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## **WEBSITE DEVELOPMENT**

The information we encounter every day, whether it is watching news on the Internet or ordering pizza, is considered to be the basis of modern life. As the life is impossible in the information vacuum, information permeates all spheres of human life and society and as a result there arises a necessity for a place for this information to be stored. Today, the Internet has entered all spheres of human life - people communicate owing to the Internet, various mobile applications work by means of the Internet. Moreover, teleworking ranks first in the whole world during difficult times of pandemic. In order to find out the latest information everyone browses hundreds of news on different websites every day. Websites have become an indispensable part of human life. All structures of medical, educational as well as public resources are posted on the Internet.

Thus, it can be inferred that the modern world cannot dispense with the relevant information which can be better provided due to its right location as well as correct presentation. It becomes possible owing to a site where each user can find everything desired and needed, from the usual viewing of news to research and work with databases.

Designing your own website presupposes a great variety of nuances. Higher priority should be accorded to the defining the purpose of your site, designing and researching your potential customers' needs. This work should be done prior to domain determining, site layout, and its optimization. Specifying your site theme is a key to its success, because, to the extent feasible, you should always rely on the interests and views of your future users.

The contemporary world is constantly filling up with new ingenious ideas and many programming languages are established. A young specialist should master the basic knowledge that enables him to learn new programming languages through experience and use these skills in complex codes. In addition to skills acquired while studying at the university, a qualified specialist should be highly-logical and imaginative. It is the creation of websites that makes it possible to use the MVC pattern, to develop an administration system. In order to implement such a site, it is necessary to analyze the existing websites that are considered to be the best judging by various criteria, in any case, it is necessary to develop an adaptive interface using HTML5, CSS3, JS. In order to quickly access the data, the user is looking for, you should design the database for a specific subject area.

A web site (usually the Internet) is a resource that consists of one or more web pages with hypertext, text, media (pictures, video, audio) and other types of content available on one of the web protocols. Web pages and other web files are served by web servers, a special software that delivers web content to web clients. Such web protocols as HTTP, HTTPS, SPDY, WebSocket are the most prevalent nowadays. A web browser, special software able to display web pages and to interact with other

types of web content, serves as a client to whom a web server usually delivers website content. Both web content and websites can be static and dynamic. A static website or web page is stored on the server as separate static files, and is delivered by the web server without any changes in the form they were created by the author. Typically, these types of web pages do not have the ability to interact with the user and are only suitable for viewing the information hosted on them. Dynamic web pages are generated by means of a special program that runs on a web server and can be compiled from different components by a web server on the fly. Such pages mainly allow you to interact with the user, providing advanced capabilities not only to view but also to save or alter the information. The content of dynamic pages at the same address may differ over time, or be different for different visitors at the same time [2, 3].

Having examined the definition of a website, it is worthy to study the methods and ways of its creating. A content management system will be considered initially. CMS is a software for managing websites or other information resources on the Internet or individual computer networks. The first CMSs were developed in large corporations to organize work with the documentation. In 1995, a single entity, Vignette, separated from CNET to launch a market for commercial CMSs. Over time, the product range has expanded and increasingly integrated into modern networking solutions up to popular web portals. A great deal of modern CMSs are distributed as free and easy-to-install programs developed by groups of enthusiasts under the license of GNU/GPL [1].

The MVC pattern, an architectural template applied in software design and development, will also be used for the correct software development. This template implies the division of the system into three interrelated parts: data model, user interface and control module. It is used to separate the data from the user interface in a manner the changes of the user interface have a minimal impact on the data, and changes in the data model can be made without changes to the user interface. The purpose of the template is a flexible software design, which should facilitate further alterations or extensions of programs, as well as provide the ability to reuse individual components of the program [4].

To be able to view websites from different devices, one is required to use adaptive layout - an approach that involves changing the design depending on user behavior, screen size, platform and device orientation. In other words, the page should automatically adjust to the resolution, resize images, etc. It will eliminate the need to design for each new device appearing on sale. Insofar as the developed website is focused on different devices, so the adaptive page layout will be used for the development.

Hence, different programming languages should be used when designing a page. They will perform different functions, and their combination will benefit to the development of a full-fledged site. The application of adaptive layout is considered to be a prerequisite for browsing and using a page from any device. For the correct operation of the website, it is advisable to use the MVC pattern, which allows you to divide the system into three interrelated parts: the data model, user interface and control module.

According to John Lasseter "Art challenges technology, and technology inspires art". Creating a website can be compared to this phrase because not only a thorough knowledge you should possess, but also a desire as well as a creative attitude.

## REFERENCES

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