

What is usability testing?

“Watching people try to use what you’re creating/designing/building, with the intention of (a) making it easier for people to use and (b) proving that it is easy to use”

- Steve Krug, Rocket Surgery Made Easy: The Do-It-Yourself Guide to Finding and Fixing Usability Problems

5 Components of Usability

- **Learnability:** How easy is it for users to accomplish basic tasks the first time they encounter the design?
- **Efficiency:** Once users have learned the design, how quickly can they perform tasks?
- **Memorability:** When users return to the design after a period of not using it, how easily can they reestablish proficiency?
- **Errors:** How many errors do users make, how severe are these errors, and how easily can they recover from the errors?
- **Satisfaction:** How pleasant is it to use the design?

Types of Usability Testing

Quantitative: Try to *prove something* about your application by *measuring things* using a scientific approach

- Is the new version **better** than the last version?
- Are people able to **quickly** complete important tasks in the application?

Qualitative: Gain *insights* into how you might be able to improve your application

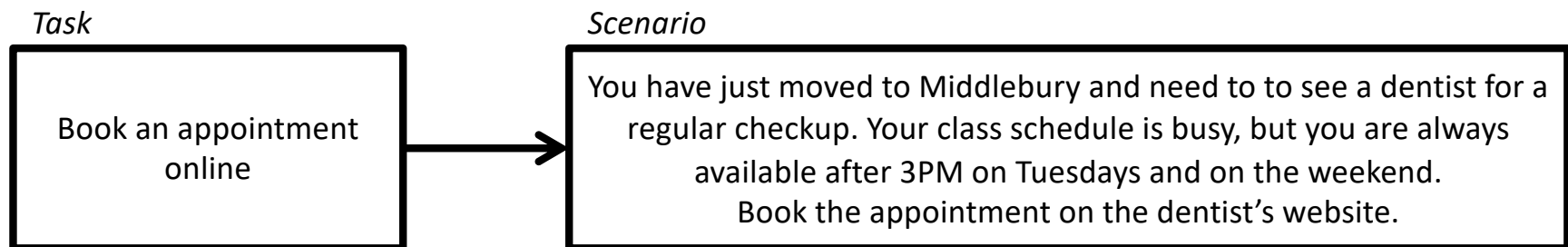
- Participants try to perform a task and **think out loud** while doing it
- Requires fewer participants and testing structure can be more flexible

Step-by-Step Guide

- Recruit **representative users**
- Ask those users to perform a set of **representative tasks**
- **Observe** what the users do and where they have difficulties with the user interface
- Debrief and determine **what you will do** to address usability problems

Defining Tasks & Scenarios

1. Produce a list of the most important things that a user needs to be able to do on your site (**tasks**)
2. Convert those tasks to scripts that give context on how they will perform the tasks (**scenarios**)



Creating High-Quality Scenarios

Make the Scenario Realistic

- **Task:** Browse product offerings and purchase an item.
- **Poor scenario:** *Purchase a pair of orange Nike running shoes.*
- **Better scenario:** *Buy a pair of shoes for less than \$40.*

Make the Scenario Actionable

- **Task:** Find movie and show times.
- **Poor scenario:** *You want to see a movie Sunday afternoon. Go to www.fandango.com and tell me where you'd click next.*
- **Better scenario:** *Use www.fandango.com to find a movie you'd be interested in seeing on Sunday afternoon.*

Avoid Giving Clues and Describing the Steps

- **Task:** Look up grades.
- **Poor scenario:** *You want to see the results of your midterm exams. Go to the website, sign in, and tell me where you would click to get your transcript.*
- **Better scenario:** *Look up the results of your midterm exams.*

McCloskey (2014), Turn User Goals into Task Scenarios for Usability Testing
<https://www.nngroup.com/articles/task-scenarios-usability-testing/>

Setting Up the Test and Preparing Participants

- Make sure that the participant knows that **the product** is being tested, not **the participant**
- Give the participant written instructions describing the task
 - Read the task out loud to the participant to make sure they aren't missing anything
- Give the participant one task at a time

During the Test

Have the participant
“think aloud”

- What are they doing?
- Why are they doing it?

Don’t help the participant!

- Remember, you wouldn’t be in the room with a real user!
- Use your judgement – you may be able to answer some clarifying questions

Take detailed **notes**

- What steps did the user take? Where did they click?
- How long did it take them?

When to **stop** a task?

- Keep an eye on the time
- Make sure you’re learning something

Debriefing

Your debriefing meeting should lead to two lists:

- The most serious usability problems that were uncovered in your site
- The usability problems that you intend to fix before the next round of usability testing

One way to start: go around and have everyone who observed the test list the 3 most serious problems that they saw