

CONTENT MANAGEMENT SYSTEM FOR WEBSITES

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Abstract: A Content Management System (CMS) for Websites is a combination between a database, a file structure and other software modules that are used for registering, editing or deleting the information.

The necessity of this kind of system is imposed in the case of dynamic websites, which need a frequent modification. With the help of this CMS, the information can be modified with a real ease from the administration area of the site; the modification of some files, usually HTML, is not necessary. This system can be implemented in any site; the implementation is made in the programming part of the site, known as the FRONTEND of the site (the part that visitors see).

The paper covers not only the presentation of the administration module, but also of the visualization module of the content added with the first module.

The application was made in PHP programming language, with MySQL database, and runs optimal on a Apache web server.

INTRODUCTION

The advanced Content Management System has as start point the facilitation of the maintenance of a website with minimum of effort. For this, the advanced CMS has a few basic functionalities: adding, modifying, deleting sections and articles; these basic functionalities also define the notion of Content Management System.

The CMS allows the addition of “Editors” for the content administration, users that have restrained rights and “Admins”, users that have all rights over the CMS.

1. TECHNOLOGIES

The system uses PHP and MySQL technologies for the administration and editing of content. Developed web pages use the Cascading Style Sheets (CSS) for a separation between the HTML code and the proper formatation of the colors and fonts and for a better optimization. The JavaScript technology is used also for client-side validation, validations that reside also server-side in the PHP files, taking in consideration that some browsers do not have JavaScript activated.

2. THE STRUCTURE OF CONTENT MANAGEMENT SYSTEM

Sections and Articles

The content is stored in the database under the form of sections or articles, like the general structure. A section can contain other sections or articles.

A Section has the following attributes:

- Section Parent
- Section Title
- Section Description
- Statute (for Approbation, Not Approved, Approved)

Structure Sample

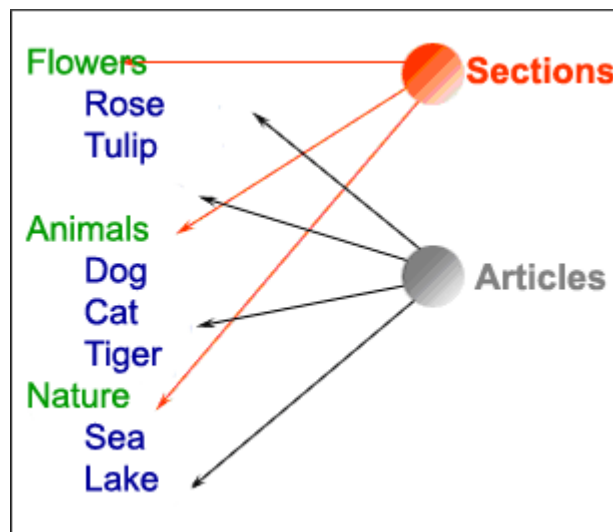


fig. 1

An Article has the following attributes:

- Section
- Article Title
- Article Subtitle
- Article Description
- Article Content
- Statute (for Approbation, Not Approved, Approved)

2.2. Possible operations over sections

Over a section there can be made several operations:

- Add
- Modify

- Delete

Add: This operation allows the addition of a new section; for this request to be accomplished there is required the following information: Section Parent, New Section Title, Section Description and Statute (for Approbation, Not Approved, Approved).

Modify: This operation allows the modification of an already existing section; for this request to be accomplished there is required the following information: the Section that is wanted to be modified, Section Parent (in the case that it is wanted its modification), Section Title, Description and Statute.

Delete: This operation allows the deletion of a already existing section

2.3. Possible operation over an article

Over an article there can be made several operations:

- Add
- Modify
- Delete

Add: This operation allows the addition of an article within the framework of a selected section; for this request to be accomplished there is required the following information: Section, New Article Title, New Article Subtitle, Article Description, Article Content, Statute.

Modify: This operation allows the modification of an already existing article; for this request to be accomplished there is required the following information: the article that is wanted to be modified must be selected, this being done by selecting the section on the first time; to every article I can modify the following fields: Section Parent, Article Title, Article Subtitle, Article Description, Article Content and the Statute of the Article.

Deletion: This operation allows the deletion of an already existing article.

2.4. Authors

The authors are the ones that can log on in CMS and that can modify the content. There are two kinds of authors:

- *Admin*
 - *Editor*
1. The *Admin* type author has all the rights over CMS, including the right of adding other Authors.
 2. The *Editor* type author has the possibility of adding other Authors limited; rest, he can add, modify or delete the content of the site from the administration module of CMS.

Both types of Authors dispose of the possibility to modify the data in their profile.

Author Role	Admin
Role Description	KING OF ALL
Username	razvang
Modify Password ?	<input type="checkbox"/>
New Password	<input type="text"/>
Confirm New Password	<input type="text"/>
Name	Razvan Gavrilas
Email	razvang@metroconsultgrup.com
Website Title	Situl Meu
Website	www.yahoo.com

Fig.2 Author of Profile

2.5. *Authors Operations*

The Admin type Author has the possibility of executing the following operations:

- Add
- Modify
- Delete
- Modify profile.

The Editor type Author has the possibility of executing only the operation of modifying his profile.

3.CONTENT VISUALIZATION

The chapters 1 and 2 present the structure of the administration module of the CMS. In this section I will describe briefly the visible part of the proper website, which has a content that is wanted to be modified.

All the added content can be visualized on the site by the means of some integrations from the site programmer with diverse functions of the CMS. Some of these functions will have the following utilizations:

1. creation of the site menu depending on sections, sub-sections and articles
2. display article content
3. display information concerning the section

The functions 1, 2, 3 are the main ones used in the visible part for the current visitors of the site. These functions are combined with a design realized by the initial designer and programmer of the site. The implementation can be easily upgraded or modified according to the demands of the site.

CONCLUSIONS

The Content Management of Websites is a vital element in maintaining and periodical actualizing a site that wants to send a consistent message to its visitors.

Using a CMS, the actualization of a site can be realized also by personnel, which is not qualified in computer programming, in this way saving resources.

The site is implemented by the programmer (designer) only one time, afterwards becoming totally dynamic with the help of this CMS.

This CMS is used for sites that have a medium level of content. It is not recommended to sites that have advanced necessities in content management.

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