

# Design And Implementation of Virtual Learning Content Management System

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**Abstract**—T Content development has become a sensational means of sharing information over the internet. Even the non-technical ears got the ability to publish content easily and quickly on the World Wide Web. It's all possible because of the easy-use of content management tools available and is widely used by firms, news organizations, educational institutions and other businesses. CMS will be to create a virtual learning content management system. Contents are produced in huge amount at an increasing rate every year. Information overload and content is created every day he content is then used to make websites , The contents must be arranged and presented correctly or else the website will be mixed with useless content and not user friendly. A Content Management System (CMS), is a Graphic User Interface (GUI) that makes interacting with a website's database user friendly. There are thousands of CMS options for websites, such as WordPress, Drupal, Wix, Grid, and user can even build there own Custom CMS solution. All of these CMS systems work differently, Allowing the website admin different levels of permission and control. Although the CMS is the entirety of the web application (database tables, admin panel and front-end display), a CMS is typically judged on the functionality of its admin panel. WordPress is the most popular CMS because of its large plugin library, which exponentially increases its admin panels functionality. CMS's must install themselves on use's hosting account and come with pre-built modules such as content pages, events and other content. The required things for these are already baked into the install and all the user need has to do is create the content. When the user clicks the upload button, user is taken to a page that is simply a website form wrapped in a simple user interface. Once the Post button is clicked, the form is submitted to the database and the new row is created. The user's website public-facing pages, always communicating with the server, pull down the latest user interface for their respective areas and display user content in the correct styles and positioning.

## I INTRODUCTION

Content development has come to be a sensational way of sharing records over the internet. Even the non-technical users got the capability to put up content material without problems and quick on the World Wide Web. All is possible due to the clean-use of content management equipment available and is broadly used by corporations, information organizations, academic establishments, and different

corporations. In this chapter, All will study the idea of CMS and why is broadly common inside the market.

## II ACKNOWLEDGMENT

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Fig 1 The works which may be done on a content

### III CONTENT MANAGEMENT SYSTEM

CMS (Content Management System) is described as a device or software program software containing a hard and fast of interrelated packages used to create and handle different form of content. Some well-known examples of CMS software program are Joomla, Drupal, WordPress, etc.

### IV CONTENT MANAGEMENT SYSTEM

A CMS (Content Management System) is graphical user interface witch allows the customers to create, modify, and publish material even without the knowledge of programming languages which are necessary to create web pages.CDA (Content transport application) responsibility is for the again-quit offerings. Also manages grants content material after framing the inside of CMA.

### V WORKING OF WEBSITE VISITORS AND WEB CMS

A Web content material control machine makes use of a programming languages to fetch statistics saved in a database, layout after which present to viewers. There are various programming languages being used within the history of internet sites. A net content control gadget is normally run using a database. There are one-of-a-kind databases to be had and a few are most effective like minded with certain OS(operating system). The web site might also use what's referred to as a flat record machine a textual content record containing database statistics without any program particular formatting that may be used by and manipulated by way of different programs.In the subsequent diagram shows operating of customer, server and Database relationship in internet Content management System

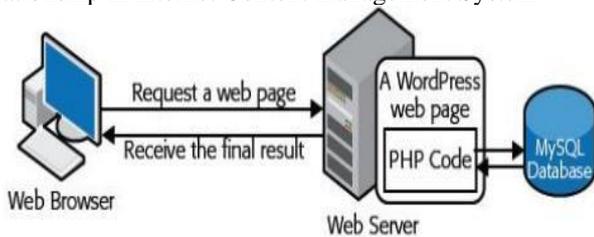


Fig 2 Working of client and database

A Web content material control machine makes use of the programming language to fetch the statistics saved in the database, layout after which present to the viewer. There are various programming languages that can be used within the history of a internet site. A net content control gadget is normally run using a database. There are one-of-a-kind databases to be had and a few are most effective like minded with certain operating systems (on-line and offline. The web site might also use what's referred to as a flat record machine (a textual content record containing database statistics without any program particular formatting that may be used by and manipulated by way of different programs.In the subsequent diagram shows operating of customer, server and Database relationship in internet Content management System As a result, a function f works as follows: f: set PhpMyadmin database mysql,Then this function will be extended to the wordpress set and will behave similarly to

f:wordpress database mysql.As a result, when writing the database names in PhpMyadmin and Wordpress, the database names in PhpMyadmin and Wordpress are assumed to be the same.

### VI FEATURES OF CONTENT MANAGEMENT SYSTEM

- User Management lets in the management of user facts just like the roles of various users allotted to paintings simultaneously, including creating or deleting the person, change the username, password, and different related statistics.
- Theme System Allows to alter the site view in addition to functionality the use of stylesheets, images, and templates.
- Different plugins are presented, which gives custom functionalities and capabilities to create the CMS website online.
- Search Engine Optimization is embedded with plenty of seo (SEO) gear making content material search engine marketing more honest.
- Media Management is used for handling the media files and folder, with importing media contents easy and convenient
- Multilingual Translation of the language, as favored with the aid of the consumer, is possible thru CMS.

### VII ADVANTAGES OF CONTENT MANAGEMENT SYSTEM

- Most of the CMS is open supply and is available free of charge.
- Easy and brief uploading of media files may be performed.
- Several search engine marketing gear make on-website online search engine optimization less difficult.
- Easy customization is feasible as consistent with the need of the user.
- Can modify CSS documents as in keeping with the layout wanted by way of the user.
- Many templates and plugins are to be had at no cost. Customization of plugins is also possible.
- Content enhancing is likewise more relaxed as will makes use of the WYSIWYG editor.

### VIII DISADVANTAGES OF CONTENT MANAGEMENT SYSTEM

- CMS software program needs a time-to-time replace, and as a result the person wishes to appearance out for an up to date model.
- The use of various plugins can make the website heavy and hard to run.
- CMS hosting is pretty expansive.
- PHP knowledge is required to alter or trade the WordPress internet site.

## XI LITERATURE SURVEY

A literature survey or a literature review in this project report is that section which shows the various analyses and development made in the field of interest and the results already published, taking into account the various parameters of the project and the extent of the project. It is the most important part of this report as it gives a direction in the area of this development. It helps to set a goal for the analysis - thus giving the problem statement.

Paper Review: Ming- Ju Yang, Wen-Chung Chang, Senior Member, IEEE, Win-Jet Luo, and Po-Chun Yang, Fellow, IEEE

The Project outline explains the project while Learning site is connected to useful Web resources within the project. Students explore the Web site in advance, propose what they wish to investigate through brainstorming, and make a mind map. Once a subtopic has been selected, students or small groups of students plan an appropriate timeline and activities for their project and show them to teachers and all their friends on the Web. If necessary, teachers or students can advertise to look for partners on the bulletin board system. Through news for parents, parents can understand the project planning their children will work. A teacher completes the section of the project outline form and submits it. Information appearing on this form will appear on the Web. So students can read it and understand the central questions of their project, what they are going to do and what products they are going to produce.

## X FEATURES OF WEB CMS

The web content management system (WCMS) presented in this study is developed using two open source projects, namely PHP, a hypertext preprocessor, and MySQL, one of the world's leading open source databases. The principal features of the proposed system are described in more detail in the paragraphs which follow.

## XI ON-LINE ADDITION AND DELETION OF WEB PAGES

On-line addition and deletion of web pages. In the proposed system, the content of new web pages, e.g. text, graphics or images, is prepared offline and is then published to the website via the simple click of a button having first completed a dialogue box to indicate to the system the content which is to be transferred. The specified content is then automatically published as a new web page with an appropriate format. Using this process, new web pages can be easily created by non-technical users with no previous background in webpage design. In practice, new web pages can be added by authorized users at any time from any location in the world; the only requirement being a computer with a web browsing capability and an Internet connection. The number of pages which can be added to the website is limited only by the physical memory space allocated to the site.

## XII AUTOMATIC COMPRESSION OF GRAPHICS AND IMAGE FILES

Automatic compression of graphics and image files Any graphics or images to be embedded in the web pages are automatically compressed to a width of 100 pixels using a high-geometric-ratio compression technique during the file transfer process. The compression process is applied irrespective of the original format of the graphic or image, e.g. .jpg, .jpeg, .gif, or .png. The compression process results in a significant reduction in the storage space occupied by each web page and therefore increases the number of pages which can be simultaneously maintained and improves the efficiency with which the contents of the website can be sorted and searched. Furthermore, the compression process is performed on-line and is fully automatic such that the end user need have no specialized knowledge of graphic imaging tools or data compression techniques.

## XIII SIMPLE ONLINE DATA UPDATE MECHANISM

On-line data update mechanism As with the webpage addition system described in above, the proposed WCMS provides users with a simple method for managing the data content of the website. The user simply specifies the number of data files which are to be transferred and is then presented with the corresponding number of dialog boxes within which to specify the appropriate files. A one click operation is all that is then required to transfer the corresponding data to the website database.

## XVI INTUITIVE NEWS MANAGEMENT AND PUBLICATION INTERFACE

New management and publication interface The WCMS developed in this study is designed to create, manage and publish text, graphics and images. In the proposed system, the publication of the database contents on the web site is facilitated using an intuitive on-line interface which allows the user to specify the required typesetting features such as the text font, size and color, and so forth. Figure 1 illustrates the various components of the WCMS



Fig 3 overview of WCMS structure

## XV CONCLUDING MODULE

Students present reports of results in the form of Web pages, presentations, construction, document files, etc. to the entire class and discuss or write about suggested future improvements. Students use this form to report the results of a project

### XVI HOME PAGE

In Fig 4 you can see the home page of the website which contains the navigation bar for all the other pages and a button for accessing the notes page and has a background image and a logo which redirects home page when accessed through other pages in the website



Fig 4 Home page

### XVII NOTES PAGE

In Fig 5 you can see notes page where there is a search bar for searching the notes the student requires and a download button which is redirected to the e-books for the student to download .

TITLE	Y	YEAR	S	SEMESTER	DOWNLOAD
ENGINEERING MATHEMATICS - I	FIRST	FIRST	FIRST	SEMESTER	Download
PHYSICS	FIRST	FIRST	FIRST	SEMESTER	Download
CHEMISTRY	FIRST	FIRST	FIRST	SEMESTER	Download
ENGLISH	FIRST	FIRST	FIRST	SEMESTER	Download
BASIC ENGINEERING GRAPHICS	FIRST	FIRST	FIRST	SEMESTER	Download
INDUSTRIAL TRAINING	FIRST	FIRST	FIRST	SEMESTER	Download
PHYSICAL EDUCATION(I)	FIRST	FIRST	FIRST	SEMESTER	Download
ENGINEERING MATHEMATICS - II	FIRST	FIRST	SECOND	SEMESTER	Download
CALCULUS AND ITS APPLICATIONS	FIRST	FIRST	SECOND	SEMESTER	Download
APPLIED PHYSICS	FIRST	FIRST	SECOND	SEMESTER	Download

Fig 5 Notes page

### POSSIBLE FUTURE CHANGES

In this paper, we proposed a learning model called Web Project Learning to provide motivation and collaborative learning to students in the Web environment. We expect that students are concerned with the problems of their regional environments and investigate them when our learning model

is applied to environmental education. Our model also encourages students to interchange their own peculiar environmental characteristics. Using the proposed model, students can strengthen research and organization skills while being responsible and self-motivated. As they gain learning experience for the pure joy of learning, their emotional interest, intrinsic motivation, and hunger for knowledge can also be increased. The students are immersed in an authentic learning environment while undertaking the project.

Their activities encourage them to exercise life skills such as problem solving, communication and collaboration, making decisions, and using information technology. Also, parents are concerned about their children's development and thus will participate in and contribute to the project. As teachers examine the students' work and prepare the project, their own understanding of students' development is deepened. Further research issues are as follows. At first, we need to develop evaluation criteria that we can post it on the Web to let students know how their projects will be evaluated. We will also need to conduct a study comparing the performance of students using our proposed model and that of students following traditional classroom teaching.

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