

IMMEDIATE SEARCH FEEDBACK

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TECHNICAL FIELD

[0002] This disclosure relates generally to user interfaces for digital processing systems, and in particular, relates to a graphical user interface that presents immediate search feedback.

BACKGROUND INFORMATION

[0003] Users of modern data processing systems, such as general purpose computer systems, often desire to find information stored on remote computer systems or networks, such as for example information accessible through the Internet. The Internet is typically defined as a computer network consisting of a worldwide network of computer networks that use the TCP/IP network protocols to facilitate data transmission and exchange. One common method for locating information available on the Internet is to submit a search request or query to a search engine. A search engine is typically a computer program that retrieves documents, files or data from a database or from a computer network, such as the Internet, usually based on keywords input by a user. The search engine may include functionality for searching the Internet in general, or the search engine may be limited to a particular network, domain, website, or computing system accessible through the Internet. A user typically interacts with a search engine through a graphical user interface (GUI), in which the user inputs text describing the desired search terms or parameters. Search engines are often accessible by a user through a GUI of a web browser application. **FIG. 1** generally describes a prior art method **100** of performing an Internet search. In use, a user is typically presented with an input field in which to enter text describing the information sought. Once a user has completely entered the desired search terms **102**, the user enters an express command **104** to submit the search request to the search engine, such as for example by depressing the "Return" or "Enter" key on a keyboard, or clicking a GUI element, such as a "Submit" button within the browser application or on a web page presented by a web browser application. The search request is then submitted **106** to the search engine based on the complete search terms input by the user. Results from the search request, typically in the form of links to other websites, documents or files, are then presented to the user for review and selection **108**. Should a user desire to refine or revise the search terms **110**, the user may add to or modify the text previously entered into the input field, and then is required to again manually submit the search request by entering a submit command, such as by depressing a "Return" button.

[0004] While the conventional interaction between user and search engine (e.g. completely entering search terms,

manually submitting them, waiting for the results to be displayed, reviewing the results, modifying the search terms, manually resubmitting the search request, etc.) is the conventional paradigm, there are drawbacks and inefficiencies associated with this process. For example, a user must wait until the search terms have been completely typed in by the user before any results are displayed. Furthermore, a user must proactively issue a submit command in order for an input search request to be submitted to the search engine, which can be tedious.

SUMMARY OF THE DESCRIPTION

[0005] The present invention relates to immediate search feedback. In one aspect, as a user enters search terms for submission to a search engine, results based on the received input appear as the user is typing. Search query strings are automatically submitted to a search engine using received portions of the input text.

[0006] In one aspect, immediate search feedback is provided. Search input is received within a search field of a web browser application. Based on characteristics of the search input, a determination is made whether to automatically submit a query to a search engine. In one aspect, the query is automatically submitted to the search engine. The query is based on the received search input. Results are presented in a results web page displayed by the web browser application. The results web page is received in response from the query submitted to the search engine. In one aspect, the search field is included in a web page presented by the web browser application.

[0007] In another aspect, text input is received within an integrated search field of a web browser application. Based on characteristics of the text input, a determination is made whether to automatically submit a query to a search engine. The query is then automatically submitted to the search engine. The query is based on the received search input. A web page returned from the search engine based on the query is displayed within the web browser application. After the returned web page is displayed, the focus is automatically maintained within the integrated search field. In one aspect, the returned web page is prevented from controlling the focus.

[0008] In another aspect, text input is received within a search field of a web page displayed by a web browser application. A determination is made, based on characteristics of the text input, whether to automatically submit a query to an Internet search engine. The query is automatically submitted to the search engine. The query is based on the received search input. Results returned from the query submitted to the search engine are presented within the web page. In one aspect, the search field for receiving text input is presented within a first frame of the web page, and the first results are presented within a second frame of the web page.

[0009] The present invention is described in conjunction with systems, clients, servers, methods, and machine-readable media of varying scope. In addition to the aspects of the present invention described in this summary, further aspects of the invention will become apparent by reference to the drawings and by reading the detailed description that follows.

DESCRIPTION OF THE DRAWINGS

[0010] Non-limiting and non-exhaustive embodiments of the present invention are described with reference to the