A GUI-Based Version of the SenseMaker Interface for Information Exploration

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ABSTRACT
SenseMaker is an interface for information exploration. The original HTML version of the interface relied on tables for display and forms for interaction. The new Java version is GUI-based. This video illustrates the new SenseMaker interface by presenting a hypothetical scenario of a user carrying out an information-exploration task.

Keywords
Information exploration, digital libraries, user interface, graphical user interface, GUI, information visualization

INTRODUCTION
SenseMaker is an interface for information exploration that utilizes an interactive, structure-mediated approach. Users identify key concepts of interest by interactively adding structure to collections of search results. They add structure by bundling results according to different strategies (e.g., bundling results by author). Users then build on and sculpt this structure to perform concept-based finding and filtering of results. More details about our approach are in [1].

THE GUI-BASED VERSION OF SENSEMAKER
The original HTML version of the SenseMaker interface relied on tables for display and forms for interaction. Evaluation of this interface revealed several usability problems. Accordingly, we redesigned the SenseMaker interface to be a GUI-based Java applet. This interface represents bundles of results with folder icons. Users can double-click to open bundles, revealing in place the contained results, which are represented with document icons. Users can mark bundles of interest as triggers for action.

Bundles and individual results are also presented in the interface with *hi-cites* [2]. Hi-cites are dynamically-created citations with active highlighting of all values for a particular attribute (e.g., title).

SCENARIO
In this video, we present a hypothetical scenario of a student researching a term paper for a seminar on 3-D interfaces. The student (John) uses SenseMaker to find information on the topic of "volume rendering."

He begins his exploration by querying multiple, heterogeneous sources of information (see Figure 1). SenseMaker communicates with CSQuest [3] to provide him with term suggestions. Soon, he obtains a collection of search results, bundled by Web site (see Figure 2).

After browsing through these bundles, he decides to use the Stanford bundle as the basis for finding more results. Once his collection has been expanded by this action, he browses through it and then limits the collection to just this enlarged bundle. He then iteratively bundles the results in order to gain different perspectives on them. SenseMaker communicates with SONIA [4] to carry out his request when he asks for bundling by similar content.

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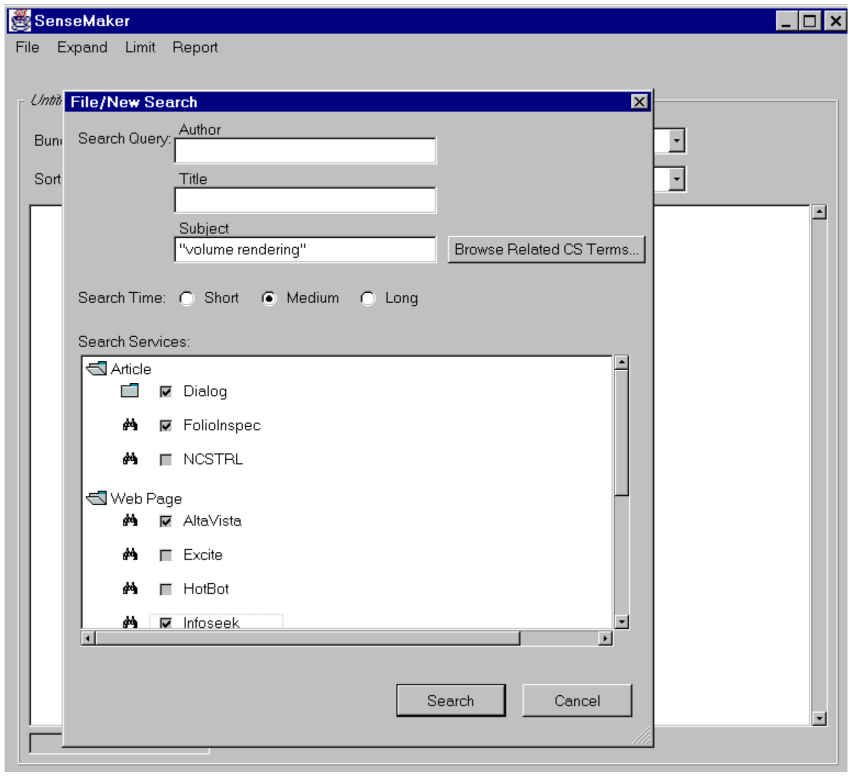

Figure 1: John begins his exploration of *volume rendering* by querying multiple, heterogeneous sources of information.

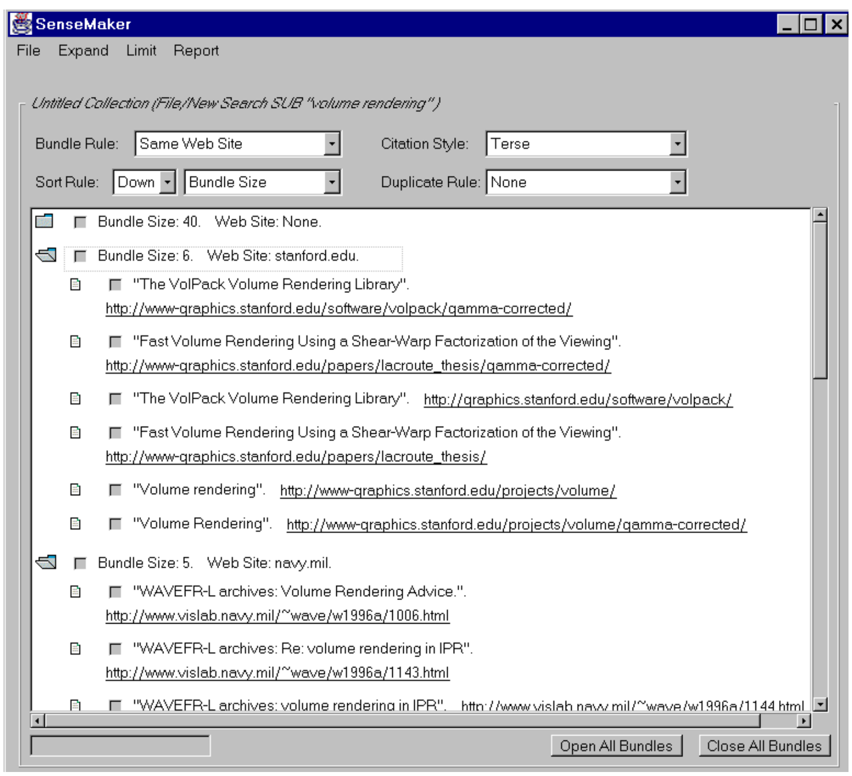

Figure 2: John can iteratively organize his search results into bundles. Here, bundling is by Web site. He can use these bundles as the basis for limiting or expanding the collection of results.