

31

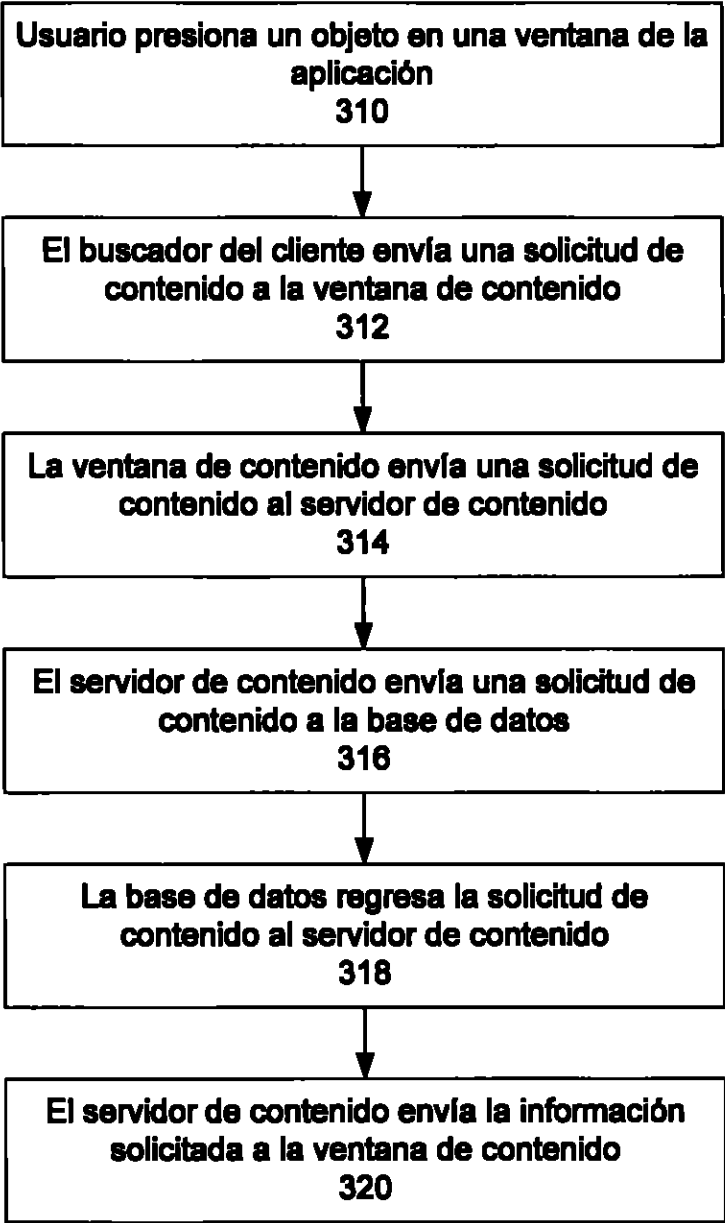


Figura 3

32

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The diagram illustrates a web browser window with two panes. The left pane (410) displays a contact form for ABCProvider, Inc. The right pane (412) shows navigation tabs and a list of actions.

Left Pane (410):

- Menu:** File, Edit, View, Favorites, Tools, Help
- Navigation:** Back, Forward, Favorites, Search, Media
- Address Bar:** Address http://
- Content:**
 - Contact Us:** You can contact ABCProvider, Inc., several ways. You can visit our training facility in Norcross, Georgia, contact us via phone or fax, or send us an E-mail by using the form below.
 - Form Fields:**
 - Name:
 - Address:
 - City, State:
 - Phone: Postal code:
 - Question:
 - Submit:**

Right Pane (412):

- Tabs:** General, Process Site Search, Process Contact
- Content:**
 - On this page you can:**
 - Submit a request to contact you,
 - Find our address
 - Get directions and a map to our Norcross facility
 - Type your question or request here.**

Figura 4

400

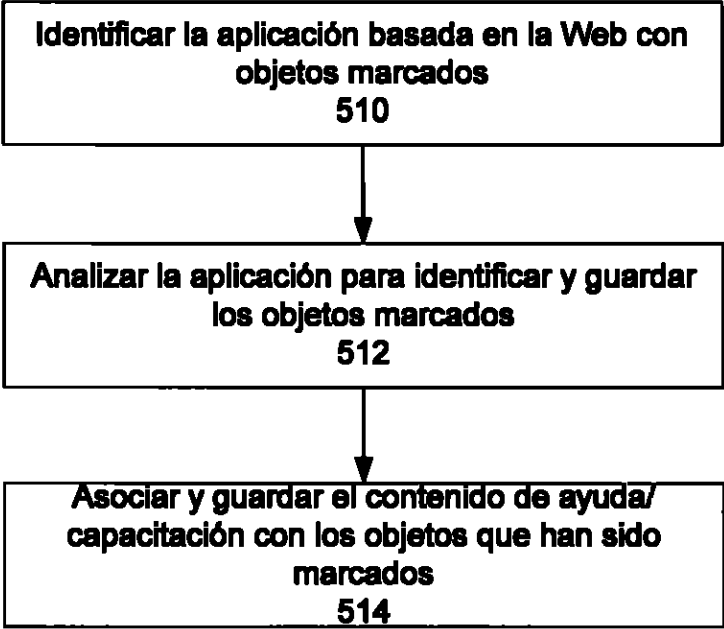


Figura 5

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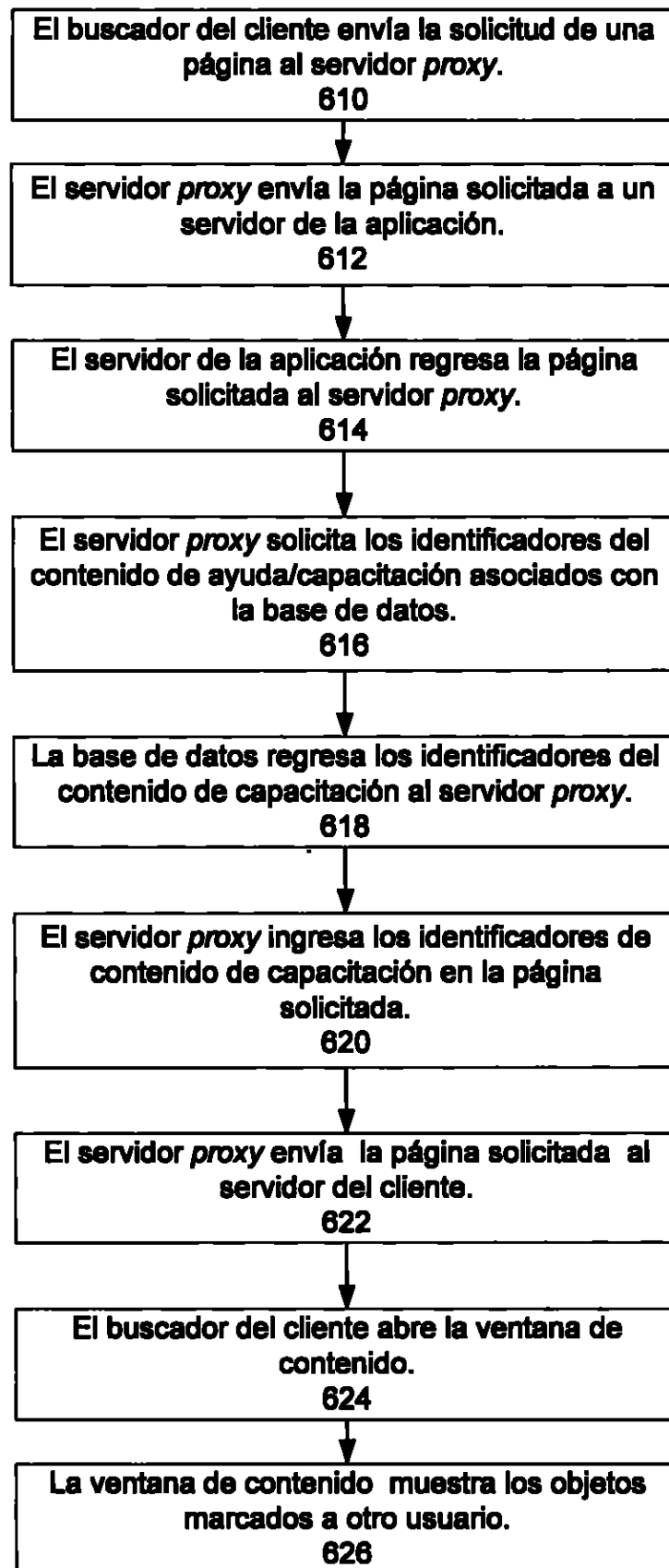


Figura 6

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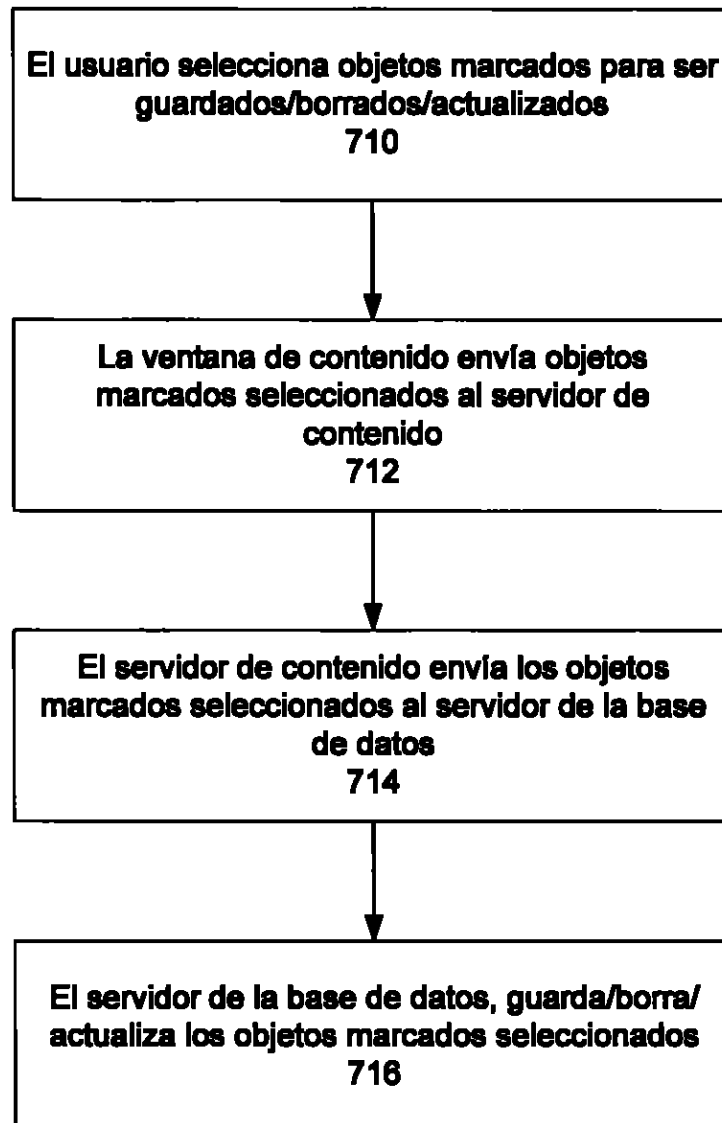


Figura 7

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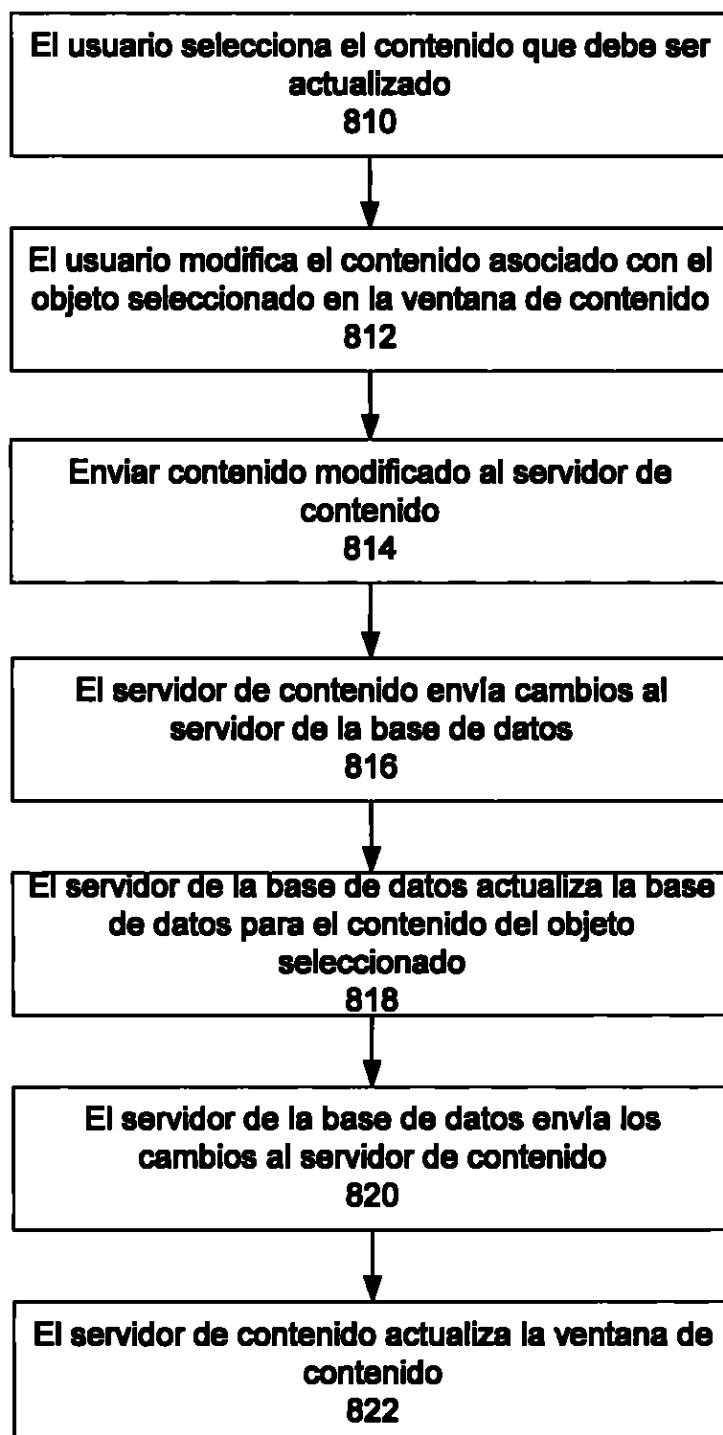


Figura 8

940

GeneralProcess Site SearchProcess ContactProcessesPolicies

Form Objects

Form 1910

912 Found on Page: Y

914 Record in Database: Y

916 Name: Search

918 Form Action: http://www.abc_provider.com/searchresults.as

919 ActionNothingV

920 Elements for Form 1

922

Page	DB	Action	Name	Type
Y	Y	NothingV	keyword	Text Field
N	Y	NothingV	Image field	Submit Button

924

926

928

930

Form 2

Found on Page: Y

Record in Database: Y

Name: contactus

Form Action: http://www.abc_provider.com/About/send_en

ActionNothingV

Elements for Form 2

V

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Admin

General: Update - Tabs

Current: Page - Links - Forms

Find: EPSS - Pages - Links - Forms - Fields

Figura 9

General

Process Site Search

Process Contact

Process

Policies

Link Objects

1000

1010

1012

1014

1016

Page	DB	Action	URL	
Y	Y	Nothing	V	http://www.abc_provider.com/default/
Y	Y	Nothing	V	http://www.abc_provider.com/About/
Y	Y	Nothing	V	http://www.abc_provider.com/About/
Y	Y	Nothing	V	http://www.abc_provider.com/About/
Y	Y	Nothing	V	http://www.abc_provider.com/Course/
Y	Y	Nothing	V	http://www.abc_provider.com/Course/
Y	Y	Nothing	V	http://www.abc_provider.com/Service
Y	Y	Nothing	V	http://www.abc_provider.com/Service
Y	Y	Nothing	V	http://www.abc_provider.com/default/
Y	Y	Nothing	V	http://www.abc_provider.com/Service
Y	Y	Nothing	V	http://www.abc_provider.com/default/
Y	Y	Nothing	V	http://www.abc_provider.com/Course/
Y	Y	Nothing	V	http://www.abc_provider.com/Course/
Y	Y	Nothing	V	http://www.abc_provider.com/Service
Y	Y	Nothing	V	http://www.abc_provider.com/default/
Y	Y	Nothing	V	http://www.abc_provider.com/default/

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Admin

General: Update - Tabs

Current: Page - Links - Forms

Find: EPSS - Pages - Links - Fields

Figura 10

39 85

1100

GeneralProcess Site SearchProcess ContactProcessPolicies

Content Search

Search for: 1110

ID 1112Title 1114Tab 1116Content 1118

Allv

Search Results (66 records) 1120

ID 1122	Title 1124	Tab 1126	Content (first 40 char 1128)
1	Contact us page stuff	General	On this page you can: Sub
2		General	Click here to return to the h
	Contact us	General	We like to keep in touch. (
		General	
		General	To search our site: 1 Type i
		General	
		General	Click this link to get informe
		General	A company's sucess can b

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Figura 11

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Web-Based Help/Training Content**Field of the Invention**

5 The present invention relates to providing help/training content for a web-based application, and is particularly concerned with simultaneously displaying customizable, interactive help/training content in a browser window for an object of a web-based application as the object is triggered in another browser window supporting the web-based application.

10 Computer-related applications have become increasingly sophisticated and easily accessible over the Internet. As technology advances, new versions and improvements are released periodically with increased frequency. Service providers and other entities are offering more and more applications over the Internet which are easily accessible to all types of users around the world.

15 With new technology and improved versions of software, users need instructions and oftentimes structured training classes to utilize certain applications effectively. While some applications provide a help module, traditional help programs generally offer static help content that must be requested by the user. Oftentimes, an answer to a particular problem may be difficult to locate, requiring time and effort. In addition, traditional help
20 tools are integrated into a particular piece of software (or application) thereby requiring separate help tools for each new piece of software, including upgrades. As a result, the help/training tool itself becomes obsolete with each new upgrade.

 Most companies will provide classroom instruction (e.g., training courses) to introduce a new application or updated version of a familiar application for their
25 employees. Training courses may last a few hours to several days to instruct new users on how to perform daily tasks. Similarly, newly hired employees will also need training for software. Even if a new employee is familiar with a particular application, the new employee will still need to be trained on company policies, procedures and other protocols that may be specific to an employer. The new employee might have a personal
30 instructor stepping through the operation of the computer program, providing the new employee with the policies and procedures for performing tasks (e.g., entering data). However, a personal instructor for each new employee is expensive and time consuming. One way to save costs is to provide training courses periodically, e.g., monthly, quarterly or semi-annually for a group of new employees or new users. However, if a new

employee is hired during the beginning of this period, the new employees will be unproductive for most of this period until the training course is offered. While training courses are a common way to provide instructions to users, lost production attributed to the company may be enormous and very costly to the company.

5 In addition, various users have different proficiency levels. While some users may only need a few hours of training to be productive, others may require several days. To offer the same training course to users of varying proficiency results in wasted resources, loss of productivity, and overall frustration.

10 While companies are one group of users who have a need for an improved training tool, any user may run into difficulties when accessing applications over the Internet. In particular, certain government related forms are difficult to complete correctly and oftentimes require explanation. Frustrated users may give up and be forced to resort to less efficient methods for accessing information.

15 These and other drawbacks exist with current systems.

Summary of the Invention

20 The present invention is directed to a software solution for web-based training. The present invention provides help/training content, which may include instructions, policies and procedures, and other general and/or customized information to a user while the user is accessing a web-based application system (e.g., PeopleSoft®, SAP®, etc.) delivered using Hypertext Markup Language (HTML), Extensible Markup Language (XML), or any tag-based application language. Help/training content may refer to any information or message to be displayed with the web-based application.

25 The information provided to the user may be context-sensitive, showing the appropriate information at the appropriate time (e.g., when the user needs the information). As the user moves a cursor or mouse pointer over an object of an application in one application window, the help/training content associated with the object is displayed in another window viewable by the user. The relevant help/training content may be associated with a particular object of the application so that even if the object is later repositioned, altered in size or shape or otherwise modified, the relevant help/training content will be nevertheless displayed to the user when the object is triggered (e.g., by moving a cursor over the object). Thus, in this example, the help/training content is not pixel-based, but rather defined at an object level. In another embodiment, the help/training content may be displayed depending on a location of an

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object as well. In addition, the help/training content provided to the user may be based on a particular page (or pages) of the web-based application. Further, help/training content may also be applied to the entire web-based application.

According to another embodiment of the present invention, the user is not required to request help/training content for certain objects or fields within an application. Rather, appropriate help/training content may be automatically provided to the user as the user triggers certain objects or fields (e.g., by moving a pointer or cursor over the object or field within the page of the web-based application using a mouse or other device). Therefore, the user is not required to invoke a help/training tool, nor is the user required to search through a table of contents or submit terms for a word search. For example, for topics familiar to a user, a quick scan of the relevant help/training content may be sufficient. However, for unfamiliar topics of areas that may need further explanation, a user may examine the relevant help/training content in greater detail. In addition, additional links and/or tabs of additional information may be explored. Thus, the user may proceed through an application at his or her own pace with an amount of help/training content sufficient for the individual user.

The help/training tool of the present invention may be separate from the web-based application so that the application as viewed by the end user does not appear altered or modified. In addition, the help/training tool may work with a variety of different applications. For example, help/training content associated with an object across multiple applications may be displayed to a user. If a user is running multiple applications concurrently, the help/training tool of the present invention may display relevant help/training content for multiple applications depending on where the user's cursor is currently located (e.g., over what object in what application). For example, as a user navigates through a browser, the content displayed in a content window may change accordingly. In another example, multiple browser windows may support multiple web-based applications. While a user may be positioned in a first browser window, the content shown in the content window may change as the user toggles among different browser windows supporting different applications.

The present invention may be utilized by companies, software vendors, and other entities. For example, the application may be used with in-house and vendor-delivered systems. The present invention may be used by software vendors to provide general training for their applications. In addition, consultants may provide custom training to the vendors' end-users. However, no cooperation from a software vendor may be required for

tag-based, web-delivered packages, for example. Therefore, end-user companies may work with the present invention with little or no assistance from the original software vendor. The present invention may also be used to provide consulting, implementation, and training on how to develop customized help/training content.

- 5 According to an embodiment of the present invention, a web-based Electronic Performance Support System (EPSS), running on Linux, Windows NT™ or other operating systems may be provided. The present invention may implement a combination of a proxy server, database server, and a Web server to deliver help/training content to a user simultaneously with the web-based application. One embodiment of the present
- 10 invention comprises a network-based (e.g., Internet, Intranet, etc.) tool that takes an application in a tag-based language, such as HTML, XML, or other language and instruments it with on-line, interactive, help/training content.

- According to one example of the present invention, the help/training tool may run on a Linux operating system. By running on a Linux operating system, no system
- 15 licensing fees for platform-level software are required to support the present invention. Although the help/training tool may be developed under Linux, on the client side, any workstation attached to the Internet or to a company's Intranet running a web browser, such as Netscape™, Internet Explorer™ or other browser, may view the help/training content delivered by the present invention.

- 20 According to another embodiment of the present invention, a content management window enables a content developer (or other user) to develop help/training content and insert the content into a database. For example, a content developer (or other user) may create content and associate the content with objects (e.g., input fields, buttons, lists, links, etc.) in a web-based application. The content management window may run with
- 25 the application or without the application. For example, when new content is being created for an application, the application may run while content is being associated with tagged objects. In another example, if a minor correction is being performed, an edit may be performed to the content without running the application.

- According to an embodiment of the present invention, a system for accessing
- 30 help/training content associated with a web-based application comprises a first browser window for supporting the web-based application; a help/training tool associated with the web-based application; a user device (e.g., a mouse or a cursor) for triggering at least one predetermined object in the web-based application wherein the at least one predetermined

44 49

object has an associated help/training content; and a second browser window for simultaneously viewing the associated help/training content for a triggered object.

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate various embodiments of the invention and, together with the description, serve to explain the principles of the invention.

Brief Description of the Drawings

The present invention can be understood more completely by reading the following Detailed Description of the Invention, in conjunction with the accompanying drawings, in which:

Figure 1 illustrates a system for providing help/training content for a web-based application, according to an embodiment of the present invention.

Figure 2 is a flowchart for accessing help/training content for a web-based application from a user's perspective, according to an embodiment of the present invention.

Figure 3 is a flowchart illustrating a help/training content request process, according to an embodiment of the present invention.

Figure 4 is an example of an application window and a content window, according to an embodiment of the present invention.

Figure 5 is a flowchart illustrating management of help/training content for a web-based application, according to an embodiment of the present invention.

Figure 6 is a flowchart illustrating a content management process, by which tagged objects are presented to a user, according to an embodiment of the present invention.

Figure 7 is a flowchart illustrating actions that may be taken with tagged objects relevant to a help/training system, according to an embodiment of the present invention.

Figure 8 is a flowchart illustrating a content management process by which content may be associated with selected objects, according to an embodiment of the present invention.

Figure 9 is an example of a form objects window, according to an embodiment of the present invention.

Figure 10 is an example of a link objects window, according to an embodiment of the present invention.

Figure 11 is an example of a content search window, according to an embodiment of the present invention.

Detailed Description of the Invention

5 The following description is intended to convey a thorough understanding of the invention by providing a number of specific embodiments and details involving a system and method for providing help/training content for a web-based application. It is understood, however, that the invention is not limited to these specific embodiments and details, which are exemplary only. It is further understood that one possessing ordinary
10 skill in the art, in light of known systems and methods, would appreciate the use of the invention for its intended purposes and benefits in any number of alternative embodiments, depending upon specific design and other needs.

Figure 1 illustrates a system for providing help/training content for a web-based application, according to an embodiment of the present invention. System 100 may
15 include a client browser for displaying an application window 110 that supports a web-based application which may be accessed over the Internet or a company's Intranet (or other network). The application may be developed using JAVA, PHP, HTML, XML, MySQL, javascript, ActiveX and/or any other language. Application window 110 may be in communication with a proxy server 112. Proxy server 112 may be in communication
20 with an application server 114 and a database server 122. Database server 122 may manage and maintain database 116, which may include a plurality of databases where the plurality of databases may be located at a single location or multiple locations. While having access to application window 110, a user may simultaneously view help/training content on a content window 118. Content window 118 may be in communication with a
25 content server 120, which may be in communication with database server 122. While the servers are illustrated as being separate, the functionality associated with each server may be combined. For example, functionality associated with the servers shown in Figure 1 may be combined into one server or multiple servers, which may reside at a single location or multiple locations.

30 Application window 110 and content window 118 may be supported by a client workstation 102, such as any desktop device, computer, personal digital assistant (PDA) or other device capable of accessing the Internet or a company's Intranet (or other network), including wireless/mobile devices. According to an example, the application window and the content window may be displayed on a single device. In another