8. How do you perform drag and drop / long press / swipe and scrolling using W3C Actions API?
9. How do you interact with web elements in a hybrid mobile application?
10. What's the advantage of using cloud devices to perform automation testing?
11. How do you perform automation tests on a cloud platform like Sauce Labs?
12. What is the desired capability and what are the necessary desired capabilities for connecting to iOS and Android Devices?

Database Testing

1. What are different types of Database Testing?
2. How do you perform schema testing?
3. How do you test a stored procedure?
4. Can you test a stored function directly? If not, how do you test a stored function?
5. What's the difference between stored procedure and stored function?
6. What is a trigger and how do you test a trigger?
7. What is Data Mapping Testing?
8. What is Data Integrity Testing? And how do you perform Data Integrity Testing?

