CHECKLIST FOR MOBILE APPLICATION TESTING

By Shivkumar Jirwankar QA Engineer, Clarion Technologies

Table Of Contents

Title	Page Number
INTRODUCTION	2
DEVICE SPECIFIC CHECKLIST	3-5
NETWORK SPECIFIC CHECKLIST	6
APPLICATION SPECIFIC CHECKLIST	7-8
APPLICATION USER INTERFACE CHECKLIST	9-11

INTRODUCTION

With time, smartphones have evolved, so as its users. We all use smartphones in our day to day life. Mobile OS like Android and iOS have captured the market and have got maximum users. In this era of smartphone, a good quality mobile application is what every user look out for.

There are several advantages of using an application over the web application. So, it is very important to build a good quality application, so as to boost the business of a particular organization.

This document contains the important checklist of any Android, iOS, windows or any other OS specific application. Functional checkpoints will differ from application to application. But the checklist related to the device specific, network specific and UI specific will almost remains the same.

Kindly go through this document and make sure that you perform the maximum coverage of checklists. This will surely enhance the quality of your mobile application and ultimately add to the business value of the organization.

1. DEVICE SPECIFIC CHECKLIST

Sr. No.	Description	Remarks
1.1	Can the app be installed on the device?	
1.2	Does the app behave as designed/desired if there is an incoming call?	
1.3	Does the app behave as designed/desired if there is an incoming SMS?	
1.4	Does the app behave as designed/desired if the charger is connected?	
1.5	Does the app behave as designed/desired if the charger is disconnected?	
1.6	Does the app behave as designed/desired if the device goes to sleeping mode?	
1.7	Does the app behave as designed/desired if the device resumes from sleeping mode?	
1.8	Does the app behave as designed/desired if the device resumes from lock screen?	
1.9	Does the app behave as designed/desired if the device is tilted?	

1.10	Does the app behave as designed/desired if the device is shaken?	
1.11	Does the app behave as designed/desired if there is push notification message coming from in -built apps (calendar reminders, to-do task etc.).	
1.12	Does the app behave as designed/desired if a push message is coming from another app (like Whatsapp, Facebook, Instagram, Twitter, Gmail etc).	
1.13	Does the app interact with the GPS sensor correctly (switch on/off, retrieve GPS data)?	
1.14	Is the functionality of all the buttons or keys on the device defined for this app?	
1.15	Verify that buttons or keys which are not defined function have no unexpected behaviour on the app when pressed.	
1.16	In case there's a true "back" button available on the device does the "back" button take the user to the previous screen?	
1.17	In case there's a true "menu" button available on the device, does the menu button show the app's menu?	
1.18	In case there's a true "home" button available on the device, does the home button get the user back to the home screen of the device?	

1.19	In case there's a true "search" button available on the device, does this get the user to some form of search within the app?	
1.20	Does the app behave as designed/desired if the "low battery" message is pushed?	
1.21	Does the app behave as designed/desired if the sound on the device is turned off?	
1.22	Does the app behave as designed/desired if the device is in airplane mode?	
1.23	Can the app be uninstalled from the device?	
1.24	Does the application function as expected after re-installation?	
1.27	Can the app be found in the play store or app store? (Check after it goes live)	
1.28	Can the app switch to different apps on the device through multitasking as designed/desired?	
1.29	Are all touch screen positions (buttons) working when a screen protector is used?	

2. NETWORK SPECIFIC CHECKLIST

Sr. No.	Description	Remarks
2.1	Does the app behave according to specification if connected to the internet through Wi-Fi?	
2.2	Does the app behave according to specification if connected to the internet through 2G, 3G, 4G data network ?	
2.3	Does the app behave according to specification and show error message when the app is out of network reach?	
2.4	Does the app resume working when it gets back into network reach?	
2.5	Does the app still work correctly when tethering or otherwise to another device?	
2.6	What happens if the app switches between networks (Wi-Fi, 3G, 2G and 4G)?	
2.7	Does the app use standard network ports (Mail: 25, 143, 465, 993 or 995 HTTP: 80 or 443 SFTP: 22) to connect to remote services, as some providers block certain ports.	

3. APPLICATION SPECIFIC CHECKLIST

Sr. No.	Description	Remarks
3.1	Has the app been tested on different type of devices and different versions of OS?	
3.2	Stability check: If the app has a list (for instance of pictures) in it, try scrolling through it at high speed.	
3.3	Stability check: If the app has a list (for instance of pictures) in it, try scrolling to before the first picture pr entry and beyond the last picture or entry.	
3.4	Is downloading of the app prevented in case it's bigger than the OS allows downloading when connected to cellular networks.	
3.5	Integration: does the app connect correctly to the different social networks (LinkedIn, twitter, facebook, etc) or to any other application or site.	
3.6	The app does not interfere with other apps when in background/multitasking mode (using GPS, playing music, etc.).	
3.7	Can the user take print from the app (if applicable)?	
3.8	The search option in the app displays relevant results.	
3.9	Verify most common gestures used to control the app.	

3.10	What happens when you select different options at the same time (undesired multitouch) ?	
3.11	App name should be self explanatory.	
3.12	Does the app limit or clean the amount of cached data.	
3.13	Reloading of data from remote service has been properly designed to prevent performance issues at server-side. (manual reloading of data can reduce the amount of server calls)	
3.14	Does the app go to sleep mode when running in the background (prevent battery drain) ?	
3.15	Does app is asking permission to access a particular feature of the phone? (For example, Calendar, Contacts, Phone dialer, location, GPS, etc).	

4. APPLICATION USER INTERFACE CHECKLIST

Sr. No.	Description	Remarks
4.1	To keep controls as unobtrusive as possible for instance by fading them out if they are not used for a while.	
4.2	Make it possible for users to go back to a previous screen for instance by adding a back or cancel button	
4.3	The main function of the app should be apparent immediately. It should speak for itself.	
4.4	Use at most one action on the screen that is highlighted as the most likely for the user. (Example: in iOS a blue button represents the default or most likely action).	
4.5	Minimize user actions by using a picker or a table view where users can select a certain choice over a data entry field where users have to type a choice	
4.6	In an app, the user should not be able to store files locally, outside the app sandbox.	
4.7	In an app, the user should not be exposed to the permissions of a specific file	
4.8	If there is a long list of data to scroll through, provide a search option above the list.	

4.9	If performance is slow, indicate a progress status icon ("Loading"), preferably with specific message.	
4.10	In case of 'live' filtering of data while the user enters his search query, verify the performance.	
4.11	The appearance of buttons that perform standard actions are not altered in the app (for instance: refresh, organize, trash, Reply, back, etc.)	
4.12	Do not use standard buttons for other functions then that they are normally used for	
4.13	The app should respond to all changes in device orientation, as per the design	
4.14	Tapable elements should be about 7x7 mm in size, using the pixel density of the target device you can calculate the amount of pixels (chapter documentation contains a link to different devices compared).	
4.15	Do not redefine gestures in your app that have a standard meaning (example: swiping from top to bottom enables the notification center)	
4.16	Requirement to login is delayed in the app as long as possible	
4.17	If the app is stopped at an unexpected time, user data should be saved locally and available at start-up.	

4.18	Users should be warned of the consequences of deleting a document	
4.19	Keyboard adjusts according to the input (for instance, numbers/letters keypad should open up in case of Phone Number field).	
4.20	Are inactive buttons clearly distinguished from active buttons?	