

# Heuristic Evaluation for Mobile Devices

**Set constraints** - The project will have limits of engagement. If the project is only to address how it works on iPhone 4 and above, there's no point in logging issues on Android or Blackberry much less featurephones.

**Know your audience** - You are an office worker. Make no assumptions about your users, and find out how they work. What do they expect, what do they use on their device right now and how often.

**Know what your audience uses** - Within the limits above, find out what devices and browsers your users employ. Ideally, you have specific research and maybe even analytics from the first launch or similar products. Otherwise, use basic knowledge of the industry and regions.

**Know how your audience works** - If outside, account for glare. If never really sitting still, take into account one-handed use and movement.

**Do not forget browsers** - (Only for Web) In some markets, the default browser is not used, or is no longer the default browser due to language or other regional needs. Know this, and check in the correct browser, or in several.

**Think about the ecosystem** - Check app store descriptions, icons, app filenames, confirmation emails, error messages, shared link labels. Don't assume entry at the home page, but simulate Google searches and resumption after delays.

**Don't get lost** - Make a chart of what you are going to test, both process and platforms, and mark it off as you go.

- Load in portrait mode.
  - Check that all components are visible.
  - Check the color and contrast for legibility and readability of all components.
  - Is the size of all type suitable for the size of the device and the viewing distance?
  - Are all touch targets the right size?
  - Is there any interference between touch targets?
  - Confirm touch and gestures do not interfere with each other. Check gestures in multiple areas, and try moving while on click areas to make sure gestures do not submit tap actions.
  - Check press-and-hold actions operate correctly. Check that tap actions do not have unexpected behaviors when pressed and held.
  - Check the virtual keyboard layout (or hardware keyboard constraints) on each input field to assure it is in a suitable mode. Numeric entry should pull up the right keyboard, not force the user to change modes.
  - Check form entry, errors and submission in general.
  - Make sure all other applications link properly. If a Share link loads the email client, make sure the correct data is passed in a valid format, for example.
  - Are all targets reachable from conventional grasping positions. Are there any critical labels or functions obscured by touchable items?

- Make sure all designed haptics (vibratory feedback) operates as expected, and are perceptible in the user's expected context?
- Assure that all auditory feedback (sounds, readback, etc.) operate as designed, and are audible in the expected user environment.
- Check for visibility of all items. Is anything covering or overlapping other items?
- Make sure all images are properly-displayed. Check for crispness, proper aspect ratio, and that transparency works correctly.
- Check for consistent margins and gutters.
- Make sure everything is aligned properly, especially with immediately-adjacent elements.
- Look for overly-narrow spaces around icons, words and other components that make them hard to read or disguise divisions between hierarchical components.
- Check that gradients are properly aligned, oriented (aren't upside down) and are the right color. Programmatically-defined gradients can vary by OS version so work in one version, but look wrong in another.
- Read all text. Make sure there are no mis-spellings, and that nothing is cropped off or overlapping another component.
- Make sure it all works. Does clicking something cause the expected action to occur?
- Do all device (or browser) functions work? Check Back, Home, and menu buttons (or any others) work as expected. Be sure to follow OS guidelines regardless of what specifications say; in Android the Back and Menu buttons should almost always work, even if they are solved in other ways inside your application.
- Switch to landscape.
  - Especially watch for the transition itself. Make sure items do not jump around, or that it does not take too long to re-render.
  - Make sure items appear in the proper location, and stretch to fit or move into multiple columns, as expected. Look for unnecessary gaps.
  - Re-confirm all items from the portrait list. Especially confirm that no items are cropped or covered.
  - Enter information into form fields, and perform the transition. Assure the entered content is in place (not cleared), and the field is in focus still.
  - Switch back to portrait, and observe the same transitions to make sure this work also.
  - Confirm any remote connected devices required to make the application work will connect and exchange data.
- Force a switch to any other input devices; slide out or dock keyboards for example.
- Use voice input, or other control features that are built into or accessed by the application.