Assignment 0918

This assignment aims to give you some firsthand experience with collecting usability measurements and assessing how well a device or system complies with its associated guidelines document.

Outcomes

This assignment will affect your proficiency measures for outcomes 1b, 1c, 2a, 2b, 2c, 4d, 4e, and 4f.

Background Reading

If the course texts are available to you, the following readings will shore up the current material.

• Norman Chapter 1
• Shneiderman/Plaisant Chapter 2

For Submission

With your class-assigned teams and systems, perform the following interaction design studies. Although you will have the same results and findings, please report your conclusions individually.

Commit your reports (LaTeX source files preferred) to your private GitHub repositories under the folders usability-metrics/ and guideline-survey/.

Usability Metrics

Record some usability metrics for your assigned system. You can take measurements from as many people as you like, classmates or otherwise.

First, write down 3 concrete tasks that you would your test subjects to perform (e.g., “place a call to (424) 555-1978”). These form the basis of your measurement activities.

• Learnability—Make sure that your subject is not familiar with the system they are about to use (interface knowledge), but understand the tasks in your list (domain knowledge). Without further information, ask them to perform the task on the device or system. Record the amount of time they take before performing the task correctly.

• Efficiency—For this metric, use subjects who are familiar with the system they are about to use (the more proficient, the better). Ask them to perform the tasks on your list. Record the amount of time taken to perform each task. For this metric, you may want to take multiple measurements for each task.

• Satisfaction—We will stay very simple here. Just ask your subjects to rate, on a scale of 1 to 10, how much they enjoyed performing each task on their respective devices or systems.

In your submission, report the results of your studies and make a judgment call on which device or system you feel performed best. Make sure to state and explain the priorities you gave to each metric.

Guideline Survey

Skim the guidelines documents that correspond or apply to your group’s assigned devices or systems. Make a general assessment of how well (or not) your assigned device or system complies with that guidelines document. Provide at least two user interface design choices that you think demonstrate compliance or non-compliance in a compelling way—ideally, provide a screenshot from the actual system alongside an excerpt from the guidelines document that supports your case.

Finally, look at your usability metrics alongside your guideline survey/audit. State whether you think there is a correlation between them, and provide a brief explanation of your conclusion.