# Distributed management of corporate websites

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#### **Abstract**

The aim of this work is to present and explain an institutional tool that enables the university's different centers, departments and projects to create Web pages independently while respecting the institutional image, and without the user needing special technological knowledge. The tool has been developed by the University of Las Palmas de Gran Canaria (ULPGC) as part of its Plan for Info-Tech Systems and Communications ULPGC 2003-2006 (Pl@n STIC ULPGC 2003-2006). This article explains the motives behind the tool's development as well as its structure, methodology and most significant advantages..

Keywords: websites, planning, management

#### 1 Introduction

There is no doubt that Web pages today constitute a means of multi-media expression and creation that allows the institutional image to be projected. Therefore, it is essential for universities to be able to communicate a coherent and coordinated image through the Web pages of its different centers, departments and non-centralized projects.

In that context, the University of Las Palmas de Gran Canaria (ULPGC) has developed a tool that permits the transfer of knowledge relevant to the different profiles for which it is intended and so facilitates the presentation of issues relevant to the university areas.

This tool can be accessed on the Web and any user with a basic knowledge of computers can manage his/her site and achieve a result that is coherent with the institutional image and the other websites.

## 2 Origin of the tool

This tool to create Web pages was created in response to the need to reinforce the corporate image and to integrate the different areas of the ULPGC under one graphic identity. Its development began in the middle of April 2003 to meet the needs of the university community in line with the guidelines set out in the Plan for Info-Tech Systems and Communications ULPGC 2003-2006 (Pl@n STIC ULPGC 2003-2006) [1,2].

Different groups of individuals have varying gaps in their knowledge of how to create Web pages and an easy-to-use tool was developed to reduce those gaps. To that end, the different needs and deficiencies related to the creation of corporate Web pages were analyzed.

The modularity of the ULPGC's new tool means that managers with no experience of MySQL, HTML and PHP can design Web pages of their areas of interest and include texts, images and links while always respecting the corporate graphic identity.

# 3 Structure and methodology of the generic Web page

In the design stage of the Institutional Tool, a series of basic tasks, which the user can access after authorization, were proposed in order to put the tool into operation.

As Figure 1 shows, there are four principal tasks that are seen in the management area and these are accessed from a home page. Those four tasks are *Page Management*, *Menu Management*, *Web Appearance Management* and *On-line Help* and the following section gives a detailed description of each of them.

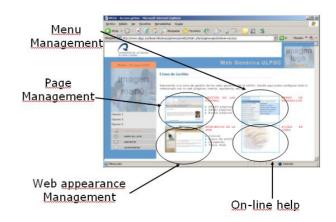


Figure 1. Management area

#### 3.1 Page Management

The creation of the new Web page begins in this area. It contains an RFT editor with simple tools, like those of any word processor, with which the user may insert text, images and links, as shown in Figure 2. The following elements permitting the desired Web page to be designed are also found in this area.

- Page Title. This allows the title of the Web Page to be inserted.
- *Description*. This space permits a short description of the page to be inserted.
- *Page mnemonic*. From here it is possible to insert a reference to the created page.
- Menu option. This element indicates which browser menu option is highlighted when the created page starts to be used.
- Contents editor. The contents of the page are developed in this area.
- *Delete*. This allows the created Web page to be deleted.
- View. This displays a preliminary view of the Web page in a new window.

The tool is intended for users of all levels without limiting the creativity of those who wish to advance in the development of innovative pages. This makes it possible to insert pages created with other instruments, such as PHP and HTML.



Figure 2. Page Management. Editor

#### 3.2 Menu Management

The page menus represent a way of signposting and ordering the page content and it is essential that they have a certain flexibility in the administration and management of information. The dynamics of the content will depend on the balance, structure and relationships between the menus.

In this respect, no restriction to the designer's organization capacity was foreseen and various options to configure the browser menu were developed. This makes it possible (Figure 3) to create new menu options, insert sub-selections of an existing option as well as to delete or edit them.

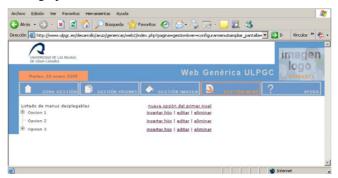


Figure 3. Menu management

If a user decides to create a New First Level Option, the tool requests the following data (Figure 4):

- *Option name*. Represents the name of the option to be displayed on the menu.
- Option description. Refers to a brief description of the defined option.
- *URL*. Constitutes the address of the created Web page. In this element there is a distinction between internal and external links. Internal links refer to Web pages that the user has placed within the management area of the tool, while external links refer to pages outside the Web page.
- Open in a new window. This permits the opening of a new page containing the information about the option selected.
- Expand column. This is used from the second menu option when its title is long.
- Order number. This represents the order of the option in the menu.



Figure 4. Insert a new option in the menu

It is also possible to *Insert Sub-option*; an element that permits sub-options to be added to the selected menu option. A maximum of four levels of sub-options may be added.

Finally, and logically, the option *Edit* allows modifications to be made to the different characteristics of the menu option, while the option *Delete* allows the selected menu option to be deleted.

#### 3.3 Web page appearance management

The image, design and appearance, together with the technology, are details that emphasize the content of Web pages. The institutional tool enables the user to experiment with the different appearances of the page with ease, while always respecting the corporate graphic identity. In this way, the titles and graphics can vary in color, font, size, etc. depending on the user's preferences (see Figure 5).

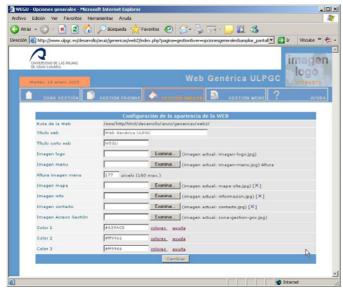


Figure 5. Web page appearance management

The elements that enable changes in the appearance of the Web page are:

- Web page path. Represents the path within the server where the Web page is located.
- Web title. This is the title of the Web page.
- *Short Web title*. This is the Web page title that appears in the browser when the different pages are loaded.
- Logo image. This is the image found at the top right of the page. The default images are located in a folder called "images". It is possible to add new graphic images.
- *Menu image*. This is the image found above the menu.
- *Menu image height*. This option permits the position of the "image menu" to be determined.
- *Title image*. This is the image found at the top of the page with the Website title.
- *Map image*. This is the image of the Web page map. This option offers the possibility of deleting it.
- Information image. Clicking on this image opens a new window displaying information about the Web page. Its use is optional since the designer may delete it.
- Contact image. Clicking on this symbol opens a new window with the contact person/s. This option can be deleted.
- Management access image. This gives access to the Web page management area.
- *Color 1*. To modify the color in the upper left area of the Web page. (see Figure 6).
- *Color* 2. To change the color of the date box. (see Figure 6).
- *Color 3*. To change the color of the bars that appear when a menu option is selected (see Figure 6).

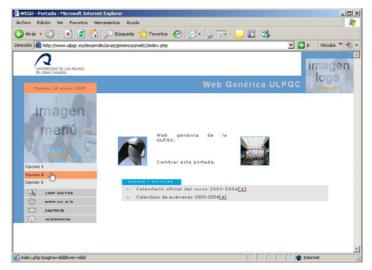


Figure 6. Color management

#### 3.4 On-line Help

Although this institutional tool is easy to use, it must provide a certain flexibility to be able to meet the individual needs and knowledge gaps of the different users. In this respect, a user's manual with four sections (Page management, Menu management, Web page appearance management and On-line help) has been prepared. Each of the sections is explained in the manual, which gives a step-by-step guide to how to create the Web page.

On-line help is also available to facilitate rapid, efficient learning while enabling any problems requiring urgent attention to be solved.

#### 4 Results

As mentioned in the introduction, the development of the tool started in April 2003 and it became operational in the last quarter of 2003, meaning that it has been effectively used for more than a year. The results have been excellent during that period, both from the Web communication perspective and from the user's point of view, given the tool's flexibility, simplicity and independence.

During the period of operation, sixteen pages have been incorporated into the tool. They are of various types:

- Areas of the university (http://www.serviciostic.ulpgc.es, for all the ICT services provided in the University).
- Faculty pages (http://www.fcee.ulpgc.es, which belongs to the Faculty of Economic and Business Sciences).
- Institutional project pages (http://www.softwarelibre.ulpgc.es, that is the ULPGC Free Software Office).
- Congress
   (http://www.congresos.ulpgc.es/item2004, of the Congress of Information Technology in Education Management, held in Las Palmas de Gran Canaria in July 2004).
- External entities linked to the University (http://www.esep.ulpgc.es of the Higher School of Protocol Studies).
- Social projects carried out my university members (Parranda Universitaria, a musical group that plays typical Canarian music, http://www.ulpgc.es/webs/parranda).

All of those pages are being maintained by different users with no great knowledge of IT. Figure 8shows screen snapshots of some of the pages, where the value of having this type of tool to help guarantee a homogeneous corporate image is obvious, as the institutional image demonstrates (see Figure 7).



Figure 7. Institution's Web page







Figure 8. Other web pages managed with the tool

## **5 Conclusions**

This tool for Web page design creates a series of advantages in the educational context, such as:

- It permits the easy design of Web pages according to the different levels of knowledge of the individual heads of departments and areas.
- It offers flexibility and modularity in its presentation of contents.
- It maintains the corporate graphic identity in all the Web pages that are developed, without limiting creativity.
- It permits the designer to achieve learning parallel to the continuous innovation of the tool without being dominated by technological sophistication.
- It facilitates the organized and creative transfer of knowledge in line with the heterogeneity of the different university profiles.

#### References

- [1] Universidad de Las Palmas de Gran Canaria. The ULPGC Strategic Plan ULPGC 2002-2006. (2002). [Available in English at <a href="http://www.ulpgc.es">http://www.ulpgc.es</a>]
- [2] Universidad de Las Palmas de Gran Canaria. The Plan for Info-Tech Systems and Communications ULPGC 2003-2006. (2003). [Available in English at http://www.ulpgc.es]