

1. List down the things you cannot test on an Emulator but on Real Devices?

Ans. The software cannot emulate battery issues, network connectivity and other real-time data: GPS, sensors, gestures, touch force, etc. It cannot emulate the performance of an app in terms of incoming calls, SMS, etc.

2. What All Major Networks to Be Considered While Performing Application Testing?

Ans. You should test the application on 4G, 3G, 2G and WIFI. 2G is a slower network, its good if you verify your application on slower network also to track your application performance.

3. What are the google core quality guidelines for Mobile Apps, Explain guidelines for Functionality?

Ans. Android users expect high-quality apps. App quality directly influences the long-term success of your app—in terms of installs, user rating and reviews, engagement, and user retention.

If you're creating apps for other Android devices, such as tablets or TV, there are additional quality guidelines you should consider.

- a. Visual design and user interaction.
 - i. Standard design
 - ii. Navigation
 - iii. Notifications
- b. Functionality.
 - i. Permissions
 - ii. Install location
 - iii. UI and Graphics
 - iv. User/app state
- c. Compatibility, performance and stability.
 - i. Stability
 - ii. Performance
- d. Security.
 - i. Networking
 - ii. Data
 - iii. WebViews
 - iv. App Components
- e. Google Play / App Store
 - i. Policies
- f. Setting up a test environment.
- g. Test procedures.
 - i. Hardware acceleration and so on

4. Write down test cases for Push notification.

Test Cases for Push Notification

Sr. No	Title	Summary	Precondition	Importance	Steps	Expected Result	Type
TC_01	Verify the notification received when the app is open.	Verify the notification received when the app is open.	App must be installed	High	1) Open the app 2) User will get the message	Notification is shown	Manual
TC_02	Verify the notification received even if the app is closed.	Verify the notification received when the app is Closed	App must be installed	High	1) Randomly on any functionality of phone 2) User get notification from the app	Notification is shown	Manual
TC_03	Verify the notification received even if the device is lock.	To Verify the notification when Phone is Locked	App must be installed	High	1) Phone must be locked 2) Message comes on the app	Notification is shown	Manual
TC_04	Verify the notification received even if user playing the game.	To verify the notification when User is playing game	App must be installed User is playing game	High	1) User is playing any game 2) user get any message from our app	Notification is shown	Manual
TC_05	Verify the notification received even if another app is in use.	To verify the notification when User is on other app	App Must be installed	medium	1) User Must be on another app. 2) User must get any message from our app	Notification is shown	Manual
TC_06	Verify the notification received in multiple time zones.	To Verify the notification received in multiple time zones.	App Must be installed	MEDIUM	1) User changes its time zone from device setting 2) User Gets any message from our app	Notification is shown	Manual
TC_07	Verify the notification is clickable & it's open up the notification.	To verify the notification is clickable and opening	App must be installed	high	1) User must get notification in notification panel of device 2) User will click on the notification	User will navigate to app and able to see the notification directly.	Manual
TC_08	Verify the sound, vibration & blinking.	To Verify the sound, vibration & blinking	App Must be installed Phone must be on general for sound setting for	high	1) User get any message or notification from app	phones gets vibrated with sound and blinking notification	Manual

			Vibration must be ON			come.	
TC_09	Verify app crashed after tapping on the notification	To verify that app get crashed after getting notification	App must be installed	High	1) User get an push notification 2) User tap on it.	App gets crashed.	Maunal
TC_10	Verify the notification is not getting removed from notification bar once the notification is opened.	To Verify the notification is not getting removed from notification bar once the notification is opened.	App Must be installed	High	1) User get an Push notification 2) User will tap on it.	Notification is not removed after opening.	Manual
TC_11	Verify repeated notification comes for same message.	To verify that same notification is coming repeatedly.	App Must be installed	High	1) User is getting message or notification	Notification is coming repeatedly.	Manual
TC_12	Verify the notification is not clickable.	To verify that the notification is not clickable	App must be installed	High	1) User gets an notification from any ap.	User is not able to click on the notification.	Manual
TC_13	Verify that notification get disappear after tapping.	To verify that notification is disappearing after tapping.	App Must be installed	High	1) User gets an notification from any app and click on it.	Notifications gets disappear but didn't open the app for seeing the message of notification.	Manual
TC_14	Verify repeated notification multiple times and check notification is in the order.	To verify the order of the notification	Apps must be installed	High	1)User is getting notification from different app on the same time with minor differnce.	Order of Notification is correct in case of multiple notification.	Manual
TC_15	Verify recent notification message always should be on the top in a stack.	To verify that recent notification should be at top	App must be installed Some notification already exists.	Medium	1) User is getting notification from the app	Recent notification is at top in the stack	Manual
TC_16	Verify that Icon count increased when not clicked on notification	To verify that Icon count increase when not clicked on notifications.	App must be installed.	Medium	1)User keeps on geeting notification and did not tap on them.	App icon count got increased	Manual

5. How to record a log from the Android/iOS device?

Ans. Tools For android :

- TestFairy
- Fiddler

- LogCat
- Crashlytics (now replaced by FireBase)

Steps in detail

1. Setup Java on your Machine according to the 32 /64 bit machine architecture.
2. Setup Android SDK on windows machine.
3. Enable USB Debugging from Settings->Developer Option->Debugging.
4. Enable Stay Awake from Settings->Developer Option.
5. Move to the Android SDK directory on Machine like E:\SDK_NDKFOLDER\Android-sdk.
6. Open bat file on double click from E:\SDK_NDKFOLDER\Android-sdk\tools.
7. 'Dalvik Debug Monitor' window will open.
8. Capture Screen: Select Device in Left panel (Device ->Screen Capture).
9. The screen will get captured and you can save with Ctrl + S or Save button.
10. Record Screen: We can record Android device screen from Device-> Screen Record.
11. Recorded screen will save on the default document location or where you set the path.
12. Recorded video output format will be .mp4.
13. Capture adb logcat/Android device logs from Device ->Run logcat.
14. Save Logs from right click on Logs->Select All->Copy and paste in a notepad file or gist file.

Tools for iOS are :

- TestFairy
- Crashlytics (now replaced by FireBase)
- InstaBug
- XCode
- iOS Console

Steps to record iPhone screen

1. Connect your iPhone using a cable.
2. Open 'QuickTime Player' from Applications.
3. Click the File menu and choose "New Movie Recording".
4. Click the arrow on the right of the record button and you will see your phone as a choice.
5. Now you can record Mac screen using Jing/TechSmith/Screencast as earlier.
6. You can start activity on iPhone Screen. You can see the activity displayed on the Mac screen.
7. You can save the recorded screen by first clicking on the Start Recording button, then stop the recording by clicking on the Stop Recording button. Finally, you can export/save the recorded video in multiple sizes (480Px, 720Px, 1020Px, etc.) from File ->Export to option.

6. What do you understand by Device and OS fragmentation in mobile application testing?

Ans. Mobile device fragmentation is a phenomenon that occurs when some mobile users are running older versions of an operating system, while other users are running newer versions.

Mobile device fragmentation can be a problem for software developers who must create different versions of the same app in order to make sure it works correctly with different versions of a given OS. It can also be a problem for IT departments because different operating versions have different capabilities, which can make them harder to manage and secure.

The term mobile device fragmentation is also used to describe different versions of the same operating system that are created when an original equipment manufacturer (OEM) modifies an open source mobile operating system for specific products.

7. What is deep linking? What do you understand by deferred deep linking?

Ans. Deep linking is when a link sends users directly into a specific point in the app experience, rather than an external website or app homepage.

- Mobile app deep links (also known simply as “deep links”) point to content inside an app.
 - More Visibility
 - More Clicks
 - More Engagement

Deferred deep linking is one aspect of mobile deep linking. It describes the principle of deep linking into an app that is not yet installed. In this case, deep linking will be "deferred" until the application will be installed by the user.