

Apple Human Interface Guidelines: The Design Process

Guidelines for Conducting User Observations

There are many ways to get feedback from users during the design process. These include usability testing, cognitive walkthroughs, group walkthroughs, on-site observations, and heuristic walkthroughs. You can use the following guidelines when conducting user observations, but note that they can apply more generally to other types of testing as well. Remember that testing is not an experiment; you will not get quantitative data that can be statistically analyzed. You can, however, see where people have difficulty using your product, and then use that information to improve your product.

If time and budget permit, consider working with a professional usability testing facility to conduct this type of testing. If this is not feasible, try to allow a cross-section of colleagues within your company to use a prototype of your product and gather their feedback. This alone will improve the usability of your product because some testing is far better than no testing.

If you choose to conduct your own user observation-based testing, following these guidelines will help you get the most valuable data:

1. **Introduce yourself and describe the purpose of the observation** (in very general terms). Most of the time, you shouldn't mention what you'll be observing. **Make it clear to the participant that you are testing your product, not the participant.**
2. Tell the participant about how long the test will take and that **it's OK to quit at any time, for any reason.** The user should never feel pressured to complete a test. Besides, quitting may indicate that the underlying task is too difficult or complex and should be simplified.
3. A common testing methodology is to **use the think-aloud protocol.** If you are using this protocol, explain how to do it. Ask participants to think aloud during the observation, saying what comes to mind as they work. By listening to participants think and plan, you'll be able to examine their expectations for your product as well as their intentions and their problem-solving strategies. You may find that listening to users as they work will provide you with an enormous amount of useful information. In particular, you'll discover some of the details of the mental model the user has of the task. You can help users practice thinking aloud by having them describe a simple task, like how they prepare a cup of coffee.

4. **Describe** in general terms **what the participant will be doing**. Explain what all the materials are and the sequence in which the participant will use them. If you are using a lab, explain the purpose of each piece of equipment in the room (hardware, software, recording devices, and so forth) and how it will be used in the test. If you need to demonstrate your product before the user observation begins, be sure you don't demonstrate something you're trying to test.
5. It is very important that you **allow participants to work with your product without any interference or extra help from the facilitator, the analyzer, or anyone else**. This is the best way to see how people really interact with the product. For example, if you see a participant begin to have difficulty and you immediately provide an answer, you will lose the most valuable information you can gain from user observation: determining where users have trouble and how they figure out what to do. Note: There may be situations in which you will have to step in and provide assistance, but you should decide what those situations will be before you begin testing. For example, you may decide that you will allow someone to struggle for at least 3 minutes before you provide assistance or that there is a distinct set of problems on which you will provide help. However, if a participant becomes very frustrated, it's better to intervene than have the participant give up completely.
6. Conclude by **explaining what you were trying to find out** and answer any questions the participant may have.
7. **Use the results**. As you observe, you will see users doing things you may never have expected them to do. When you see participants making mistakes, your first instinct may be to blame their inexperience or lack of intelligence. This is the wrong response to have. Remember that the purpose of observing users is to learn what parts of your product might be difficult to use or ineffective because of faulty product design.
8. **Watch for patterns**. Just because one user has a problem with something, that doesn't mean every user will. Carefully consider why the single user had the problem and consider discarding that finding if it can be easily explained, otherwise, recognize that the software may be faulty.
9. **Review all results** with a cross-functional team comprising representatives of product management, marketing, engineering, human interface design, documentation, and quality assurance. Each of these participants will view the results through the lens of their own expertise, enabling them to provide valuable insights into various usability issues with which the users might have struggled.

Adapted from <http://developer.apple.com/Mac/library/documentation/UserExperience/Conceptual/AppleHIGuidelines/XHIGDesignProcess/XHIGDesignProcess.html>
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