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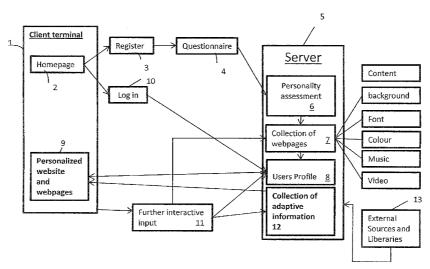
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#### (54) Title: METHOD FOR DISPLAYING WEBSITES



FlG. 1

(57) Abstract: Method for displaying one or more webpages of a website in a client-server architecture, the method comprising the steps of a) displaying an interactive webpage of the website on a client terminal display, b) receiving interaction data of an operator of the interactive webpage, c) forwarding the interaction data to the server, d) selecting the appropriate configuration of the one or more webpages of a website out of a collection of available webpages, and e)displaying the one or more webpages of the website in the selected appropriate configuration on the client terminal display.





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Method for displaying websites

convincing for all users.

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The invention concerns a method for displaying one or more webpages of a website in a client-server architecture.

A client-server architecture involves multiple clients connected to a central server. In general a client is client terminal display, such as a mobile phone, tablet, notebook or desktop computer. Such client is by wire, wireless or by a combination thereof, directly or indirectly, by several other servers, connected to the central server. For instance in an internet environment the person or user operating a client terminal may, for instance with help of a browser, access the central server and request certain services. The central server will return certain data which are displayed at the client terminal display. The returned data are in general displayed as a website consisting of one or more webpages. This method of displaying webpages is fairly rigid. Every person will have the same webpage displayed. The webpages are therefore designed for an average person that may be interested in the website. Accordingly such person will not obtain information that is tailored to his personal circumstances, mood, and mental stage and the owner of the website is not able to tune the website to the specific circumstances of interested persons. The information that the owner wishes to provide to the interested person is therefore in general suboptimal, restricted and not presented in a way that it will be optimal attractive or

Various prior art documents relate to websites.

WO2009147365 (Al) recites a system and method for adding content, such as a gadget, comprising a first part and a second part, to a webpage loaded on a browser without requiring the webpage to be reloaded on the browser in the process.

US2006282304 (Al) recites a system and method operating on a client device and acquiring a suspect list of user products based on information derived from the client device. The system normalizes the list, and the user confirms the accuracy of the product list. At the best the interaction between user (client) and system relates to establishing personal interests of a user with respect to commercial goods and the like and/or preferences

with respect to representation of the website. Such does not relate to *personality* characteristics let alone well-being of a user.

The present invention intends to solve one or more of the problems of the prior art as described above, and it is in particular an objective of the invention to provide a method to display a website that may be adapted to a person interested in that website and to the circumstances of such interested person.

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The method according to the invention is characterized by one or several of the appended claims.

According to a first aspect of the invention the method for displaying one or more webpages of a website in a clientserver architecture comprises the steps of a)displaying an interactive webpage of the website on a client terminal display, b) receiving interaction data of a (virtual) operator of the interactive webpage, c) forwarding the interaction data to the server, d)selecting the appropriate configuration of the one or more webpages of a website out of a collection of available webpages, and e)displaying the one or more webpages of the website in the selected appropriate configuration on the client terminal display. Accordingly the method according to the invention provides for an interactive website. The operator of the client terminal may enter data, for instance according one or more questionnaires, which are forwarded to a server. On basis of the interaction data the appropriate configuration of a website or webpage is selected out of a collection of available webpages. The webpage is then displayed at the client terminal display. In this way the operator or user of the client terminal may, consciously or unconsciously, influence what and how information is displayed. The owner of the website is now in a position to provide the requested information in an attractive, optimal configuration that is convincing to the operator (user) .

In a further aspect of the invention the interaction data, entered by the operator, are personalized. By entering personal information a webpage may be further tuned to the personality of the operator. Such personalized data may comprise personal preferences and/or personality characteristics of the operator. In this way the collection of webpages, available at

the server or made available to the server, may comprise a large number of webpages specifically tuned to a spectrum of personal preferences and/or personality traits. On basis of the interaction data the preference and/or the personality traits of the operator are determined and a selection is made out of the collection of webpage configurations.

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According to the invention the steps of receiving interaction data may include a) displaying a questionnaire of one or more questions, and b) recording the one or more answers of the questionnaire and/or c) recording technical data available from the user which may include cookies, geographic data and server data. In this way the operator may be questioned about several aspects concerning his preferences and/or personality in order to obtain an elaborate picture. For the personality assessment suitable psychology tools may be applied such as the 'big five factors' assessment, also called the 'five factor module', which is a generally accepted tool to describe human personality.

In a further embodiment of the invention the step of selecting appropriate configuration of the one or more webpages of a website includes a) categorizing the one or more answers of the questionnaire and b) selecting the appropriate configuration of one or more of the webpages out of a categorized collection of configurations on basis of the determined category. The combinations of answers are categorized and on basis of this category the most suitable webpage is selected out of a collection that is categorized in relation to the categories of possible combinations of answers.

According to the invention the interaction data may include the login data of a specific operator, which login data may be linked by the server to stored interaction data of such specific operator, and, when logging in, the appropriate configuration may be selected on basis of the linked stored interaction data. More specific the login data may be linked to a user's profile stored at the server. In this way an operator who has already registered will obtain the appropriate configuration of the webpage immediately after login. Also the users profile may become available for the operator.

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In a further aspect of the invention the collection of available websites comprises websites that differ in their combination of several variables such as, but not limited to, content, content density, layout, color, font, background music, films, adjusted clothing and behavior of actors and atmosphere. By providing more or less custom-made content, the information is provided in an optimal way for a specific user with certain preferences and/or a specific personality. From a psychological viewpoint, transfer of this information to the operator is further enhanced by adapting the website design to the specific personality of the operator. Such design may for instance be reflected in content density, layout, color, font, background music, films, adjusted clothing and behavior of and atmosphere. A younger person may for instance prefer a different color setting and type of music than an older person. Also the circumstances may be reflected in the webpage. For instance the color setting and music may differ for a morning and night application of the webpage. The method of the invention makes it possible to have the webpages of the collection of available webpages adapted in response to the users profile and/or further interactive input by the operator. In this way the operator may influence some of the settings of the webpage as initially provided to the operator. Such new configuration may be stored in the collection and may, for instance on a self-learning basis, also made available to other users if such configuration seems appropriate for a specific subgroup of users.

According to the invention, in response to the users profile and/or to the interaction data and/or to further interactive input by the operator, the server may select adaptive information out of a collection of adaptive information available to the server, and forward the adaptive information to a client terminal display. In this way the content of a webpage may be adaptively extended with additional information. Such additional information may be stored in a collection of adaptive information. Forwarding such additional information may be triggered by a certain setting in the users profile, by interaction data or further interactive input by the operator, simply said on request of the operator/user. The adaptive

information may be integrated in the webpage in form of text, pictures, diagrams and in any other suitable form. In particular the adaptive information may come as an avatar. Such avatar may optimally reflect, in a graphical way, the personal characteristics and circumstances of the operator /user. In a further aspect of the invention the adaptive information is forwarded to a client terminal by a message service, such as e-mail.

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The various aspects of the invention will now be described in more detail and will be elucidated, by way of example only, with reference to the accompanying drawing which shows in figure 1, a flow diagram of an example client-server architecture, operated according to the method of the invention.

In figure 1 the client terminal 1, which may for instance be a smartphone, a tablet, a notebook or a desktop computer, is connected to a main server 5. Such connection may be wired, wireless or a combination thereof. The connection may be direct or indirect via one or more servers. In an internet environment normally several servers are involved. An operator of the client terminal 1 may contact the server 5, for instance by internet and may request information from the server 5, for instance information from a certain website. The homepage 2 of that website will be displayed on the client terminal display. According to the invention the website will request the operator to register 3. In order to have the operator registered the website will display a questionnaire 4. The questionnaire is composed such that the personality of the operator or at least the category of personality of the operator may be determined. Such questionnaire may for instance be based on the psychology tools such as 'big five factors' also known as 'five factor model'. After the operator has answered all questions, by entering the answers at the client terminal 1, the answers are forwarded to server 5. Server 5 is provided with personality assessment software 6 that assesses the personality of the operator or at least the category of personality of the operator. The software may also run on a remote server with which server 5 is connected. The assessment results of the personality assessment software 6 are then entered to a

collection of webpages 7 at the server 7. Also this collection of webpages 7 may be (partly) collected on a remote server with which server 5 is connected. The collection of websites 7 consists of websites that for instance may differ in general content, content density, background, font, color, music and video content. These collection are categorized in relation to personality. Accordingly, on basis of the assessed personality, a personalized website with webpages 9 is forwarded to the client terminal 1 and the operator or user is provided with a website and webpages that match optimally with his personality.

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The users profile 8 of the operator will be maintained at the server 5, or alternatively on a remote server with which server 5 is connected. The next time the operator approaches the website he may login and the users profile 8 will be loaded to the client terminal 1 immediately.

The server 5 also comprises a collection of adaptive information 12. Further, the server 5 may be connected to external sources 13, in particular external servers, that store adaptive information. The server may, for instance dependent on certain developments in the server profile 8, add additional adaptive information to the personalized websites 9. This adaptive information may for instance be advises or references/links to other website that may be of particular interest to the operator. The operator may also self-trigger such adaptive information by putting forward to the server a request for further interactive input 11. The server 5 will then select appropriate adaptive information that will then be included in the website or webpage 9 as displayed.

A practical application of the method according to the invention may for instance be a website that provides information concerning obesity, that motivates users to tackle their obesity, that provides dedicated and customized training programs and that provides advice and support during the training program. Such application typically requires a high degree of interaction between the user and the website. Further, it is known that each person with obesity has its own personal characteristics and circumstances that may be the reason for his or her obesity and may influence the results and success of a

possible training program. Moreover, there are a large number of types of diet and types of training programs. One diet or training program may be very effective for a certain person and may have no or less effect to another person. The experience is that persons with obesity and in particular persons in an obesity training program observe mood swings. The effect of the advices and training program may accordingly depend on the sensitivity of approach.

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A person interested in advise en training support may enter the obesity-support website. The opening webpage will then provide a questionnaire to the user. Such questionnaire will typically comprise questions to determine the personality of the user. For instance the psychology tools 'big five factors' also known as 'five factor model' may be applied. Of course also additional questions may be included in the questionnaire, in particular questions concerning the physical condition and the particular circumstances. The answers may be registered as an users profile and the user may be provided with a login. The next time the user enters the website, after login, all relevant information will immediately be available and be used to provide the optimal settings of the website and in particular the webpages thereof. The answers of the questionnaire are applied to determine the optimal setting of a webpage. The server stores or has entrance to a collection of webpages. Each webpage is for instance available in several settings. Each setting is optimal for a category of users. Based on the answers of a user, the user is assigned to a certain category and the appropriate webpage for that category will be displayed at the computer of the user, or at any other client terminal display, such as a smartphone or a tablet. Such webpage may for instance differ in content. In this way only the information will be displayed that is relevant for the user. Further, the design of the website may be tuned to the user. Users are very sensitive for such design. The extent to which the website is found pleasant also determines whether the user will continue application of it and whether its advices and training programs are used. For instance younger persons may perceive a website with more content, pop music, video content and stronger colors as more attractive.

Older persons may for instance prefer advice from a doctor, while younger persons may prefer a personal coach. Although the questionnaire will determine the user profile, the user may be enabled to adapt its users profile and accordingly the website and one or more of is webpages. A webpage may also provide adaptive information. This adaptive information may be requested by the user, however may also be generated by the website itself in response to a certain occurrence. For instance, if the user notes that his or her weight loss during the program is not in line with the program, he or she will ask for advice. Then such advice may be generated from a collection of additional information, such as a collection of advices. In the same occurrence the website could also generate this adaptive information itself. The advice may then be added to a webpage. Alternatively, the advice may be forwarded by message services as e-mail or sms. The advice may be visualized, for instance in a diagram. In the present application the adaptive information may for instance be visualized in an avatar. Such avatar represents the user's alter ego and may at an obesity website represent the body shape and the development thereof during the training program.

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In a further aspect the present invention relates to optimizing communication between a website and a user. Such communication may be directed towards improved well-being of a user, such as by assisting in weight control.

In a further aspect the present invention relates to improving life and/or health of a user of the present website. By assisting in a user in making choices and preferences, taking into account e.g. personality characteristics, e.g. weight control can be further optimized.

To the person skilled in art it is obvious that the above given embodiments of the method represent only a few of the many possible variations in which method according to the invention may be executed. Therefore the embodiments given here must be understood as an elucidation to the appended claims without limiting the scope of the invention. Within the protective scope numerous variations are conceivable.

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## **CLAIMS**

- 1. Method for displaying one or more webpages of a website in a client-server architecture, the method comprising the steps of
- $\hbox{a) displaying an interactive webpage (2,9) of the} \\$  website on a client terminal display (1),
- b) receiving interaction data of an operator of the interactive webpage (2,9),
  - c) forwarding the interaction data to the server (5),
- d) selecting the appropriate configuration of the one or more webpages of a website out of a collection of available webpages (7), and
- e) displaying the one or more webpages of the website in the selected appropriate configuration on the client terminal display (1).
- 2. Method according to claim 1, characterized in that interaction data comprise personalized data.
- 3. Method according to claim 2, characterized in that the interaction data comprise preferences of the operator.
- 4 . Method according to claim 2 , characterized in that the interaction data comprise personality characteristics of the operator .
- 5. Method according to one of the claims 1-4, characterized by the steps of
- $_{\mbox{\scriptsize a}\,\mbox{\scriptsize )}}$  displaying a questionnaire  $_{\mbox{\scriptsize (4)}}$  of one or more questions, and
- $\ensuremath{\mathtt{b}}\,)$  recording the one or more answers of the questionnaire, and/or
- c) recording technical data available from the user which may include cookies, geographic data and server data
- 6. Method according to claim 5, characterized in that the step of selecting the appropriate configuration of the one or more webpages of a website includes
- a) categorizing the one or more answers of the questionnaire and
- b) selecting the appropriate configuration of one or more of the webpages out of a categorized collection of

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configurations on basis of the determined category.

- 7. Method according to one of the preceding claims, characterized in that interaction data of a specific operator are stored at or are made available to the server (5).
  - 8. Method according to claim 1, characterized in
- a) that the interaction data include login data (10) of a specific operator,
- b) that the login data (10) are linked by the server (5) to stored interaction data of such specific operator, and
- c) that, when logging in, the appropriate configuration is selected on basis of the linked stored interaction data.
- 9. Method according to claim 8, characterized in that the login data (10) are linked to an users profile (8) stored at the server (5).
- 10. Method according to claim 1, characterized in that the collection of available websites (7) comprises websites that differ in their combination of several variables such as content, content density, layout, color, font, background music and atmosphere.
- 20 11. Method according to one of the preceding claims, characterized in that the webpages of the collection of available webpages (7) are adaptive in response to the users profile (8) and/or further interactive input (11) by the operator .
- 12. Method according to claim 11, characterized in that a) in response to the users profile (8) and/or to the interaction data and/or to further interactive input (11) by the operator, the server selects adaptive information out of a collection of adaptive information (12) available to the server,
- 30 and

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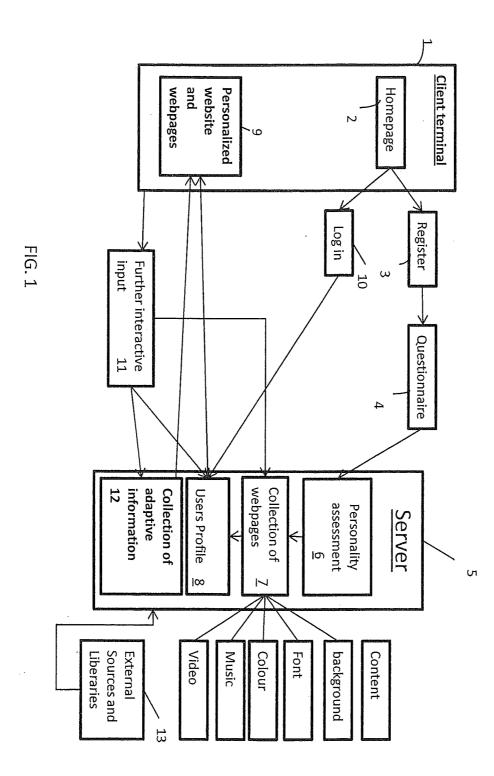
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- b) that the adaptive information (12) is forwarded to a client terminal display.
- 13. Method according to claim 12, characterized in that the forwarded adaptive information (12) is integrated in one or more of the webpages (9) of the website.
- 14. Method according to claim 12 or 13, characterized in that the forwarded adaptive information (12) is visualized, for instance as an avatar representing the operator.

15. Method according to claim 12, characterized in that the adaptive information is forwarded by a message service, for instance e-mail.



#### INTERNATIONAL SEARCH REPORT

International application No PCT/NL2013/050004

a. classification of subject matter INV. G06F17/30

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal , WPI Data, INSPEC, COMPENDEX

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	Anonymous: "User-speci fic wep page clCC6ss", Discussi on forum on CodeGuru website , 15 July 2009 (2009-07-15) , pages 1-2 , XP002683138, Retri eved from the Internet: URL: http://forums.codeguru.com/showthread.php?480862-User-specific-web-page-access [retri eved on 2012-09-05] page 1, paragraphs 1, 2 page 2, paragraph 2	1-15

X	Further	documents	are listed	in the	continuation	of Box C
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X See patent family annex.

- \* Special categories of cited documents :
- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

### 28 February 2013

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016

# 07/03/2013

Authorized officer

Haffner, Ronal d

# **INTERNATIONAL SEARCH REPORT**

International application No
PCT/NL2013/050004

C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	1
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Х	Anonymous: "i Google", Wi ki pedia, the free encycl opedia	1-15
	26 June 2011 (2011-06-26) , pages 1-6, XP002683139 ,	
	Retri eved from the Internet: URL: http://web.archi ve.org/web/20110626231 951/http://en .wi ki pedi a.org/wi ki / 1Googl e [retri eved on 2012-09-07] page 1 - page 2	
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/NL2013/050004

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