

Usability Metrics in the Desktops of Various OS

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Introduction

Interaction Design

In the second chapter of their text *Designing the User Interface*, Shneiderman and Plaisant discuss "standards" to follow while creating systems. The chapter separates these rules into Guidelines, specific definitions distributed and adhered to by companies and organizations and Principles, broader generalizations that are more "fundamental."

For this report, personalization tasks on the Mac, Windows, and Linux systems were pitted against each other to test their usability. Each provides a basic philosophy or guidelines for developers to follow. Further discussion of the guidelines can be found in the */guideline survey/* section of the repository.

Usability Metrics

In order to create a concrete, non-subjective method of rating the usability of systems, a set of 5 usability metrics were created. These assign qualitative values in order to rate systems numerically.

1. **Learnability:** the amount of time that it takes to learn the system.
2. **Memorability:** the amount of time that it takes to recall how to use a system after a period of time has passed since learning.
3. **Efficiency:** the amount of time it takes to complete a task using the system.
4. **Errors:** the amount of errors made while completing a task while using the system.
5. **Satisfaction:** the amount of satisfaction gained while using the system.

Usability Metrics in context of this assignment

Procedure

3 Concrete Tests

In order to test system usability, the following three tests were conceived:

1. Saving a jpg via the Chrome Browser to the computer and setting it as the background
2. Changing the Screen Resolution
3. Taking a screenshot.

Procedure

For each subject, we prepared, on a Linux, Windows, and Mac, the Chrome Browser with a picture that had never been saved to the computer before and closed all superfluous windows. The system settings icon remained in the taskbar of every system. The subjects were briefed on the tests as follows:

1. **Background Changing:** You must save this (indicates) picture and set it as your desktop background. Feel free to open any window or use any sort of help dialouge or search engine.
2. **Screen Resolution Change:** Alter the screen resolution from the current set-up to any other setting.
3. **Taking a Screen Shot:** Take a screenshot of the desktop and save it.

We first tested the subject on the foriegn system and then on their usual systems. The times were recorded on a Samsung Galaxy S3 default clock/stopwatch. Miliseconds were not recorded.

Data Reports

Andrew B.

1 1:16 own 0:07

2 0:39 own 0:09

3 0:02 own voice over, music, 1:07

Lisa

1 2:41 own 0:30

2 1:12 own 0:16

3 0:01 own 0:03

Kathleen 1: 1:12 own 0:04

2 0:45 0:16

3 0:01 0:02

""	Main System	New System
Changing Background	0:07	1:16
Changing Screen Resolution	0:09	0:39
Screen Shot	1:07	0:02

Reflections

These reflections reflect those of Kaitlyn Higa. The same report, but with