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Abstract

This thesis concerns the creation of a dynamic website that will act as the main page for the department of Mechanical Engineering of the University of Applied Sciences of Piraeus. As an educational institution website, it contains information about all the courses of the department and the study structure as well as functions that help teachers and the administration department in managing announcements and news and also information handling towards students regarding the department issues. For the creation of the website we used the open source Wordpress Content Management System.

1. Introduction

In today’s modern educational system, having a website that is functional and dynamic is a standard for any self-respecting institution. Content management systems provide a fitting solution to the need for appealing, high end design. WordPress, one of the world’s most popular Open Source CMS is an ideal fit for the purpose of creating a modern website for an educational institution since it has features that give the more advanced user the freedom to modify the portal to the client’s needs and it is also very easy to use in order to post articles, news and updates, even for users with little technical knowledge on web development.

2. Overview

This thesis has focused on explaining the various aspects of the modern web as well as some of its history, before trying to investigate what is web development, analyzing the tools developers have in their disposal. We make an effort to go through the most popular technologies, including, but not limited to, HTML, PHP, CSS and JavaScript and provide definitions as well as examples on those tools.

We then explain what Content Management is and we focus on Content Management for the Web and we analyze the various Content Management Systems that exist, pointing out the usage of the most popular ones that are available to us. We try to give a glimpse on the history of WordPress and how it became one of the most popular Systems around and we justify why we picked this over the thousands of other Web CMSs that were on the Open Source market.

Lastly, we described the process through which we created the webpage, step by step, trying to spell out everything, from the smallest detail to the most obvious
element, in order for everyone reading this paper to be able to recreate the result, be
that for another educational institute, or even for a website of his own design.

3. Experimental Results

By using the WordPress software in order to create a fully functional website, I
realized its advantages over other Content Management Systems, as well as the
advantage of using a Content Management System instead of trying to create
something so massive and dynamic by writing it in code (HTML, CSS, PHP). Not only
did I gain a lot of experience on the modern way of web development, I also understood
the various aspects of content management and the features of WordPress in
particular.

4. Conclusions

In this thesis we used the WordPress software to modernize and rebuild the
website of the Department of Mechanical Engineering of the University of
Piraeus TT. WordPress is a personal publishing system that uses a PHP and
MySQL platform. The platform provides everything we may need to create our
own website and to publish our material. It is particularly important that
WordPress is easy to use for both people with programming skills, giving them
the ability to create additional functionalities by creating their own plugins, as
well as for those without the necessary expertise regarding the issue of web
development. So this particular site we created will remain as a useful tool for
the Mechanical Engineering Department members, allowing them to display
and edit the contents of their pages, without the need for specialized external
assistance.

5. References

Indianapolis, Indiana: Wiley Publishing, Inc.
Inc.
desource.uvu.edu/dgm/2120/IN/steinja/lessons/01/01_02.html#subhead01.
(2012). Retrieved February 16, 2016, from
http://desource.uvu.edu/dgm/2120/IN/steinja/lessons/01/01_02.html#subhead01
desource.uvu.edu/dgm/2120/IN/steinja/lessons/01/01_02.html#subhead02.
(2012).
desource.uvu.edu/dgm/2120/IN/steinja/lessons/01/01_02.html#subhead04.
(2012). Retrieved from


