

Current topics in Media Computing and HCI - Assignment 4: Search

Due: May 23, 2006 @ 23:59

Description

In this assignment, you will experience (or not) for yourself the joys of incremental search

Task

Download Firefox 1.0 from mozilla.org. It is available for Windows, Linux and Mac OS X.

Incremental search on a webpage is enabled by pressing the "/" key. Text you type after that will be searched incrementally. You can use ctrl/cmd-g to jump to the next match.

Lets take the following scenario: you want to know an extended weather forecast for Aachen.

Open www.yahoo.com in a Firefox.

- 1. Find the link for 'All Y! Services...' and click it.
- 2. Find the link for 'Weather' and click it.
- 3. In the 'Enter City or Zip Code' type in Aachen and hit enter .
- 4. Find the link for 'Extended Forecast' and click it.

Using the keyboard with incremental search, the equivalent would be:

1. Type "/", followed by "All", hit "Enter".

2. Type "/", followed by "w", hit "Enter".

3. Type "/" followed by "En", tap Tab, and type "Aachen" and tap enter.

4. Type "/" followed by "exten" and tap enter.

Using a watch, time yourself (or a friend) performing the above scenario with the mouse and then with the keyboard about 3-5 times, until the times for the keyboard search have stabilized.

Write a short summary of your results (one page is sufficient) with the following:

* Your timing data

* How long did it take before you (or your friend) got used to the keyboard interface? (if at all?)

* What is the difference in time between the fastest interaction with the mouse and the fastest interaction with the keyboard?

* Offer a simple (1 or 2 sentences) explanation for your results. How might these results vary with trained or untrained users.

For extra credit, do one (or more) of the following:

* Do a Student's t-test analysis of your data. Are the differences you observed statistically significant? What is the p-value?

*When does incremental search outperform the mouse and vice versa? How is this relevant in user interface design?

* Suggest some improvements to the design of the incremental search feature in Firefox, based on Raskin's principles.

* Suggest some improvements to the design of Firefox in general, based on Raskin's principles.

You may work on your own or in groups of 2.

Submission

Submit your assignment electronically. You must email a PDF to <u>holman@cs.rwth-aachen.de</u> before the due date. Please note that no other format (Word, OpenOffice, etc...) will be accepted. The subject of your email should be "ct assignment 4"; be sure to use this exact subject line as it will be used to filter assignment submissions for grading.

Grading

The assignment will be graded on the following rough scale:

* 1.0 - exceptional work that clearly went above and beyond what was expected from the exercise

* 2.0 - exercise was completed satisfactorily as per the assignment specification

* 3.0 - exercise was completed, but has some problems

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- * 4.0 incomplete exercise
- * 5.0 little or no effort was put into the exercise

Late assignments will be graded with a penalty of 0.5 per 24 hour period after the due date.