## PRINCIPLES AND BEST PRACTICES IN WEB DESIGN

Вінницький національний технічний університет

**Анотація** У цій статті дається визначення веб-дизайну, а також представлені основні види веб-дизайну та найпоширеніші методи створення веб-сайтів.

Ключові слова: веб-дизайн, види веб-дизайну, методи, веб-дизайнер.

**Abstract** This article provides a definition of web design and presents the main types of web design and the most common methods of creating websites.

**Keywords:** web design, types of web design, methods, web designer.

Web design is the process of designing and developing a website for the internet. While creating a website requires additional skills and resources, such as software coding and development, the design aspect often focuses on the user interface and experience. The user experience encompasses the website's appearance, functionality, layout, and content. Web designers aim to find the most effective way to display information on a website, making it engaging and helpful for users. They often utilize different web designs and layouts based on the site's intended function and use.[1]

Evolution of Web Design:

Web design used to primarily focus on designing websites for desktop browsers. However, since the mid-2010s, designing for mobile and tablet browsers has become increasingly important.[2]

Roles in Web Design:

A web designer is responsible for creating the design and layout of a website or web pages. They may work on brand new websites or update existing ones. Their role differs from web developers who specialize in bringing web designs to reality through coding and integrating various website components.

Types of Web Design:

- 1) Single-page designs: These websites present all their information on a single webpage. The length of the page can vary, allowing users to scroll down to view all the information. This type of design can be versatile and used for various purposes, such as storytelling or showcasing portfolios.
- 2) Static websites: These websites have minimal user interaction, and the design remains consistent across all platforms. Static websites are often created using basic code, such as HTML or CSS, and they typically consist of a set number of webpages used to convey information.
- 3) Dynamic websites: Unlike static websites, dynamic websites allow users to interact with the content on the webpage, resulting in a more active and engaging design. Developing dynamic webpages often involves using more versatile programming languages like JavaScript, PHP, or ASP.

- 4) Responsive website design: This approach adjusts the layout and display of information based on the browser's size. Whether viewed on a mobile device or a computer browser, responsive design ensures that the webpage adapts to different screen sizes, delivering the most relevant information. Responsive design enhances user browsing across different devices.
- 5) Liquid website design: Similar to responsive design, liquid design doesn't manipulate the layout based on screen size. Instead, the design stretches or shrinks the entire webpage to fit the chosen window size. This type of design is useful when maintaining information integrity across various browser sizes is crucial.
- 6) Fixed design: A fixed design keeps the website's size consistent regardless of the screen or window size. It adheres to a specific resolution, ensuring a consistent layout across all browsing devices. However, this design may pose challenges for users on smaller screens, requiring more effort to navigate the page and find information.[4]

Best Practices in Web Design:

- 1) Digital Strategy Informed Web Design: This holistic approach aligns all parts of a web design project with overall business goals and marketing strategy. It includes value proposition design, user experience design, content strategy design, web design, marketing approaches, and analytics integration.
- 2) Value Proposition-Based Web Design: This approach focuses on designing compelling websites that connect with the intended audience. It involves designing and testing value propositions to ensure the website perfectly matches customers' needs and desires. This process provides clarity for content strategy and marketing efforts.[2]

Web design encompasses various types of design approaches and methods to create engaging and effective websites. The evolution of web design has emphasized the importance of designing for mobile and tablet browsers.

## **REFERENCES**

- 1. Web Design [Електронний ресурс]. Режим доступу: https://www.interaction-design.org/literature/topics/webdesign
- 2. Niederst, Jennifer (2006). Web Design In a Nutshell. United States of America: O'Reilly Media. pp. 12–14.
- 3. Web Design Services [Електронний ресурс]. Режим доступу: https://polymash.com/web-design-services-expertise/
- 4. Various Types of Website Designs and Their Primary Functions [Електронний ресурс]. Режим доступу: <a href="https://www.indeed.com/career-advice/career-development/types-of-website-design">https://www.indeed.com/career-advice/career-development/types-of-website-design</a>

*Нагорняк Вадим Євгенович* — студент групи 2ICT-21б, Факультет інтелектуальних інформаційних технологій та автоматизації, Вінницький національний технічний університет, Вінниця, e-mail: steamcs22go82@gmail.com

**Кришталь Сергій Олександрович** — студент групи 2ІСТ-216, Факультет інтелектуальних інформаційних технологій та автоматизації, Вінницький національний технічний університет, Вінниця, e-mail: <a href="mailto:krishtal.serg@gmail.com">krishtal.serg@gmail.com</a>

Науковий керівник: *Ібрагімова Людмила Володимирівна*, старший викладач кафедри іноземних мов, Вінницький національний технічний університет, Вінниця, e-mail: milatvin@ukr.net

Nagornyak Vadym Y. - student of group 2IST-21b, Faculty of Intelligent Information Technologies and Automation, Vinnytsia National Technical University, Vinnytsia, e-mail: <a href="mailto:steamcs22go82@gmail.com">steamcs22go82@gmail.com</a>
Kryshtal Sergiy O. - student of group 2IST-21b, Faculty of Intelligent Information Technologies and Automation, Vinnytsia National Technical University, Vinnytsia, e-mail: <a href="mailto:krishtal.serg@gmail.com">krishtal.serg@gmail.com</a>

Supervisor: *Ibrahimova Liudmyla V*. Senior Lecturer, Department of Foreign Languages, Vinnytsia National Technical University, Vinnytsia, e-mail: <a href="mailto:milatvin@ukr.net">milatvin@ukr.net</a>