Becoming a Pro Mobile Applications Testing



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Testing Strategies for Mobile Apps

USABILITY TEST

To ensure that the buttons should have the required size and be suitable to big fingers. To ensure that the buttons are placed in the same section of the screen to avoid confusion to the end users.

To ensure that the icons are natural and consistent with the application.

To ensure that the buttons, which have the same function should also have the same color.

To ensure that the validation for the tapping zoom-in and zoom-out facilities should be enabled.

To ensure that the keyboard input can be minimized in an appropriate manner.

To ensure that the application provides a method for going back or undoing an action, on touching the wrong item, within an acceptable duration.

To ensure that th<mark>e contextual menus are not overloaded because</mark> it has to be used quickly.

Testing Strategies for Mobile Apps

INSTALLATION TEST

Verify application gets installed properly

Verify user can uninstall application successfully

Verify app updates are properly installed

Verify aborting installation does not affect other features

Check app behavior on trying to install it on non-supported version/device.

Verify app is installed properly from app store and from side loading

Testing Strategies for Mobile Apps

SECURITY TEST

Data flow -- Can you establish an audit trail for data, what goes where, is data in transit protected, and who has access to it?

Data storage -- Where is data stored, and is it encrypted? Cloud solutions can be a weak link for data security.

Data leakage -- Is data leaking to log files, or out through notifications?

Authentication -- When and where are users challenged to authenticate, how are they authorized, and can you track password and IDs in the system?

Server-side controls -- Don't focus on the client side and assume that the back end is secure.

Points of entry -- Are all potential client-side routes into the application being validated?

Testing Strategies for Mobile Apps

Platform/OS TEST

Different OS ->Android, IOS, Windows

Different browsers -> Firefox, Google Chrome, IE, Safari

Different Screen Size and resolution

OS versions and memory size

Hardware capable of interrupt handling without getting hanged

Multilingual Support

Different Time Zones Support

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Mobile Test Industry Standards : Testing Strategies for Mobile Apps EXTRA

FUNCTIONAL VS Non-FUNCTIONAL TEST

Unit Testing Smoke testing / Sanity testing

Integration Testing (Top Down, Bottom up Testing)

Interface & Usability Testing

System Testing

Regression Testing

Pre User Acceptance Testing (Alpha & Beta)

User Acceptance Testing

White Box & Black Box Testing

Load and Performance Testing

Ergonomics Testing

Stress & Volume Testing

Compatibility & Migration Testing

Data Conversion Testing

Penetration Testing

Operational Readiness Testing

NON- FUNCTIONAL

Installation Testing

Security Testing

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Mobile Test Industry Standards : Testing Strategies for Mobile Apps EXTRA

ACCESABILITY TEST (What is SCREEN READER ?)

Mobile Accessibility is critical to reaching all audiences. A product is accessible when a person with a disability can have an experience equivalent to that of a person without a disability

Users who are blind will use a screen reader to navigate and access information on mobile devices.

The screen readers are included in the device operating system and can be turned on in the device settings.

When Screen Reader is turned on, the gestures and keyboard shortcuts change.

In the 2014 Webaim survey shows that 82% of Screen Reader users will use a mobile device

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Mobile Test Industry Standards : Testing Strategies for Mobile Apps EXTRA ACESSABILITY TEST (SCREEN READER)

Web Content Accessibility Guidelines (WCAG)

- A person who is blind using a screen reader or a talking browser can navigate your information and interact with it.
- A person with low-vision can magnify the screen and understand the content.
- A person who is deaf or hard-of-hearing can read captions in multimedia presentations.
- A person with a dexterity limitation can use the alternative input devices for all interaction, or can use speech recognition software.
- A person with ADHD or dyslexia can use and understand the content and complete tasks
- Please refer to this link to learn more https://www.w3.org/TR/WCAG20/

Screen reader testing on mobile

Zooming site/application

Color ratios

Readability of the site

Navigation