Important Appium Interview Questions:

1. What is the difference between mobile application testing and just mobile testing?

Mobile app testing suggests testing an application on hand-held devices and differs from mobile testing in that it focuses on features and functionality of the tested application only while the other closely focuses on mobile devices' native application features like SMS, Call, Media Player, etc.

2. Can you remember the names of different versions of Android OS?

Of course, you can. Here they are: 1.5 Cupcake, 1.6 Donut, 2.0 Eclair, 2.2 Froyo, 2.3 Gingerbread, 3.0 Honeycomb, 4.0 Ice Cream Sandwich, 4.1 Jelly Bean, 4.4 Kit Kat.

You may want to know more about the latest one when answering this question. Among the features of Android 4.4 released in October 2013 are:

- Dialer Search helping in searching a nearby thing by the phone number
- Wireless printing capability
- Hangouts SMS Integration
- Downloads app redesign
- Location featured in Quick Settings
- Seeking music and movie from the lock screen

3. Do you know which tools are used on Android for capturing app logs?

'Monitor.bat' file under Android SDK's 'Tools' folder can be used to see the log, select or save it. ALogCat, a free tool for getting logs featured on Google Play, is another option.

4. What major criteria should be taken in consideration while doing end-to-end mobile testing?

The first areas of your attention in this case should be installation, first-time launch without network, app's uninstallation, its orientation if supported, and testing app performance using different devices with different network scenarios. Further, you may want to test how the app is responding in case of entering invalid user credentials and attempting to change those after installation. If the app is to access the network, it is important to see that logs generating during this contain sensitive information in encrypted form only.

5. What mobile application types do you know?

We can distinguish three broad types of mobile apps:

- Native apps are those specifically developed for a certain platform, directly installed on the device and taking the advantage of all its features such as the camera, GPS, compass, etc. These apps utilize the native notification system of device and work offline well.

- Web apps on mobiles are web portals designed and hosted for mobile devices. To access these, URLs are used in mobile browsers.

- Hybrid apps can be viewed as web apps built in native apps. They are written using web technologies like CSS, JavaScript and HTML. They run inside the native container while leveraging the browser engine of a device to render HTML and process JavaScript locally. Such apps are not tied to particular mobile devices or platforms and can work on any.

6. How could one test patches and defect fixes for an app in production?

Since regression testing of the whole product cannot be effectively done in a short time, it makes sense to regression-test the relative module and focus mainly on the area related to bug fixes and, additionally, to do sanity testing on the rest of modules on the high priority devices.

7. What tools can be used for debugging?

Generally, to learn the cause of an issue where some failure is occurring logs are used. This can be done by means of iPhone Configuration Utility on iOS and Android Monitor.bat on Android. With log provided from these tools it will be easy for developers to tell the cause.

8. What mobile automation testing tools do you know?

The means of automation are usually chosen subjectively depending on project needs and application type. Among good paid automation tools available today are Ranorex, Silk Mobile, SeeTest, etc. There are also worthy free tools like Appium, Robotium, KIF, Calabash, etc., but using these requires certain coding skills such as Java or Ruby.

9. What is it you can do with a real device that you cannot do with emulators?

Testing on real devices has a number of advantages over emulators. Only using real devices you can test such interrupts as messages, phone calls, battery drain, low battery scenarios, memory card mount and unmount scenarios, Bluetooth, and actual app performance as a whole.

10. How can you learn about the app's CPU usage and its memory utilization?

On Google Play you can find such tools as Usemon, CPU Usage & Process List Viewer, CPU Usage Monitor, etc. Systrace feature from Android monitor can also help when using SDK.

You should remember that your personal experience in mobile testing and real examples are always appreciated, so these answers are mostly useful to proof-check your knowledge.

11. How to sign the Android Build (APK)

Using IDE like eclipse when you create a debug build the build is by default signed using the key generated by the keytool utility present in JDK.

In release build you sign by your private key using these steps (presuming that you already have a private key to sign your application if not you can go through this URl for more info

http://docs.oracle.com/javase/6/docs/technotes/tools/windows/keytool.html):

a)open your project in eclipse

b)Press right click on mouse and then click on exportthen click on Android

c)Then click on Export Android Application then click on next button

d)Select the name of Project (What is of your application) then click on next

e)Select Use existing Keystore and browse the path of your private keystore

f)Enter Password of keystore in required field and click on next

g)Select Use existing Key and provide password and click on next

h)Now click on finish

12. Which are the different Internet protocols

TCP - Transmission Control Protocol : TCP is used for transmission of data from an application to the network. TCP is responsible for breaking data down into IP packets before they are sent, and for assembling the packets when they arrive.

IP - Internet Protocol:IP supports unique addressing for computers on a network. Data on an Internet Protocol network is organized into packets. Each IP packet includes both a header (that specifies source, destination, and other information about the data) and the message data itself.

13.Have you ever done Security Testing on Mobile Devices/Apps? What kind of Security have you performed for Android iOS

You have to check and test unlockpatterns, passwords, by creating multiple profiles if you phone supports it.

For App you have to check App permissions, Need to test the data encryption if supported in OS or not. You should verify is data leaking to log files, or out through notifications& also server side control.

For mobile websites use tools like SQL Inject Me, XXS Me, WebScarab. A web proxy can also be used to intercept all mobile device traffic to monitor data and test for security issues.

14. How do you Find the UDID of the iOS devices ?

- Connect the Device to iTunes
- Click on Device name present on left side of Panel
- Click on Summary (It shows device summary
- Click on Serial number
- It shows you the 40 digit hexadecimal number

Use of UDID: It is basically used for Device Provisioning.

For QA you have to just copy and paste it using Edit button of iTunes and provide this number to developer so that they can add it to provisioning file which came along with testing builds.

15. What are the different types of IP

1) Static IP address : It is that IP which is unique for one customer and he will always get sameIP address

2) Dynamic IP address: Its is that IP that whenever you connect to internet you get a new IP for your machine.

Also we can classify IP’s into:

Global IP addresses : These are unique and cannot be shared by two or more computers.

Private LAN IP addresses: As name suggest they are for private LAN network and they cannot be directly connected accessed from global Internet.

16. How do you assign IPs to android Devices

I am providing steps for assigning static IP for as you need not to assign any IP which Dynamically they are assigned.

Steps are:

1. Click "Settings.

2. Click "WIFI."

3. Connect any WIFI

4. Tap and hold on your WIFI network

5. Tap on Modify Network

6. Select or check the Show Advance Options

7. Dismiss the keyboard using back button

8. Tap on IP settings(DHCP) and select static

9. Enter new IP settings as you want

17. What is the latest version of iOS ?

iOS 8.1.2

18. What is the latest version of Android OS?

5.0(Lollipop)

19. List down the Mobile Test Automation Tools

Popular Open Source Tools:

a)MonkeyTalkfor Android, iphone

b)Robotiumfor Android

c)Selenium for iOS & Android

d) Appium for iOS & Android

e) Frank for iOS

f) Calabash for iOS & Android

Paid Tools :

a) Device Anywhere

b) SeeTest

c) PerfectoMobile

d) ZapFix

20.What is your approach while Testing ?

Following Test Strategy can be followed while testing Mobile Application:

First and foremost point is application installation on device , the application installation testing that application should be easily and completely installed on device.

Then comes the smoke or sanity testing, do basic verification of application whether it is testable or not, if no then file a bug or suspend the testing effort.

Then do the functionality testing of Application, whether it is meeting the functional requirement or not.

Then verify the GUI of application.

After this much is done you have to take care of the

Performance of application, i.e. how much time application screens are taking in responding to user action for static applications.

Network testing i.e., using application on EDGE, WIFI, 3G or 4G networks, Airplane modes and observe the behavior of application as some applications crashes on low networks.

Testing call feature from application (if application has that feature) with and without SIM card installed in it.

As now a days most of the devices are coming with touch screens so you have to take care to multi touch using more than one finger, tap & hold on screen and just a small touch etc.

Open all the native application if device is multi tasking then observe the response/behavior of application under test.

Do orientation multiple times if application support orientations.

Then check the un-installation Testing of application i.e., all the components of application should get removed from device when user uninstall it;

After these things are done you have to take care of various other scenarios like

Interruption in the process of installation and at various other place of request/receiving from server etc by receiving call/SMS etc ,low battery indicator, Alarm/Calendar event indicators .

Application specific testing scenarios depend on which type of application you are testing.

Check the compatibility of application on different hardwares which includes different screen size/resolution on real devices like iPhone platform check on iPhone/iPod touch and on iPad which are running on different or same iOS or on different manufacturer devices of same /other device OS like Android or Windows phones or on different emulators as emulators always do not provide complete support to all kind of application.

Do some destructive testing like passing large input at different places or by doing something which is not expected.

Security Testing which also depends upon application to application, basic application like password encryption etc

Retesting and regression testing are continuous part of any kind of testing

21. Which is the prominent feature introduced in iOS 7 which are very important?

Control Center, AirDrop for iOS, and smarter multitasking

22. Which are the prominent feature introduced in iOS 6

New privacy settings, Google Maps, YouTube removed, New Maps introduced, Intelligent Siri, Facebook comes integrated , Passbook app.

23. Which is the prominent feature introduced in iOS 8 which are very important

AirDrop between mac, iPhone & iPad,Health and HealthKit,Interactive notifications,iCloud Drive,CustomizedKeyboard and HomeKit

24. Which is the prominent feature introduced in Android L a.k.a 5.0 or Lollipop which are very important

Material Design