**Mobile App Questions Online - August 1, 2019**

**DO NOT WRITE ANYTHING IN MY DOC**

**DOWNLOAD YOUR Own COPY**

 **Session 1**

1. List all that applies to Interruption Tests .
2. How would you prepare Device for Testing?
3. How would you prepare Test Environment before downloading an APP
4. How would you test a newly released APP that you never tested before? List all that apply
5. Assume APP was released in a Market place. Where would you start testing?

**Session 2**

1. What are a major Mobile Service Providers in US ?
2. What are responsibilities of Mobile Service Providers?
3. What Technology Major Networks Service Providers use?
4. What is a difference between two major Network Service Providers?
5. List Network Evolutions that you know.
6. List a variety of Mobile Devices that you know.
7. What is a difference between FeaturePhone and SmartPhone?
8. What is Jailbreaking? What device this term applies to?
9. What is Unlocking? What device this term applies to?
10. What is Rooting? What device this term applies to?

**Session 3 ( work on Colabus Video and Learn the functionality )**

**Session 4**

1. What is Tethering?
2. List most common Glossary Terms for Android.
3. What is iOS ?
4. List Licensed OS(s).
5. List Proprietary OS(s).
6. List Open Source OS(s).
7. List advantages and disadvantages for Open Source OS
8. How to find Android OS version number?
9. How to find iOS version number?
10. How to find WinPhone version number?
11. What is the latest Android OS name, version number and API Level?
12. List all active Google Android OSs

**Session 5**

27. How to enable Developers Options Menu

1. In Developers Options what else do we need to enable/check prior to connecting our Real Device to ANdroid Studio?
2. What setting in USB Configuration we should select?
3. How to setup Android Studio /adb path for Windows?
4. How to setup Android Studio/adb path for Mac OS?
5. What is Terminal in Android Studio?
6. What command are we using to check connected Devices?
7. What are you steps to authorize a Real Device if you have received a message “ Unauthorized” after you typed adb devices?
8. How do you create AVD?
9. What is an Emulator?
10. Why Emulator is listed as Emulator-5554 ? What is 5554?

**Session 6**

1. What is Android Studio?
2. What is ADB and where this option is coming from?
3. What is ADB is used for?
4. What command line is used to see how many devices are being connected to Android Studio?
5. What is Terminal?
6. What is Android Studio AVD?
7. What is Android Studio AVD used for?
8. Is it necessary to install Android Studio to use SDK? Answer : NO , we can use SDK without Android Studio
9. What is a reason to enable Developers option on Android?
10. What is .APK file?
11. What devices .APK files apply to ?
12. What Integrated Development Environment .APK developed in?
13. What programming languages used to develop .APK ?
14. What is .APK architecture? List container files this package has.
15. What is AndroidManifest.xml file and what information it does contain?
16. How to install app on the Emulator? Practice both ways
17. How to install app on a Real Device ?

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**DO NOT WORK ON THESE QUESTIONS BELOW until instructed. Session structure may change depending on a Project and other factors. Answer only questions that are highlighted in yellow.**

1. What is Fast Boot Mode and when do we need to use it?
2. What is Download Mode and when do we need to use it?
3. What is Recovery Mode and when do we need to use it?
4. What is Safe Mode and when do we need to use it?
5. How to enable Developer Options Menu ? List all steps that are necessary to perform
6. What is Developer’s Mode Menu? Why do we need it?
7. Make a list of some of the DevOp Menu options and how it could be used?
8. What are possible ways to get Bug Report for an Emulator?
9. What is ANR and how it differs from Crash?

**Session 4**

**Session 5**

1. How to get Bug Report without connecting Device to your PC/Laptop?
2. How to get Bug Report using adb command line from a Real Device?
3. What is ADB Logcats?
4. How we can set logcat to run only Error level logs?
5. Unscramble a meaning of < adb logcat \*:F >
6. How to clean logs buffer?
7. Why do we need to clean buffer before running logcat?
8. How to save logs into a text file?
9. How to stop running logs?
10. How to simultaneously run logcat for an application and dump it to the text file ?
11. How to get a package information?

**Session 6**

1. What is Monkey Test?
2. What is the number ( exp. 5000 ) represents at the end of the line?
3. How can we run and collect logs from a Monkey Test ?
4. How to collect logs from threadtime?
5. Using what command line we can copy file from PC/laptop to our Device?
6. What directory on our Devices are available for data transfer?

**Session 7**

1. Using what command line we can copy file from our Device to PC/Laptop?
2. What are the command line we use to retrieve Bugreport files from our Device?
3. How to make your device Remote?
4. How to get your IP Address using adb command line?
5. Why do we separate Remove Device by serial number?
6. How to reboot device?
7. Why adb is not working in Shell?
8. What is shell ?
9. Is it possible to run adb command line in shell?
10. Why adb is not working in Shell ?
11. What adb command do we use to take a screenshot?
12. What formats are suitable for saving screenshot images?
13. What adb command do we use to record a video continuously ?
14. What adb command do we use to record a 1 min video, and 2 min video ?

**Session 8**

1. What adb command do we use to kill an emulator ?
2. How to create folder/subfolder ?
3. How to remove folder/subfolder?
4. How to Stop Server?
5. How to Restart Server?
6. What is DUMPSYS commands and what can we do using it?
7. List few examples what data we can extract using DUMPSYS commands

 use adb shell dumpsys -l ( to get all possible testing options . See our class document )

Session 9

1. What is the difference in Testing Approaches between Desktop and Mobile Testing in general? ( see slides )

**Open Walmart Website on your PC/Laptop and download Walmart APP on your phone ( see homework)**

1. What is the difference in Testing Approaches between Mobile Web APP and Mobile Native APP? -self help
2. What is the difference in Testing Approaches between Desktop Native APP and Mobile Native APP?-self help
3. What is the difference in Testing Approaches between Desktop Website and Mobile Web APP?-self help

**Session 11**

( Please review self study folder mentioned in a HW - then answer some of these questions )

1. What is iOS?
2. What is iOS latest version number?
3. What is .IPA file?
4. List few alternatives to Google OS
5. Is there an alternative to Google OS ?
6. If there is an alternative to Google OS , list a few that you know.

**Session 12**

1. Give a definition of Software Framework
2. List Software Framework’s distinguishing features
3. How many layers Android OS contains of?
4. What is Linux Kernel functionality?
5. What is Libraries?
6. What is Android Runtime?
7. What is the difference between Dalvik Virtual Machine (VM) and ART ?
8. List most important app framework components.
9. Where APP Layer is located?
10. What is API?
11. What types of API do you know?
12. Describe what each API is about .
13. List App Categories
14. List App Types
15. In what programming language Native APP is developed for Google OS ?
16. In what programming language Native APP is developed for iOS ?
17. Describe how Native APP communicates with OS
18. How do we access Web app ?
19. In what programming language Web APP is developed for Server Side ?
20. In what programming language Web APP is developed for Client Side ?
21. In what programming language Hybrid APP is developed for Google OS ?
22. In what programming language Hybrid APP is developed for iOS ?
23. Describe how Hybrid APP communicates with OS
24. Describe how WEB APP communicates with OS
25. Select either Native, or Hybrid or WEB APP and list the pros and cons

**Session 13**

1. List distribution and Installation Channels for .APK package.
2. What is TestFairy ?
3. What is TestFairy used for?
4. How to install a third party .APK?
5. Is it possible to get Logs from your devices without connecting Phone to PC/Mac?
6. If you answered YES in question in previous describe how.
7. List distribution and Installation Channels for .IPA package.
8. What is XCode?
9. How to collect Logs from XCode on Mac?
10. How to Collect Logs from iPhone without XCode?
11. What is iTunes?
12. How to collect Logs from iTunes?
13. What is TestFlight?
14. What are the challenges in Mobile Device Testing ?
15. What the term “Device Fragmentation” means?
16. List advantage and disadvantage of Automated Testing?
17. List advantage and disadvantage of Manual Testing?
18. List types of Mobile App Tests that are used in Industry.
19. What would you test for Functional Test?
20. What would you test for Performance Test?
21. What is Memory Leakage Test?
22. List all that apply to Interruption Test?
23. What would you test for Usability Test?
24. Apply all possible Scenarios to perform an Installation Test properly?
25. What would you test for Platform/OS Test?
26. List few Functional Tests
27. List few Non Functional Tests
28. Describe Accessibility Test and to whom it may apply.
29. What areas of accessibility Screen Readers are designed to cover?
30. Select one area ( exp : closed captions, or voice commands) and create 5 test cases

**Session 14**

1. What are Security Test?
2. What are Mobile Security threats and vulnerabilities?
3. Describe what is “OWASP” stands for?
4. What is most recent OWASP Top Ten List?
5. List few of OWASP Top Ten RISKS?

**Session 15**

1. What is Remote Device Access and what is it used for?
2. List most popular RDAs that Industry uses.
3. What is Mobile Emulator?
4. By whom Mobile Emulators supplied from?
5. List types of Mobile Emulators?
6. List some of advantages and disadvantages of Mobile Emulators. (What tests can’t be performed on Emulators?)
7. What is Mobile Simulator?
8. By whom Mobile Simulators supplied from?
9. List some of advantages and disadvantages of Mobile Simulators.
10. What should be considered when setting up a Mobile Testing Lab?