PRODUCING A SHARABLE LINK FOR REPLAYING ONLINE USER ACTIONS

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TECHNICAL FIELD

This disclosure generally relates to sharing information with other users.

BACKGROUND

A friend may sometimes ask a user for information about a general subject, such as information about a specific topic or how to accomplish a given task on the Internet. If the information is publicly available and can be found on the Internet, then the user can perform a web search to find the information. Additional steps may also be required before the user sends the requested information to the friend. Sometimes, the user may also want to provide step-by-step instructions that document how the information was obtained, including specific steps that were performed. For example, the step-by-step instructions can include search terms that were entered, web sites that were accessed, various other steps that were performed, and other information. To provide the step-by-step instructions, a typical user today may manually record the set of step-by-step instructions, including listing URLs of websites that were visited and identifying other actions and/or specific steps that were used to find the requested information. Recording such information may include, for example, manually copying and pasting information, such as to send in an email, or hand-writing the information on a piece of paper.

SUMMARY

In general, a mechanism is provided for a Web browser application that is initiated by a first user to automatically produce a single sharable link that, when opened by a second user, re-
plays the actions performed by the first user who shared the link. For example, the second user can use the sharable link to automatically play back the actions on a different computer system. The actions can include, for example, search terms that were used, web sites that were accessed, and other steps that were performed. The mechanism can use existing tools for replaying actions.

A sharable link can be included, for example, with the answer to a question, and the sharable link can be used to re-play the user actions needed to obtain the answer. In this way, not only does the second user get the answer to a question, but the second user also learns how to obtain the same or similar information in the future without asking the first user again. This can increase productivity of both users. This technology is not restricted to search engines and web sites, as the same technology can be used to transfer knowledge on how to accomplish any generic task in the Internet, such as re-setting a password on a specific web site.

DESCRIPTION OF DRAWINGS

FIG. 1 is an example environment in which a single sharable link is created and shared.

DETAILED DESCRIPTION

FIG. 1 is an example environment 100 in which a single sharable link is created and shared. For example, a first user 102a performing actions during a first user session 104a can initiate the creation of a sharable link 106 that can be used by a second user 102b during a second user session 104b to play back the first user’s actions.
The sharable link 106 can be produced by a sharing module 108, for example, that is part of a browser 110. The sharing module 108 can serve as a general mechanism for the browser 110 or some other Web browser application to produce the sharable link 106. When the sharable link 106 is opened by another user (e.g., the second user 102b), actions performed by the first user 102a during the first user session 104a are replayed. Replay can occur, for example, on a second computer system 112b that is different from a first computer system 112a on which the sharable link 106 is created. The sharable link 106 can be used and re-used repeatedly, including by other second users 102b and, if desired, by the first user 102a. In this way, the sharable link 106 can be used with browser-user-action replaying technology to achieve information sharing between two users (and/or to document user actions as needed).
An example sequence of actions can begin at a first step, for example, when the first user 102a enables recording 114 (such as by selecting an option provided by the sharing module 108). This may occur, for example, after the second user 102b asks the first user 102a a question 115 such as, “Do you know how long a tiger’s claws are?”

At a second step, for example, recording of user actions 116 can begin. For example, the act of enabling recording 114 can cause the sharing module 108 to start recording user actions of the first user 102a. The user actions that are recorded can include, for example, entering one or more search queries into a search engine, selecting one or more search results to navigate to various web sites (e.g., www.example.com/tigerfacts), and performing other actions. Other actions that are recorded can include, for example, selecting a web page tab or other control (e.g., a “Facts” tab on which information regarding tigers is available), and reviewing various images and/or videos. Information that is captured and recorded can further include user keyboard input, mouse clicks and other mouse actions, URLs of web pages that are visited, options that are selected, and any other user actions that are to be shared with the second user 102b though the sharable link 106.

At a third step, for example, when the first user 102a decides that the recorded actions are complete and are ready to be shared with the second user 102b, the first user 102a can share (118) the actions. Sharing can be initiated by selecting a control provided by the sharing module 108 and can include terminating the recording of user actions.

At a fourth step, for example, the sharing module 108 can create the sharable link 106. The sharable link 106 can be, for example, a link to location on a web site that includes a complete set of the user actions that were recorded. In some implementations, instead of (or in addition to) a link, a file can be provided that includes the user actions.
At a fifth step, for example, once the sharable link 106 is created, the sharable link 106 can be used by the first user 102a in various ways. For example, the first user 102a can include the sharable link 106 with additional information 120 (e.g., an answer to the question: “Tiger claws are X inches long on average. Use the link I shared to see how I found out and to view photos!”)

At a sixth step, for example, the second user 102b can use the sharable link 106. For example, the second user 102b can click on the sharable link 106, which can cause automatic opening of the browser 110 in which the actions performed by the first user 102a are played back 122. In some implementations, the sharing module 108 can provide the play-back mechanism. In some implementations, the sharing module 108 can include various play-back features such as pause, rewind, save, print, share, and/or other basic features pertaining to play-back of information and the processing of information in general.
ABSTRACT OF THE DISCLOSURE

A mechanism is provided for a Web browser application that is initiated by a first user to automatically produce a single sharable link that, when opened by a second user, re-plays the actions performed by the first user who shared the link. For example, the second user can use the sharable link to automatically play back the actions on a different computer system. The actions can include, for example, search terms that were used, web sites that were accessed, and other steps that were performed.