Tab4

A Task-Focused Approach to Support Sharing And Interruption Recovery in Web Browsers

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Task-Focused Browsing

Tab4 is a prototype browser interface designed to better support users whom regularly use browsers for myriad tasks. Specifically, the **Tab4** browser interface enables the following features related to tasks and their artifacts (i.e. tabs, bookmarks and annotations).

- Webpages can be grouped into tasks, providing a unified target for resumption.
- Tasks and pages can be annotated, supporting resumption after long intervals.
- Tasks can be shared through a novel web-service easily.

Design Requirements

Through a series of interviews to explore users' browsing habits, we generated a set of five design requirements that aid the development of **Tab4**:

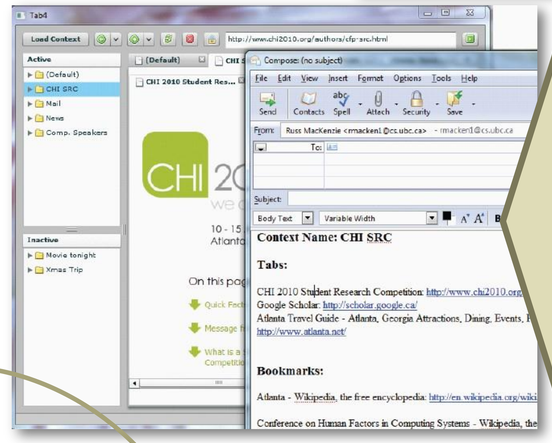
- Support the grouping of webpages into tasks
- Facilitate task switching and resumption
- Include navigation artifacts (i.e. bookmarks) as part of a task
- Allow annotation of webpages and tasks
- Ease sharing of pages and tasks between users

The "Active" task sidebar shows currently active tasks. Since these bookmarks are specific to the "CHI SRC" task, they don't interfere the users while using other tasks.

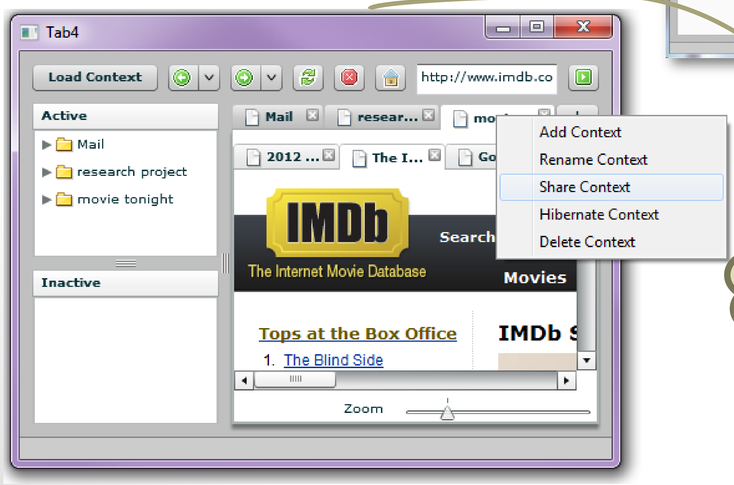
The "Inactive" sidebar lists two tasks which are currently suspended; double-clicking activates these tasks.

Additional task bar to group multiple tabs

Hovering over a task in the sidebar causes a transient popup to appear. The popup shows a thumbnail view of a tab within the task, and supports annotations in the text box at the bottom of the popup.



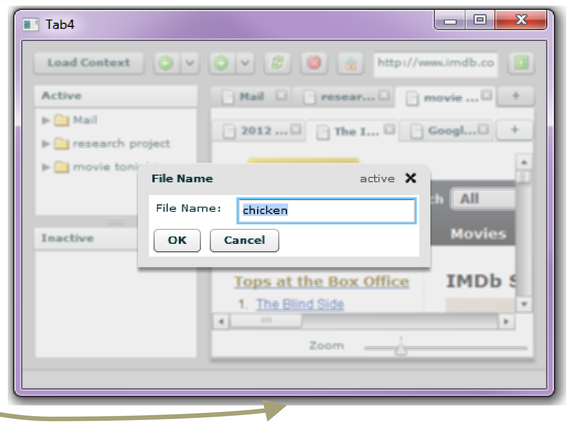
A task can be shared as regular hypertext by dragging and dropping it into a document or an email. The hypertext contains information of all the artifacts, including tabs, bookmarks and annotations, as shown in the email client in the image.



share

web service

load



Evaluation

Our experiment evaluates the suitability of the **Tab4** browser to support task switching in a high-pressure, interruption-ridden settings. Eight participants were asked to use our prototype for two 15-minute sessions to perform specific tasks while getting interrupted occasionally by the experimenter.

All subjects indicated task-based browsing is useful, making it easier to complete the assigned tasks, and that they would use task-based browsing if available in their primary browser.

Future Directions

We identified the following areas which are worthy of further investigations:

- including browsing history as part of the task artifacts
- long-term, real-world usage of a functionally complete system, with logging and critical incident interviews
- incorporate our interface as a plug-in to existing browsers, such as Mozilla Firefox or Google Chrome