



Unit 6

Testing prototypes

HMI Design Masterclass handout

Testing your prototype is the most important quality gate for your HMI design. This unit will show you how to test and discuss those use cases that are most relevant to your users – with users. And how to do this efficiently and effectively in a well-defined process that will deliver an authoritative user feedback that will have a positive impact on your HMI design, all with relatively little effort.

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Design Tips

1	Test your prototype with your users	As a designer, you are certain your HMI is absolutely brilliant. But what really matters is what the users think of it.
2	Define a target and specific questions	An efficient testing process focuses on complex areas or functions that are critical or new.
3	Focus on the most important aspects	Test the most important use cases with five users in no more than one hour. This should be sufficient to identify the bulk of the issues in your HMI design.
4	Test your prototype on-site	On-site testing will help motivate users, and informal feedback like frowns and smiles will help you identify issues in your HMI.
5	Follow a task-based and explorative testing strategy	First, watch users as they explore the HMI and then test whether they can handle the use cases successfully.
6	Document the results in a concise report to support the implementation of the user feedback	Ask users to name 5 things that they like or dislike and the 3 top improvements they would like to see in your HMI.

Here are the tips from the unit for your convenience.

Keywords

Prototype	A preliminary version of an HMI that can be implemented quickly to test the design with users. A prototype focuses on crucial use cases.
Explorative test	Free exploration of a prototype by a user during the first testing phase. Aims to obtain feedback on the user's first impressions.
Task-based test	The user performs use cases with the prototype. Aims to check whether the design supports reliable execution.

These terms are worth noting.

Short Exercise

Choose an HMI, a website, or a mobile app and design a test for it using the templates. Select one screen for exploratory testing and define three use cases for the task-based test. Pretend to be the user and do the testing yourself, or test with a colleague. Compile the results as you would with a real test and analyze them to identify possible optimizations.

Try putting your new skills into practice with this exercise.