

INTRODUCTION

This checklist is specifically designed to test the characteristics of a mobile app. Obviously, it tests only generic app characteristics and not the functionality of the app. For this a separate test approach and test script must be created. The same goes of course for performance testing, usability testing, security testing and other testing activities necessary for your specific app.

The checklist is split into five different fields:

- Device specific characteristics. These are characteristics that are related to the device on which the app is installed.
- Network specific checks
- App checks. These are things to check that have to do with functionality that is frequently used in an app.
- App User interface checks.
- Store specific checks.

DEVICE SPECIFIC CHECKS

#	Description	OK/ NOT?	Remarks
1.1	Can the app be installed on the device?	<input type="checkbox"/>	
1.2	Does the app behave as designed/desired if there is an incoming call?	<input type="checkbox"/>	
1.3	Does the app behave as designed/desired if there is an incoming SMS?	<input type="checkbox"/>	
1.4	Does the app behave as designed/desired if the charger is connected?	<input type="checkbox"/>	
1.5	Does the app behave as designed/desired if the charger is disconnected?	<input type="checkbox"/>	
1.6	Does the app behave as designed/desired if the device goes to sleeping mode	<input type="checkbox"/>	
1.7	Does the app behave as designed/desired if the device resumes from sleeping mode	<input type="checkbox"/>	
1.8	Does the app behave as designed/desired if the device resumes from lock screen?	<input type="checkbox"/>	
1.9	Does the app behave as designed/desired if the device is tilted?	<input type="checkbox"/>	
1.10	Does the app behave as designed/desired if the device is shaken?	<input type="checkbox"/>	
1.11	Does the app behave as designed/desired if a local message is coming from another app (think of: calendar reminders, to-do task etc.).	<input type="checkbox"/>	
1.12	Does the app behave as designed/desired if a push message is coming from another app (think of: twitter mentions, whatsapp message, wordfeud invitation, etc).	<input type="checkbox"/>	
1.13	Does the app interact with the GPS sensor correctly (switch on/off, retrieve GPS data)?	<input type="checkbox"/>	
1.14	Is the functionality of all the buttons or keys on the device defined for this app?	<input type="checkbox"/>	
1.15	Verify that buttons or keys which have no defined function have no unexpected behaviour on the app when activating.	<input type="checkbox"/>	
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?	<input type="checkbox"/>	
1.17	In case there's a true "menu" button available on the device, does the menu button show the app's menu?	<input type="checkbox"/>	
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?	<input type="checkbox"/>	
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?	<input type="checkbox"/>	

1.20	Does the app behave as designed/desired if the "Battery low" message is pushed	<input type="checkbox"/>	
1.21	Does the app behave as designed/desired if the sound on the device is turned off?	<input type="checkbox"/>	
1.22	Does the app behave as designed/desired if the device is in airplane mode?	<input type="checkbox"/>	
1.23	Can the app be de-installed from the device?	<input type="checkbox"/>	
1.24	Does the application function as expected after re-installation?	<input type="checkbox"/>	
1.25	Can the app be found in the app store? (Check after go-live)	<input type="checkbox"/>	
1.26	Can the app switch to different apps on the device through multitasking as designed/desired?	<input type="checkbox"/>	
1.27	Are all touch screen positions (buttons) working when a screen protector is used.	<input type="checkbox"/>	

NETWORK SPECIFIC CHECKS

#	Description	OK/ NOT?	Remarks
2.1	Does the app behave according to specification if connected to the internet through Wi-Fi?	<input type="checkbox"/>	
2.2	Does the app behave according to specification if connected to the internet through 3G?	<input type="checkbox"/>	
2.3	Does the app behave according to specification if connected to the internet through 4G?	<input type="checkbox"/>	
2.4	Does the app behave according to specification of the app is out of network reach?	<input type="checkbox"/>	
2.5	Does the app resume working when it gets back into network reach from outside reach of the network?	<input type="checkbox"/>	
2.6	Update transactions are processed correctly after re-establishing connection.	<input type="checkbox"/>	
2.7	Does the app still work correctly when tethering or otherwise connected to another device	<input type="checkbox"/>	
2.8	What happens if the app switches between networks (Wi-Fi, 3G, 4G)	<input type="checkbox"/>	
2.9	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.	<input type="checkbox"/>	

APP SPECIFIC CHECKS

#	Description	OK/ NOT?	Remarks
3.1	Has the app been tested on different type of devices and different versions of OS?	<input type="checkbox"/>	
3.2	Stability check: if the app has a list (for instance of pictures) in it, try scrolling through it at high speed.	<input type="checkbox"/>	
3.3	Stability check: if the app has a list (for instance of pictures) in it, try scrolling to before the first picture or behind the last picture.	<input type="checkbox"/>	
3.4	Is downloading of the app prevented in case it's bigger than the OS allows downloading when connected to cellular networks.	<input type="checkbox"/>	
3.5	Integration: does the app connect correctly to the different social networks (LinkedIn, twitter, facebook, etc).	<input type="checkbox"/>	
3.6	The app does not interfere with other apps when in background/multitasking mode (using GPS, playing music, etc.).	<input type="checkbox"/>	
3.7	Can the user print from the app (if applicable)	<input type="checkbox"/>	
3.8	The search option in the app displays relevant results	<input type="checkbox"/>	
3.9	Verify most common gestures used to control the app.	<input type="checkbox"/>	
3.10	What happens if you select different options at the same time (undesired multitouch, for example - select two contacts from the phone book at the same time).	<input type="checkbox"/>	
3.11	App name should be self explanatory	<input type="checkbox"/>	
3.12	Does the app limit or clean the amount of cached data.	<input type="checkbox"/>	
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)	<input type="checkbox"/>	
3.14	Does the app go to sleep mode when running in the background (prevent battery drain)	<input type="checkbox"/>	

APP USER INTERFACE CHECKS

#	Description	OK/ NOT?	Remarks
4.1	To keep controls as unobtrusive as possible for instance by fading them out if they are not used for a while.	<input type="checkbox"/>	
4.1	Make it possible for users to go back to a previous screen for instance by adding a back or cancel button	<input type="checkbox"/>	
4.2	The main function of the app should be apparent immediately. It should speak for itself.	<input type="checkbox"/>	
4.3	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).	<input type="checkbox"/>	
4.4	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	<input type="checkbox"/>	
4.5	In an app, the user should not be able to store files locally, outside the app sandbox.	<input type="checkbox"/>	
4.6	In an app, the user should not be exposed to the permissions of a specific file	<input type="checkbox"/>	
4.7	If there is a long list of data to scroll trough, provide a search option above the list.	<input type="checkbox"/>	
4.8	If performance is slow, indicate a progress status icon ("Loading..."), preferably with specific message.	<input type="checkbox"/>	
4.9	In case of 'live' filtering of data while the user enters his search query, verify the performance.	<input type="checkbox"/>	
4.10	The appearance of buttons that perform standard actions are not altered in the app (for instance: refresh, organize, trash, Reply, back, etc.)	<input type="checkbox"/>	
4.11	Do not use standard buttons for other functions then that they are normally used for	<input type="checkbox"/>	
4.12	The app should respond to all changes in device orientation, as per the design	<input type="checkbox"/>	
4.13	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).	<input type="checkbox"/>	
4.14	Do not redefine gestures in your app that have a standard meaning (example: swiping from top to bottom enables the notification center)	<input type="checkbox"/>	
4.15	Requirement to login is delayed in the app as long as possible	<input type="checkbox"/>	

4.16	If the app is stopped at an unexpected time, user data should be saved locally and available at start-up.	<input type="checkbox"/>	
4.17	Users should be warned of the consequences of deleting a document	<input type="checkbox"/>	
4.18	Keyboard adjusts to expected input (for instance numbers/letters when expected).	<input type="checkbox"/>	
4.19	Are inactive buttons clearly distinguished from active buttons?	<input type="checkbox"/>	

STORE SPECIFIC CHECKS

These checks are important to be confident that an Apple app will pass the submission process of the app store.

These checks are largely based on the apple App store guidelines. The other leading app store - Google Play, has much less strict demands. Other app stores like the Amazon app store have stronger restrictions, we've added them in a special paragraph in case they are relevant.

Keep in mind that the Apple app store submission process is not crystal clear. On many occasions, it is unclear why apps are rejected or accepted. Keep the following line in mind from the apple app review guidelines:

We will reject Apps for any content or behaviour that we believe is over the line. What line, you ask?

Well, as a Supreme Court Justice once said, "I'll know it when I see it". And we think that you will also know it when you cross it.

Note: the guidelines that are covered here are the ones that are special to the app store. For instance: Guideline 2.1 states that "Apps that crash will be rejected". Making sure that an app doesn't crash is not remedied by a simple check - it requires a functional test.

Second Note: Part of the iOS guidelines is the following guideline 10.1 Apps must comply with all the terms and conditions explained in the Apple iOS Human Interface guidelines. We've incorporated these in the Chapter "App user interface checks".

So if you're not planning to submit the app to an app store, these checks are not necessary? In principle, yes. However, many of these have relevance even if your app is not distributed through a store but for instance to a limited set of your employees. So these checks might still be useful.

#	Description	OK/ NOK?	Remarks
5.1	The app can't use any "non-public API's". This means that you can't use some functions that the distributing platform uses for its own apps. (This can generally be checked best by some sort of automated tool, like http://www.chimpstudios.com/appscanner/)	<input type="checkbox"/>	
5.2	The app can't reprogram controls of the device that are not intended for that use. (For instance: using the volume button as a shutter for the camera).	<input type="checkbox"/>	
5.3	The app should not access information on the device outside the app without the user's permission (for instance, copying the address book or getting information from other apps).	<input type="checkbox"/>	
5.4	The app should not access or write files outside the "Bundle" and "Documents" directory. (because the app can't read or write data outside the designated container area).	<input type="checkbox"/>	

5.5	The app cannot download code to be installed without the users consent.	<input type="checkbox"/>	
5.6	The app can only get new functionality by way of an upgrade through the app store.	<input type="checkbox"/>	
5.7	After download, an app should remain working. An app cannot turn off after a few days.	<input type="checkbox"/>	
5.8	An app can't be a "trail", "beta", "demo" or "test" version.	<input type="checkbox"/>	
5.9	Apple product names should be spelled correctly in the app. (For instance: iPhonez is wrong).	<input type="checkbox"/>	
5.10	If the app uses the web, it is not done using third party (i.e. non-Apple) browsers.	<input type="checkbox"/>	
5.11	You cannot mention other app platforms in your app (for instance: "Also available on android!")	<input type="checkbox"/>	
5.12	An app cannot use old interfaces, like for instance the iPod click wheel.	<input type="checkbox"/>	
5.13	Multitasking functionality of the app can only be used for its intended purposes, i.e. VoIP, Audio playback, location, task completion, local notifications, etc. This means that generally an app can't run in the background but has to be closed off if it's not used any more.	<input type="checkbox"/>	
5.14	The app must have some functionality. For instance, it can't be just a title page leading to some text. It can't be just a song, movie or book as there are different platforms for that.	<input type="checkbox"/>	
5.15	Functionality should be in sync with functionality described in store.	<input type="checkbox"/>	
5.16	In general, the app has to be <i>decent</i> . So no explicit material in the sense of sex, violence, drugs, alcohol or tobacco. It cannot address a specific ethnic or religious group in a derogatory way.	<input type="checkbox"/>	
5.17	The app has to be <i>honest</i> . This means that the description of the app has to be correct, and all functionality has to work as described. If an app gives diagnostic information, it has to be reliable. This also means that the genre and category in the description must be appropriate. The app icons should be consistent and appropriate.	<input type="checkbox"/>	
5.18	An app can't restrict the users of the app for instance by location or carrier.	<input type="checkbox"/>	
5.19	An app cannot send spam or introduce viruses, or use other apple platforms like Game Center and Push Notifications to do so.	<input type="checkbox"/>	

5.20	The app should aim at backing up a minimum of information on iCloud. The information in iCloud should be just the user generated information. Information that can be recreated or downloaded should not be backed up.	<input type="checkbox"/>	
5.21	An app cannot use location services of the device without asking permission.	<input type="checkbox"/>	
5.22	All url's in the app code should be fully functional	<input type="checkbox"/>	
5.23	The app can't use the user's location without permission.	<input type="checkbox"/>	
5.24	The location services cannot be used to autonomously control of vehicles or for emergency services.	<input type="checkbox"/>	
5.25	An app cannot use push notifications without user consent.	<input type="checkbox"/>	
5.26	Push notifications have to be send using the Apple Push Notification (APN) API. This has to be done using an APN ID.	<input type="checkbox"/>	
5.27	Push notification can't send personal information.	<input type="checkbox"/>	
5.28	The App may not distribute any private information of users (like Player ID) through the game center.	<input type="checkbox"/>	
5.29	Ad banners must be hidden when there are no ads available.	<input type="checkbox"/>	
5.30	The app must respect copyright of apple and other parties.	<input type="checkbox"/>	
5.31	The in app purchase mechanism cannot be used to purchase goods and services used outside the app.	<input type="checkbox"/>	
5.32	The in app purchase mechanism cannot be used to collect money for charities. This has to be done through SMS.	<input type="checkbox"/>	
5.33	The in app purchase mechanism cannot be used to buy a raffle or lottery ticket directly from the app.	<input type="checkbox"/>	
5.34	Apps that encourage the users to use the device in a way that may damage the device will be rejected	<input type="checkbox"/>	
5.35	An app cannot require user's personal information (for instance email address) in order for it to function.	<input type="checkbox"/>	