LIST OF PRIOR ART DOCUMENTS

PATENT DOCUMENT

[0005]

Patent Document 1: JP 2009-1697300A

DISCLOSURE OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0006]

Incidentally, there are cases where the user of a web application desires to change the layout of UI components and the like on the screen in order to improve work efficiency, improve visibility, or the like. Also, at companies and the like, there are cases where a single terminal is used by multiple users, and in such cases, there is demand for the ability for each user to customize the layout on the screen.

[0007]

However, when using a web application, the display screen on the terminal apparatus is fixed by the program distributed by the web server, or by screen definitions registered on the terminal apparatus side. Accordingly, if the user desires to change the layout of UI components and the like on the screen, the program itself needs to be modified.

[0008]

On the other hand, if UI component layout definitions are registered on the terminal apparatus side, the user can change the layout by changing settings in the terminal apparatus. However, the user is forced to perform extra operations in this case, which is a disadvantage in terms of operational convenience. In particular, in the case where a single terminal apparatus is used by multiple users, each user needs to change the layout to their own layout after use by another user, which is bothersome.

[0009]

~~One example of an object~~Embodiments of the present invention ~~is~~ seek to provide a web system, a web server, a terminal apparatus, a web page display method, and a computer-readable recording medium that may solve the above-described problems and may enable easily changing

user-specific screen layouts when using a web application, without requiring program modification and without forcing the user to perform a bothersome operation.

MEANS FOR SOLVING THE PROBLEMS

[0010]

~~In order to achieve the above object, a~~A web system according to an aspect of the present invention is a web system including a terminal apparatus and a web server that provides a web service to the terminal apparatus,

the web server including:

a login processing unit that specifies a user who made a login request via the terminal apparatus;

a layout definition storage unit that stores a layout definition file for each user, the layout definition files each defining a layout of constituent elements of web pages used in the web service;

a file transmission unit that transmits, from among the stored layout definition files for each user, the layout definition file that corresponds to the user who made the login request, to the terminal apparatus; and

a constituent element storage unit that stores constituent elements that constitute the web pages, and

the terminal apparatus including:

a layout definition interpretation unit that specifies a layout of a web page designated by the user, based on the layout definition file that was transmitted from the web server;

a constituent element acquisition unit that acquires constituent elements needed in the specified layout from the constituent element storage unit of the web server; and

a screen display unit that arranges the acquired constituent elements in accordance with the specified layout, and displays the web page designated by the user on a screen.

[0011]

~~In order to achieve the above object, a~~A web server according to an aspect of the

present invention is a web server that provides a web service to a terminal apparatus, the web server including:

a login processing unit that specifies a user who made a login request via a terminal apparatus;

a layout definition storage unit that stores a layout definition file for each user, the layout definition files each defining a layout of constituent elements of web pages used in the web service;

a file transmission unit that transmits, from among the stored layout definition files for each user, the layout definition file that corresponds to the user who made the login request, to the terminal apparatus; and

a constituent element storage unit that stores constituent elements that constitute the web pages.

[0012]

~~In order to achieve the above object, a~~A terminal apparatus according to an aspect of the present invention is a terminal apparatus that receives provision of a web service from a web server, the terminal apparatus including:

a layout definition interpretation unit that specifies a layout of a web page designated by a user, based on a layout definition file that was transmitted from the web server and defines a layout of constituent elements of web pages used in the web service;

a constituent element acquisition unit that acquires constituent elements needed in the specified layout from among constituent elements of the web pages stored in advance in the web server; and

a screen display unit that arranges the acquired constituent elements in accordance with the specified layout, and displays the web page designated by the user on a screen.

[0013]

~~Also, in order to achieve the above object, a~~A web page display method according to an aspect of the present invention is a web page display method using a terminal apparatus and a web server that provides a web service to the terminal apparatus, the

web page display method including:

(a) a step of specifying, by the web server, a user who made a login request via the terminal apparatus;

(b) a step of, in the web server, transmitting, by the web server, from among layout definition files that are stored for respective users and each define a layout of constituent elements of web pages used in the web service, the layout definition file that corresponds to the user who made the login request, to the terminal apparatus;

(c) a step of specifying, by the terminal apparatus, a layout of a web page designated by the user, based on the layout definition file that was transmitted from the web server;

(d) a step of acquiring, by the terminal apparatus, constituent elements needed in the layout specified in step (c), from among constituent elements of the web pages stored in advance in the web server; and

(e) a step of arranging the constituent elements acquired in step (d) in accordance with the layout specified in step (c), and displaying the web page designated by the user on a screen.

[0014]

~~Furthermore, in order to achieve the above object, a~~A first computer-readable recording medium according to an aspect of the present invention is a computer-readable recording medium having recorded thereon a program for provision of a web service to a terminal apparatus by a server computer,

the recorded program including commands for causing the server computer to execute:

(a) a step of specifying a user who made a login request via the terminal apparatus;

(b) a step of transmitting, from among layout definition files that are stored for respective users and each define a layout of constituent elements of web pages used in the web service, the layout definition file that corresponds to the user who made the login request, to the terminal apparatus; and

(c) a step of transmitting the constituent elements of the web page to the terminal

apparatus in accordance with an instruction from the terminal apparatus.

[0015]

~~Moreover, in order to achieve the above object, a~~A second computer-readable recording medium according to an aspect of the present invention is a computer-readable recording medium having recorded thereon a program for reception of a web service from a web server by a computer,

the recorded program including commands for causing the computer to execute:

(a) a step of specifying a layout of a web page designated by a user, based on a layout definition file that was transmitted from the web server and defines a layout of constituent elements of web pages used in the web service;

(b) a step of acquiring constituent elements needed in the specified layout from among constituent elements of the web pages stored in advance in the web server; and

(c) a step of arranging the constituent elements acquired in step (b) in accordance with the layout specified in step (a), and displaying the web page designated by the user on a screen.

ADVANTAGEOUS EFFECTS OF THE INVENTION

[0016]

As described above, according to embodiments of the present invention, it is possible to easily change user-specific screen layouts when using a web application, without requiring program modification and without forcing the user to perform a bothersome operation.

BRIEF DESCRIPTION OF THE DRAWINGS

[0017]

FIG. 1 is a block diagram showing a configuration of a web system according to an embodiment of the present invention.

FIG. 2 is a diagram showing an example of a layout definition file used in the embodiment of the present invention.

FIGS. 3A and 3B are diagrams showing examples of a web page displayed on a screen.