Haystack: A Platform for Creating, Organizing and Visualizing Semistructured Information

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1. OVERVIEW

In this demonstration we present Haystack, an environment that allows users to easily manage their documents, e-mail, appointments, tasks, and other information [1]. Haystack uses a semistructured data model to describe the connections between different documents in a user's corpus as well as the metadata concerning each document. This amalgamation provides users with a unified framework for managing all of their information, e.g., documents, e-mails, etc., through a single interface. Furthermore, Haystack's user interface exposes general tools for navigating the various kinds of information found in users' corpora.

Figure 1 shows the Haystack home page, which is displayed when Haystack's user interface is first started. Like a portal, the Haystack home page brings together in one screen information important to the user. However, unlike a portal, Haystack hosts agents that work in the background, accumulating information such as e-mail from POP3 servers and news feeds from RSS subscriptions, while the actual presentation of this information is *decoupled* from agents and is the responsibility of Haystack UI components called *views*.

When a view of a collection, such as the Inbox collection, is rendered to the screen, Haystack iterates through the members of the collection, recursively locates views for these members, and instantiates them within the collection's view. In other words, Haystack calls upon views specifically designed to present certain types of data to display those data. In the process Haystack maintains a *correspondence* between strings of text on the screen and the meetings, to-do items, or e-mail messages of the collection they represent.

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Consequently, these strings are not merely dead pixels. Instead, users can manipulate them with *context menus* and *drag and drop* them between different areas of the screen. For example, one can drag a news article from the News view to the Inbox as a reminder to read the article. Because the UI framework maintains the mapping from each visual UI element to its associated underlying object, the drag and drop operation can be tagged with the object being dragged, and as a result, the Inbox view can intelligently determine the correct response to the drop operation.

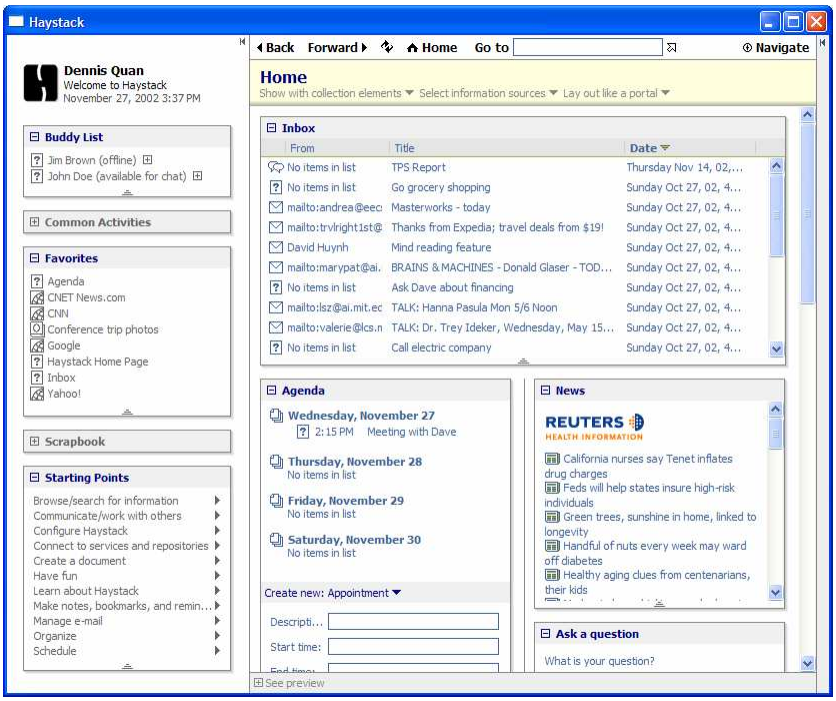

Figure 1: Haystack screenshot

2. ACKNOWLEDGMENTS

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3. REFERENCES

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