

HCI Browser – A Tool for Studying Web Search Behavior

HCI Browser

<http://ils.unc.edu/hcibrowser>

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Introduction

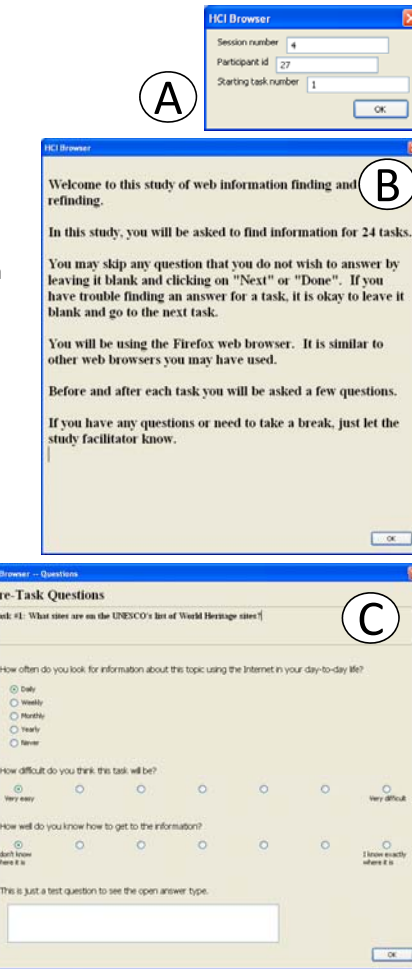
The HCI Browser is a tool to help Human Computer Interaction and Information Science researchers conduct experiments that involve presenting web browsing tasks to users. It is implemented as an extension for Mozilla Firefox 3 and can be easily installed as a Firefox add-on.

The HCI Browser can present tasks to users, administer pre- and post-task questionnaires using a variety of question types, and collect event data while the user searches and browses the web.

For more information and downloads, visit:
<http://ils.unc.edu/hcibrowser>

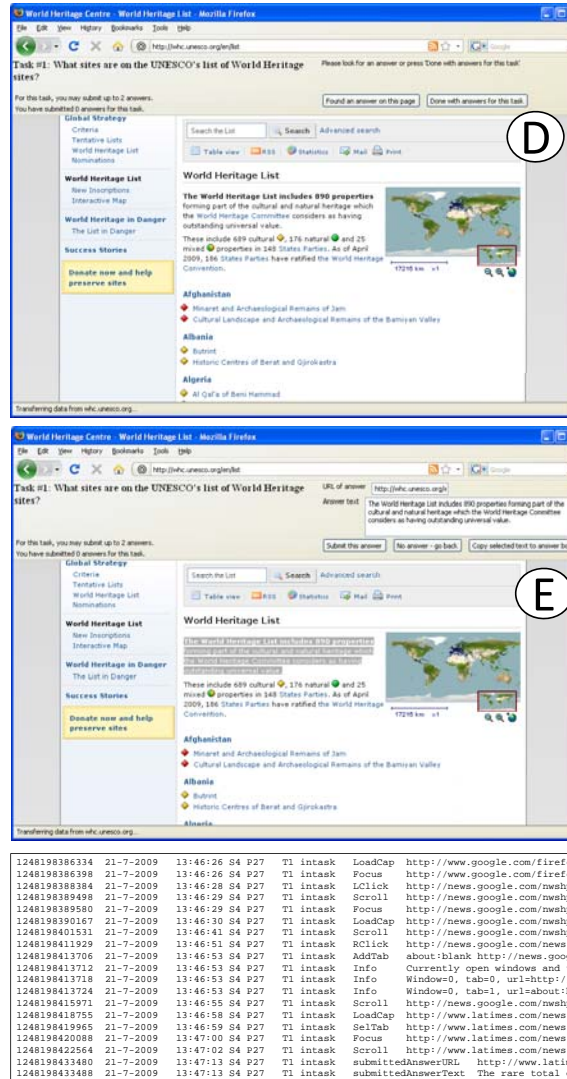
Features

- Administers configurable pre- and post-task questionnaires (C & F)
- Presents tasks to participants in the toolbar area of the browser window (D & E)
- Records browser events:
 - Pages loaded
 - Links clicked
 - Window and tab focus changes
 - Open/close windows and tabs
 - Back/forward button clicks
 - Typed URLs
 - Scrolling
 - History/bookmark menu
- Automatically closes windows at task end
- Creates a new log file for each task
- Log entries include a timestamp, session number, participant id, and task number



Start-up and Introductory Screens

A start-up screen (A) allows the experimenter to enter data about the session number, participant id, and starting task. A configurable introductory screen (B) gives participants information before they begin the tasks.



1248198386334	21-7-2009	13:46:26	84	P27	T1	intask	LoadCap	http://www.google.com/firefox?client=firefox-a&rl=0&focus=
1248198386338	21-7-2009	13:46:26	84	P27	T1	intask	Focus	http://www.google.com/firefox?client=firefox-a&rl=0&focus=
1248198388384	21-7-2009	13:46:28	84	P27	T1	intask	LCClick	http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198389498	21-7-2009	13:46:29	84	P27	T1	intask	Scroll	http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198389580	21-7-2009	13:46:29	84	P27	T1	intask	Focus	http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198390167	21-7-2009	13:46:30	84	P27	T1	intask	LoadCap	http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198401531	21-7-2009	13:46:41	84	P27	T1	intask	Scroll	http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198411929	21-7-2009	13:46:51	84	P27	T1	intask	RClick	http://news.google.com/news/url?sa=t&ct=2&st2P1_0_s_0
1248198413706	21-7-2009	13:46:53	84	P27	T1	intask	AddTab	about:blank http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198413712	21-7-2009	13:46:53	84	P27	T1	intask	Info	Currently open windows and tabs are logged below, but
1248198413718	21-7-2009	13:46:53	84	P27	T1	intask	Info	Windows0, tab0, url:http://news.google.com/swshp?cli
1248198413724	21-7-2009	13:46:53	84	P27	T1	intask	Info	Windows0, tab1, url:about:blank http://news.google.c
1248198415971	21-7-2009	13:46:55	84	P27	T1	intask	Scroll	http://news.google.com/swshp?client=firefox-a&rl=0&org=
1248198418755	21-7-2009	13:46:58	84	P27	T1	intask	LoadCap	http://www.latimes.com/news/nationworld/nation/la-fg-
1248198419965	21-7-2009	13:46:59	84	P27	T1	intask	SelfTab	http://www.latimes.com/news/nationworld/nation/la-fg-
1248198420088	21-7-2009	13:47:00	84	P27	T1	intask	Focus	http://www.latimes.com/news/nationworld/nation/la-fg-
1248198422554	21-7-2009	13:47:02	84	P27	T1	intask	Scroll	http://www.latimes.com/news/nationworld/nation/la-fg-
1248198433480	21-7-2009	13:47:13	84	P27	T1	intask	submittedAnswerURL	http://www.latimes.com/news/nationworld/n
1248198433488	21-7-2009	13:47:13	84	P27	T1	intask	submittedAnswerText	The rare total eclipse will be visible th

Configurable Questionnaires

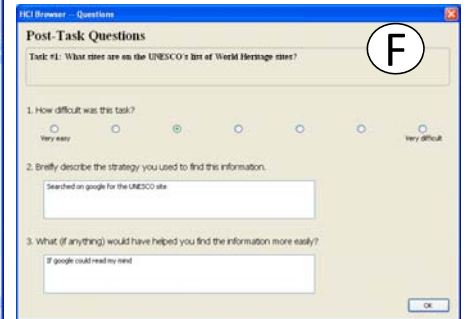
Pre- and Post-task questionnaires (C & F) can be created using multiple choice, Likert-type/semantic differential scales, and open-answer questions.

Example Pre-Task Questionnaire Configuration File

MultipleChoice
5
How often do you look for information about this topic using the Internet in your day-to-day life?
Daily
Weekly
Monthly
Yearly
Never

LikertType
7
How difficult do you think this task will be?
Very easy
...
Very difficult

OpenAnswer
This is just a test question to see the open answer type.



Log File

Records browser session, pre- and post-task questionnaire responses, and answers submitted to the primary tasks.