

Using the Joomla CMS to Build an Interactive eCommerce Website

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Question: Can I develop a fully functioning database driven interactive eCommerce website using the Joomla content management system, and without writing any lines of code, that would be suitable for most businesses in New Zealand?

Answer: YES!

Joomla means "All together"

Joomla is an open source content management system (CMS) that can be used to build database driven interactive websites. It has been developed over several years by a community of volunteer developers.

It is also extensible, which means that it can be enhanced by other developers. Hence you can develop a website using Joomla, Joomla code, and even all or develop extensions on top of it.

The new website, featured on the right, has been built using the core Joomla! plus the VirtueMart eCommerce extension. In addition, there is powerful back-end extension called CVM3 improved, which enhances the product database and brings in the bulk upload and importers.

Key features of the new system, are highlighted in the client one:

1. Better presentation of the products
2. Client members interface, which can be easily updated
3. There is an in-house stock tracking which will improve their shopping experience
4. More efficient system and processes for managing the products and orders up to date.

The biggest time to build the website was 10 days, which included a lot of trial and error time. Given the experience gained during this assignment, the above time follows this could be done in two days.

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Abstract

This paper describes the use of the Joomla content management system to build a database driven interactive eCommerce website, which is secure and scalable. The author wants this website to be an example that can be demonstrated to New Zealand businesses with the view of helping them to economically develop an on-line web presence.

Keywords

eCommerce, online marketing, websites, content management systems, Joomla!

Introduction

The question that the author was trying to answer in this assignment was:

“Can I develop a fully functioning interactive database driven eCommerce website using the Joomla content management system, and without writing any lines of code, that would be suitable for most businesses in New Zealand?”

There are a number of content management systems (CMS) available in the marketplace that can be used to build websites, including the better-known ones such as Wordpress, Joomla and Drupal.

After doing some research on these three main CMS systems, the author chose to do this assignment using Joomla, as it was portrayed as being very flexible, albeit difficult to learn.

Joomla is an open source CMS framework that has been developed over several years (originally known as Mambo). Being open sourced means that it has been developed by volunteers and is available free to download and use under the GNU/GPL License. The framework has been developed to be easily extended, and there are thousands of developers who have and do develop all sorts of extensions that they either provide for free (donations welcome), else with some sort of subscription fee. There are currently several thousand extensions available (Joomla Official Website, 2011).

The Joomla project has been very successful and is used by many organizations and developers throughout the world to develop websites on the Internet, including many government sites around the world (Discover over 1800 govt sites, 2011).

Joomla v1.6 was just released in January 2011, and includes a complete re-write of some of the core functions and is now built using the industry standard Model View Controller (MVC) framework. Developers around the world are now working on migrating their templates and extensions to this new platform. In addition, the platform has been designed so that in future it can be used for other purposes rather than just being a CMS e.g. as an Enterprise Resources Planning (ERP) system (Marriot et al., 2011).

To make this assignment as realistic as possible, the author was engaged by Penny eMarketing Ltd to re-develop her existing *Serviettes and Paper for Art* website. This website has been operating for approximately 2 years, and has been selling products in the Australian / NZ marketplace. She currently has over 2000 products online for sale.

A Design Specification document was prepared and signed off by the client in late April 2011, which included the template design to be used and other requested extensions. To ensure stability of the final product, the decision was made to build the site using the older Joomla v1.5.23 version.

Results

The actual build of the website was started on the 8th June and completed on the 13th June. The elapsed time was 5 days, which included a lot of learning and trial and error time. On reflection, the author now believes that he could build a similar website from scratch in 1-2 days, using Joomla as the base.

The site includes all the standard features of an eCommerce website, but could easily be extended much further.

When the website was demonstrated to the client, she was very impressed and cannot wait to have the new site up and running live. But that's another story...

Conclusion

The author was initially skeptical about being able to build this website using Joomla, and not having to write any lines of code. What he has discovered is that the Joomla community has built a very robust and extendable platform, which could easily be used and support most of the businesses in New Zealand.

It does take a reasonable amount of effort to learn Joomla. To actually develop extensions using Joomla would be very difficult because it does use object oriented concepts and programming standards. Having said that, the author feels that it is well worthwhile the effort required.

References

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- Discover over 1800 government sites built in Joomla! (2011) Retrieved June 14, 2011 from <http://magazine.joomla.org/issues/Issue-June-2011/item/467-Discover-over-1800-government-sites-built-in-Joomla>