Analysis of web page creation technologies used on websites of selected kitchen furniture manufacturers

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Abstract: *Analysis of web page creation technologies used on websites of selected kitchen furniture manufacturers* The paper presents some of the technologies used to build websites with a short description of each of them Presented are the criteria by which web services of kitchen furniture manufacturers were selected. The main part of the study provides an analysis of those sites in terms of technologies used in their construction. The article also contains a synthetic discussion of got results.

Keywords: website creation technologies, kitchen furniture manufacturers, web services.

INTRODUCTION

In recent years the Internet from the phenomenon of an information society, as even a decade ago was referred to, became a regular feature of daily life. At the beginning of the XXI century, the Internet is a tool used not only by people who want to quickly and smoothly to communicate, but also by companies and firms seeking to establish and maintain communication with the market and thus sell products and services, and thus to survive in conditions of increasing competition. The main tool of communication are web pages. They should be built using modern technologies that allow the proper display of pages, and thus an appropriate reception published on their content. Analysis of use of these technologies has been devoted to this paper.

SELECTED WEB PAGE CREATION TECHNOLOGIES

HTML

HyperText Markup Language is the main web content description language. It is one of the oldest and thus one of the most widespread website development technologies. HTML is a parsed language, i.e. basing on tags, the web browser displays (builds) an image of a particular web page. Its feature, non-existing in any other programming language, is that it does not generate errors and potential mistakes made in the code are simply ignored [3].

Web pages coded in HTML are plain text files, which means that they do not contain any information intended for a specific application or platform. They are readable in any flat text editor. HTML files contain the proper text to be displayed on the web page and tags used for marking up elements of that page as well as its formatting structure and links to other web pages and multimedia elements [2]. This is a document description language - it contains a set of tags describing its structure, layout and formatting of various objects on the page. This language is also independent of the hardware and software platform,

XHTML

The specification of the XHTML (eXtensilble HyperText Markup Language) does not describe any tags. It only defines changes, which shall be introduced to a HTML document,

so that it becomes a XHTML document. In practice, there are very few differences between XHTML and HTML. The differences are only limited to several formal requirements, which include: the requirement that tag names are written only in lowercase and the requirement to place parameter names between quotation marks. A correctly constructed XHTML document is de facto compatible with the XML specifications. XHTML-compatible documents, require validation, i.e. checking whether they are actually compliant with that specifications. XHTML documents must be unanimously interpreted by other users without any problems. This is in the interest of every user, as the standard is used in general e-commerce (e.g. by Internet shops).

XML

The XML (eXtesible Markup Language) consists only of some core expressions. While creating an XML document, contrary to HTML no fixed set of tags is used. Instead, custom tags are defined, which can be assigned with any name. Therefore XML is also described as an extendable programming language. This is where the power and the flexibility of XML comes from, as this formats allows to simply store any data. By separating the text from the form, one may focus on the data itself. XML is in practice a group of script languages compatible with requirements of that specifications. By using a common XML format, normal programs can easier exchange data and the information published can be more easily processed. This language permits overcoming the compatibility gap between many computer systems, allowing their users to quickly and more easily search for and exchange various types of data [5].

JAVASCRIPT

JavaScript is a client-side scripting language, which adds interactive features to web pages and permits website developers to control various aspects of web browser operation. JavaScript allows additional link information to be displayed, development of effects related to mouse cursor movements, altering web page contents according to a pre-set conditions, random generation of web page content, loading content into new web browser windows and frames and repositioning of elements on the web page using CSS. Name of the JavaScript language is only incidentally similar o the name of Java programming language. Despite some similarities in the syntax of Java to JavaScript, in order to learn JavaScript one does not need to know Java. JavaScript allows to add various options to a web page using short snippets of code, with easy to understand syntax [3]. JavaScript allows elements and effects, which are not supported by a plain HTML – such as forms or animations to be included on web pages.

CSS

Cascading Style Sheets (CSS) are an extension, which is helpful in web page development. Style sheets allow authors to apply typographic styles and instructions to elements of a web page. The word "cascading" determines what happens when several sources of style information compete over an element of a web page. Using style sheets provide greater control over the web page layout and at the same time allows separation of the web page content from its structure. Using style sheets, it is possible to specify traditional attributes, such as font size or inter-line and inter-character spacing. Style sheets also provide methods for determining indentations, margins and positions of elements. Multiple HTML pages can be linked to a single style sheet. This means that not only a single change may be made, that will effect each copy of the respective element on one web page, but also it is possible to

apply changes on hundreds or thousands of web pages by editing a single line of a style sheet only. [3] The goal of CSS creators was to combine flexible means of web page styles control and means for controlling individual elements on web pages with a relevant style hierarchy [1].

PHP

PHP (Hypertext Preprocessor) is a simple to learn language, which offers exceptional performance, tight integration with almost any database system used, stability, portability and almost unlimited options for web pages development. This language is an open source solution, which means it is free of charge. The goal of PHP is to allow web developers to rapidly write dynamically-generated web pages. It is used for dynamic image generation and for data encryption purposes [7]. The PHP language is a server-side language, which means that the code in that language is stored on the host computer serving a web page to users wishing to view it. At the time when a user enters a web page written in PHP, the server reads instructions in this language and processes them accordingly. The code executed by the server sends its output to the web browser, in the form of a HTML code.

FLASH

Flash technology permits to create a line-art animation. It allows a motion sequence, with accompanying sound track to be created, which is also referred to as movie. The advantage of Flash is the very process of movie and line art generation, which is automated. Also, animations created in Flash are considerably light weight. Flash presentations can be included on a web page or can act as a web page [ref. 4]. Thanks to advanced scripting capabilities, application of Flash presentation is only limited by developers' imagination.. It's significant advantage is scalability, as line art pictures and animations can be zoomed-in without loss of fine detail, which causes that it is quire easy to fill the whole browser window with a Flash-scripted interface without causing the source file to grow too much. The Flash technology includes, designed specially for its purposes, object-oriented programming language called ActionScript. It is responsible for communicating with external files - both for file reading and writing - for communication with database and for handling all Flash events [ref. 6].

ASP.NET

ASP.NET (Active Server Pages NETwork) is a component of the Microsoft.NET Framework platform, permitting development, deployment and execution of network applications and distributed applications. It is free of charge technology, which can be used for creation of small applications, private websites as well as large commercial applications.

ASP.NET is a technology, which allows to easily create dynamic web pages and to manage them. It is the latest generation of the original ASP technology, providing multiple improvements and extensions. ASP has made development of web sites cooperating with databases a very easy task. However it lacked features of advanced programming languages, such as object-oriented programming, complex code, portability, XML network services and a class library designed specially for the Internet or language architecture.

CRITERIA FOR WEBSITES SELECTION OF KITCHEN FURNITURE MANUFACTURERS

When selecting sites for this analysis was guided by the companies a variety of criteria that the sample was the most diverse. Selected furniture manufacturers offering furniture form both materials wood and wood-based (panel). Among these were next to the large and well known throughout the market, producers, and small companies operating locally, including carpentry workshops, family services in the field of furniture manufacturing. Were also represented manufacturers of finished furniture offered in both forms : as the series and to order. The group analyzed sites in addition to sites that have been qualified with the manufacturers only offer kitchen furniture manufacturers and other types of furniture. In the selection has been taken into account the geographical location of the manufacturer, so that the companies represented various regions of our country. Websites were divided into two groups. The first one are the web services of manufacturers, which offer only kitchen furniture. The second one is the group of producers which offer more types of furniture. Analysis was performed on 42 websites. In the first group were fourteen, in the second twenty-eight web services. Internet addresses of selected websites are given in Table 1.

ANALYSIS OF WEB PAGE CREATION TECHNOLOGIES ON WEBSITES OF SELECTED KITCHEN FURNITURE MANUFACTURERS

The following table presents results the services of kitchen furniture manufacturers analysis in terms of technologies used for their development. The table presents the state as of beginning August 2010, when it was performed. During the analysis, it has been assumed that a website does not use HTML if its code was compatible with XHTML. However use of XML by websites has only been indicated, when that specification was used, in addition to XHTML language, e.g. to handle RSS data feeds. The Internet addresses of the websites in the table below were arranged in alphabetical order (in each group).

Table 1: Web page creation technologies on websites of selected kitchen furniture manufacturers

Website address	HTML	XHTML	XML	Java Script	CSS	PHP	FLASH	ASP.NET
Manufacturers offering only kitchen furniture								
www.atlas-kuchnie.com.pl	+	-	-	+	+	-	+	-
www.bb.meble.pl	+	-	-	+	+	-	-	-
www.bik-meble.pl	-	+	+	+	+	-	+	-
www.domuskuchnie.pl	+	-	-	+	+	-	+	-
www.elprim-wika.com.pl	+	-	-	+	+	+	-	-
www.krups.pl	-	+	-	+	+	+	-	-
www.laura.com.pl	-	+	-	+	+	+	+	-
www.meblekam.pl	-	+	-	+	+	+	-	-
www.meble-niko.pl	-	+	-	+	+	+	-	-

www.medom.com.pl	+	-	-	-	+	-	+	-
www.ofm-sa.com.pl	-	+	-	+	+	+	-	-
www.prestiz.net.pl	-	+	-	+	+	+	-	-
www.stokan.pl	-	+	-	+	+	+	+	-
www.vizualform.pl	-	+	-	+	+	-	+	-
Manufacturers offering many kinds of furniture								
www.anna.net.pl	+	-	-	+	+	+	+	-
www.arinohouse.pl	-	+	-	+	+	+	+	-
www.brw.com.pl	-	+	-	+	+	+	+	-
www.extrameble.com	+	-	-	-	-	-	-	-
www.forte.com.pl	-	+	+	+	+	-	+	-
www.halidor.pl	+	-	-	+	+	+	+	-
www.ikea.pl	-	+	+	+	+	-	+	-
www.jagstol.pl	-	+	-	+	+	-	-	-
www.kuchnie-wolsztyn.eu	-	+	-	+	+	-	+	-
www.kulenty.home.pl	-	+	-	+	+	+	-	-
www.laminat.waw.pl	-	+	-	-	+	+	-	-
www.matmeble.com	-	+	-	+	+	+	+	-
www.meblegolab.pl	+	-	-	+	+	-	+	-
www.mebleklos.pl	+	-	-	+	+	+	-	-
www.meblelokator.pl	+	-	-	+	+	+	+	-
www.meblemalecki.pl	-	+	-	+	+	-	-	-
www.mebleproducent.waw.pl	+	-	-	-	+	+	-	-
www.mebleprojekt.com	-	+	-	-	+	+	-	-
www.meble-s.com.pl	+	-	-	+	+	-	+	-
www.meblocross.pl	-	+	-	+	+	-	+	-
www.megameble.com	-	+	-	+	+	+	+	-
www.mestol.pl	-	+	-	+	+	-	+	-
www.saganmeble.dzs.pl	-	+	-	-	+	-	-	-
www.slonex.pl	-	+	-	+	+	+	-	-
www.stoland.pl	+	-	-	+	+	+	-	-
www.stol-pol.pl	-	+	-	+	+	-	-	-
www.taurus.pl	-	+	+	+	+	+	-	-
www.wojtasmeble.pl	-	+	-	+	+	+	+	-

source : own research

Most of the analyzed websites was built using XHTML (twenty-eight). The most popular technologies was Javascript and CSS. Only six did not use Javascript, however CSS is not used in only one website. Using of technologies PHP and FLASH was while not popular. PHP technology was used in twenty-two cases. FLASH technology was present in twenty-two websites too (There were not the same web service). Note that XML technology was used

only in four sites, but none benefited from ASP.NET. It is hard to identify the leader of this analysis. You can specify the site, which was the least technologically advanced. It was the website available under address www.extrameble.com. This web service was created by using only HTML. It should be noted also that the HTML as outdated technology is still often used by web designers. The HTML was used in websites developing in fourteen cases.

CONCLUSION

The analyzed websites of kitchen furniture producers were created using the different technologies, which contributed to their apparent visual attractiveness and that their correct displaying (interpreting) in all popular web browsers. The only postulate that can be report to authors and administrators of these web services could be to introduce more variation to forms of the published content presentation.

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Streszczenie:: *Analiza technologii kreowania stron internetowych wykorzystanych w witrynach wybranych producentów mebli kuchennych* W opracowaniu przedstawiono wybrane technologie wykorzystywane do budowy witryn internetowych, z krótkim opisem każdej z nich. Zaprezentowano kryteria na podstawie których wybrane zostały witryny internetowe procentów mebli kuchennych. Zasadniczą część opracowania stanowi analiza tychże serwisów pod kątem technologii wykorzystanych do ich budowy. W artykule zamieszczono także syntetyczne omówienie uzyskanych wyników.

Słowa kluczowe: technologie budowy witryn internetowych, producenci mebli kuchennych, serwis internetowy

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