[0001] This application claims priority from U.S. Provisional Application No. 60/376,181, filed Apr. 30, 2002, which is incorporated by reference.

## TECHNICAL FIELD

[0002] The following description relates generally to providing an a graphical user interface and more particularly to providing an IM conversation counter and indicator for a tabbed instant messaging user interface having a tear-off element.

### **BACKGROUND**

[0003] Online service providers facilitate access to information and services by providing interactive UIs (User Interfaces) that help users navigate to desired resources. UIs often take advantage of the graphics capabilities of a user's computer and eliminate the need to manually type text commands. Generally, a UI allows a user to execute particular commands or to link to certain locations by simply selectingsimply select screen objects such as icons, windows, and drop-down menus to execute particular commands or to link to certain locations. The design of a UI has a significant impact on a user's online experience. In particular, the icons, the windows, and the menus of a UI maymust be arranged to enable a user to locate preferred information and services quickly and easily. Conventionally, navigation among interfaces corresponding to separate communications sessions was accomplished through the selection if disparate icons appearing in an operating system task bar, where the icons appeared along with other icons that did not correspond to communications sessions.

### **SUMMARY**

[0004] In one general aspect, a user interface on a displaythat enables user perception of informationstatus regarding a communications session that leverages leverage an instant messaging platform may be rendered on a display. The user interface includes an instant messaging application user interface and one or more tear-off elements corresponding to engoing instant messaging communications sessions. Each tear-off element is configured to enable that enables perception and selection by a user of a corresponding of instant messages for an instant messaging communications session. Also, each tear-off element is configured to be independently visually separated from other elements of the user, and a status indicator that provides a perceivable indication to the user of statistics regarding concurrent instant messaging application user interface and maintained as a separate entity on the instant messaging application user interfacesessions.

[0005] Implementations may include one or more of the following features. For example, the instant messaging application user interface may include a general interface tear-off element that is configured to enable perception and selection of several of the tear-off elements collectively and to enable collective visual separation of the several tear-off elements from other elements of thealso include one or more instant messaging application user interface. The general interface tear-off element may be, for example, a tab or a button. The interface may be configured to enable reattachment to other elements of the general interface. For instance, a tear-off element may be configured to be reattached to an interface other than the interface from which the tear-off element was separated. sub-interfaces that represent distinct [0006] and concurrent instant messaging communications sessions. In one implementation, one or more tear-off elements may be dedicated to and enable perception and selection of a single corresponding instant messaging communications session. The dedicated tear-off elements may be independently visually separable from other elements of the instant messaging application user interface. The dedicated tear-off elements may include, for example, tabs or buttons. The user interface may also include a manual status control associated with a dedicated tear-off element. For instance, the manual status control may enable an indication of whether a message in the corresponding instant messaging communications session has been perceived by the user. the user interface includes a perceivable status indication that a new message is pending in at least one concurrent instant messaging session.



[0007] In one implementation, one or more of the tear-off elements may be rendered visually as an integral part of the instant messaging application user interface. In another implementation, the display of the tear-off element persists when the element is visually separated from other elements of the instant messaging application user interface. In yet another implementation, the tear-off element may be configured to enable reattachment to other elements of the instant messaging application user interface. In another implementation, the user interface also includes a mechanism to determine the statistics. The statistics may include one or more of the following: a total number of concurrent instant messaging sessions; a number of instant messaging sessions with new messages; a number of new instant messaging sessions with new messages may further include a number of new instant messaging sessions with new messages and a number of old instant messaging sessions with new messages.

[0008] The tear-off elements may be configured to be separately manipulable. In one implementation, one or more of the tear-off elements may be configured to be separately removable from the instant messaging application user interface, separately invokable, separately minimizable and/or separately movable.

The statistics may be rendered in numerous positions on the display. For example, the statistics may be rendered in a title bar, in a tab header in an interface having persistent tabs, in an operating system tray, in a user interface toolbar, in a general interface that persists beyond active display of the user interface, or in a general interface actionable item that is arranged in a position on the display and that persists beyond active display of the user interface, where the general user interface actionable item enables activation of the user interface.

[0009] In one implementation, more than one of the tear-off elements may be configured to be collectively visually separated from other elements of the instant messaging application user interface and maintained as a separate display element the user interface is a visual interface. In another implementation, a tear-off element may configured to be individually visually separated from other elements of the instant messaging application user interface and maintained as a separate display element. In yet another implementation, the instant messaging application user interface and tear-off elements may be configured to display limited information about one or more concurrent instant messaging sessions. For instance, the user interface may enable a more detailed display of one or more of the instant messaging sessions through selection of a corresponding tear-off element is an audible interface.

[0010] Aspects of the instant messaging IM conversation counter and indicator for a tabbed IM user interface having a tear-off element may be implemented by an apparatus and/or by a computer program stored on a computer readable medium. The computer readable medium may comprise a disc, a client device, a host device, and/or a propagated signal. In addition, aspects of the instant messaging IM conversation counter and indicator for a tabbed IM user interface having a tear-off element may be implemented in a client/host context or in a standalone or offline client device. The instant messaging IM conversation counter and indicator for a tabbed IM user interface having a tear-off element may be rendered in a client/host context and may be accessed or updated through a remote device in a client/host environment. The instant messaging IM conversation counter and indicator for a tabbed IM user interface having a tear-off element also may be rendered by the standalone standalone/offline device and may be accessed or updated through a remote device in a non-client/host environment such as, for example, a LAN server serving an end user or a mainframe serving a terminal device.

[0011] Other features and advantages will be apparent from the following description, including the drawings, and from the claims.

## **DESCRIPTION OF DRAWINGS**

[0012] FIGS. 1-34 are block diagrams of a communications system.

[0013] FIG. 4 is a flow chart of a process that may be implemented by the systems of FIGS. 1-3.



[0014]-FIGS. 5-11 and 12A-12F are illustrations of different graphical user interfaces that may be implemented by the systems of FIGS. 1-34 when executing the process of FIG. 413.

FIG. 13 is a flow chart of a process that may be implemented by the systems of FIGS. 1-4.

[0015] Like reference symbols in the various drawings indicate like elements.

### **DETAILED DESCRIPTION**

[0016] In general, one or more tear-off elements may be provided in an interface for instant messaging (IM) applications or other online applications. For example, tear-off elements may be provided to collectively form a tabbed IM user interface (UI), where each tear-off element represents a corresponding engoing IM session. A user may tear-off one or more of the tear-off elements individually or collectively. Tear-off elements that have been torn off may be independently or collectively reattached to the user interface from which they were torn, or they may be reattached to a different user interface. In addition, once torn, the tear-off elements may be separately or collectively manipulated, moved, minimized, invoked, and activated.

[0017] In the example of a tabbed IM UI, the tear-off elements may be presented as tabs positionedIn general, an IM conversation counter and indicator may be provided for a tabbed instant messaging (IM) user interface (UI), and the tabbed IM UI may have one or more IM interface tabs. Each interface tab is assigned to a pending IM session, and the tabs appear adjacent to one another to enable selection of and, among other things, help ease switching between IM sessions, and other operations. When several tear-off element tabs are concurrently shown, an. An active tab corresponds to is rendered for the IM session currently being viewed or manipulated by the user, and inactive tabs correspond to are rendered for the IM sessions which are not currently being viewed or manipulated by the user. A tear-off elementinterface tab typically includes an identifier, such as the screen name of an IM buddy, to identify the particular IM session to which the tabit is assigned. When displayed, the identifier for an IM session typically is configured such that a user is able to read or otherwise recognize the identifier without additional information. A tear-off element tab also may include no matter how many other IM sessions are pending. An interface tab also includes a status indicator to indicate whether a new IM message is waiting to be viewed in the IM session for that session. A conversation counter may be provided to inform the user of information relating to the concurrent IM sessions, such as the total number of concurrent IM sessions, the number of new IM sessions, and the number of ongoing IM sessions having a new IM message waiting to be viewed. A scroll bar is provided for scrolling to perceive tabs corresponding to that tear-off element tab-open IM sessions when the total number of concurrent IM sessions exceeds the maximum number of concurrent conversations that may be displayed simultaneously. The scroll bar allows a user to scroll up and down among the concurrent IM sessions, and may provide an indication that one or more of the IM sessions "hidden" by the scroll bar has a new IM message waiting to be

In one implementation, an IM counter and indicator is provided on a tabbed IM UI to count the total number of concurrent IM sessions, the number of new IM sessions, and/or the number of new messages from ongoing IM sessions. A new IM session (i.e., a new conversation) may be flagged differently from an ongoing IM session with a new message. Thus, a user knows if and how many new IM sessions and/or new IM messages are present, even when viewing a different content area. Furthermore, when using the tabbed instant message (IM) user interface, new IM messages may or may not be forced into the foreground.

An indicator is provided to the user to indicate whether the user has viewed a received IM message in an existing IM session. For example, an indicator such as a blinking interface tab or area on an interface tab may be provided for a received IM message that has not been viewed. When the user views the received IM, the indicator may change to a solid IM interface tab or area on an interface tab. The user will be able to know that a new, unviewed message has been received without having to close a window or leave a current IM session, and once viewed, the indicator changes without having to actually reply to the message itself. A different visual indication may be provided for a new IM session to distinguish the new



session from a new message in an old session. The tabbed IM user interface may be rendered in response to user manipulation of a general IM user interface tab.

[0018] A tear-off element\_The IM conversation counter and indicator for a tabbed IM user interface may be rendered by any type of hardware, software, device, computer, computer system, equipment, component, program, application, code, storage medium, or propagated signal. In one implementation, the tear-off element is IM conversation counter and indicator for a tabbed IM user interface may be rendered in a client/host context, and the tear-off element IM conversation counter and indicator for a tabbed IM user interface may be accessed or updated through a remote device in a client/host environment. In another implementation, the tear-off element is IM conversation counter and indicator for a tabbed IM user interface may be implemented in a standalone or offline client context, where the tear-off element is. The IM conversation counter and indicator for a tabbed IM user interface may be rendered by the standalone/offline device and may be accessed or updated through a remote device in a non-client/host environment such as, for example, a LAN server serving an end user or a mainframe serving a terminal device.

[0019] Typically, IMinstant messaging communications involve involves an instantaneous or nearly instantaneous communication between two users, where each user is able to perceive provided with online presence information regarding other selected users ("buddies"). The IM communications may be machine to machine communications that occur without intervention by, or communication through, an instant messaging server after a communication session is established or authentication is performed. Examples of IM communications include those provided by AIM (America Online Instant Messenger), AOL (America Online) Instant Messaging, Yahoo Messenger, MSN Messenger, and ICQ, among others. Although discussed below primarily with respect to IM applications, the tear-off element may be provided for other online applications such as chat, e-mail, and players for streaming media.

[0020]-For illustrative purposes, FIGS. 1 and 2 show an example of a communications system for implementing techniques for transferring electronic data. For brevity, several elements in the figures described below are represented as monolithic entities. However, as would be understood by one skilled in the art, these elements each may include numerous interconnected computers and components designed to perform a set of specified operations and/or <a href="may be">may be</a> dedicated to a particular geographical region.

[0021] FIG. 1 illustrates a communications system 100 including a client system 105 communicating with a host system 110 through a communications link 115.

[0022] The client device 120 typically includes a general-purpose computer 170 having an internal or external memorystorage 172 for storing data and programs such as an operating system 174 (e.g., DOS, Windows.TM., Windows 95.TM., Windows 98.TM., Windows 2000.TM., Windows Me.TM., Windows XP.TM., Windows NT.TM., OS/2, or Linux) and one or more application programs. Examples of application programs include authoring applications 176 (e.g., word processing programs, database programs, spreadsheet programs, or graphics programs) capable of generating documents or other electronic content; client applications 178 (e.g., America Online (AOL) client, CompuServe client, AOL Instant Messenger (AIM) client, interactive television (ITV)AOL TV client, Internet Service Provider (ISP) client, or instant messaging (IM) client) capable of communicating with other computer users, accessing various computer resources, and viewing, creating, or otherwise manipulating electronic content; and browser applications 180 (e.g., Netscape's Navigator or Microsoft's Internet Explorer) capable of rendering standard Internet content and other content formatted according to standard protocols such as the Hypertext Transfer Protocol (HTTP).

[0023] One The general-purpose computer 170 also includes a central processing unit 182 (CPU) for executing instructions in response to commands from the client controller 125. In one implementation, the client controller 125 includes one or more of the application programs may be installed on the internal or external storage 172 of the general-purpose computer 170. Alternatively, in In another implementation, the client controller 125 may access includes application programs externally stored in and/or performed by one or more device(s) external to the general-purpose computer 170.



[0024] The general-purpose computer 170 also includes a central processing unit 182 (CPU) for executing instructions in response to commands from the client controller 125, and typically will include a communication device 184 for sending and receiving data. One example of the communication device 184 is a modem. Other examples include a transceiver, a set-top box, a communication card, a satellite dish, an antenna, aor another network adapter, or some other mechanism capable of transmitting and receiving data over the communications link 115 through a wired or wireless data pathway 150. The general-purpose computer 170 optionally includes also may be a television ("TV") tuner 186 for receiving television programming in the form of broadcast, satellite, and/or cable TV signals. The TV tuner 186 permits As a result, the client device 120 to to the can selectively and/or simultaneously display network content received by communications device 184 and TV television programming content received by the TV tuner 186.

[0025] The general-purpose computer 170 maytypically will include an input/output interface 188 that enables or wired or wireless connection to various peripheral devices 190. Examples of peripheral devices 190 include, but are not limited to, a mouse 191, a mobile phone 192, a personal digital assistant 193 (PDA), an MP3 player (not shown), a keyboard 194, a display monitor 195 with or without a touch screen input, a TV remote control 196 for receiving information from and rendering information to users, and an audiovisual input device 198.

[0026] Although FIG. 1 illustrates devices such as a mobile telephone 192, a PDA 193, and a TV remote control 196 as being peripheral with respect to the general-purpose computer 170, in another implementation, such devices may themselves include the functionality of the general-purpose computer 170 and operate as the client device 120. For example, the mobile phone 192 or the PDA 193 may include computing and networking capabilities and function as a client device 120 by accessing the delivery network 160 and communicating with the host system 110. Furthermore, the client system 105 may include one, some or all of the components and devices described above.

A graphical user interface, such as a tabbed IM user interface, may be displayed on the display monitor 195 or other peripheral device 190. A tabbed IM user interface includes one or more tabs located adjacent to one another, and each tab is assigned to an IM session. An IM conversation counter and indicator may be provided for the tabbed IM user interface.

[0027] Referring to FIG. 2, a communications system 200 is capable of delivering and exchanging data between a client system 105 and a host system 110 through a communications link 115. The client system 105 typically includes one or more client devices 120 and/or client controllers 125, and the host system 110 typically includes one or more host devices 135 and/or host controllers 140. For example, the client system 105 or the host system 110 may include one or more general-purpose computers (e.g., personal computers), one or more special-purpose computers (e.g., devices specifically programmed to communicate with each other and/or the client system 105 or the host system 110), or a combination of one or more general-purpose computers and one or more special-purpose computers. The client system 105 and the host system 110 may be arranged to operate operated within or in concert with one or more other systems, such as, for example, one or more LANs ("Local Area Networks") and/or one or more WANs ("Wide Area Networks").

[0028] The client device 120 and the host device 135 are generally capable of executing instructions under the command of, respectively, a client controller 125 and a host controller 140. The client device 120 and the host device 135 are connected to, respectively, the client controller 125 and the host controller 140 by, respectively wired or wireless data pathways 130 and 145, which are capable of delivering data.

[0029] The client device 120, the client controller 125, the host device 135, and the host controller 140 typically each typically include one or more hardware components and/or software components. An example of a client device 120 or a host device 135 is a general-purpose computer (e.g., a personal computer) or software on such a computer capable of responding to and executing instructions in a defined manner. Other examples include a special-purpose computer, a workstation, a server, a device,



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