



Co-funded by
the European Union

Web Design in WordPress

Introduction to WordPress

Filip Marković

Faculty of Technical Sciences - University of Mitrovica (UPKM)



UNIVERSITY OF LJUBLJANA
Faculty of Electrical Engineering



University of Pristina
Kosovska Mitrovica



WordPress as a Global CMS Standard

- **WordPress** is today a central platform for digital production and communication. As an open-source system, it allows every user — from students to professionals — to independently develop, manage, and publish content online.
- This presentation provides a theoretical understanding of the **CMS (Content Management System)** concept and an analysis of WordPress's role as a global standard in the field of web development. **WordPress** represents the dominant content management system (CMS), currently powering around **43% of all websites on the Internet** (W3Techs, 2024). Its popularity stems from the combination of open-source accessibility, ease of use, and remarkable flexibility.
- As an open platform, WordPress enables the community to continuously enhance functionality, design, and security. In doing so, WordPress becomes more than just a tool — it is a **technological, cultural, and economic phenomenon** of the modern Internet.



The Essence of CMS Systems

- **Content Management Systems (CMS)** are software applications that enable users to create, edit, and publish web content without direct programming.
- The key components of every CMS include:
 - A **database**, where texts, images, and metadata are stored.
 - An **administrative interface**, which allows for simple editing.
 - **Themes and templates**, which define the visual presentation of the content.
- CMS platforms form the foundation of **digital literacy**, as they combine information technology skills with communication competencies.



The Essence of CMS Systems

- **WordPress** was created in **2003** as the successor to the **b2/cafelog** project. Its founders, **Matt Mullenweg** and **Mike Little**, laid the foundations for one of the most influential open-source communities.
- Originally conceived as a blogging platform, **WordPress** has evolved over the years into a sophisticated system for building all types of websites — from personal blogs to complex web applications.
- Today, **WordPress** exists in more than **200 localised versions** and is used across **education, media, culture, and business** sectors.



The Essence of CMS Systems

- **WordPress** operates on a **client–server model**.
- Data is stored in a **MySQL database**, while content is displayed through **PHP scripts** and an **HTML interface**.
- The main components include:
 - **Core** – provides the fundamental functionalities of the CMS.
 - **Themes** – determine the appearance and structure of the website.
 - **Plugins** – add specific features.
 - **Widgets** – smaller blocks (e.g., calendar, search).
 - **API layer** – enables communication between components and external services.
- This **modular architecture** makes WordPress an exceptionally adaptable system.



The Essence of CMS Systems

- There are two main versions of **WordPress**:
- **WordPress.org** – a free, self-hosted version that the user installs on their own server. It provides full control, including access to code, plugins, and themes.
- **WordPress.com** – a hosted version that does not require installation but has limited customisation options.
- In academic and research contexts, **WordPress.org** is used because it allows the development of specific functionalities and a deeper understanding of the technical logic behind CMS operation.



Key Advantages of WordPress

- **WordPress** has become dominant due to the following characteristics:
 - **Open-source and transparency** – anyone can analyse and customise the system.
 - **Accessibility and cost-effectiveness** – the basic version is free.
 - **Interoperability** – integration with numerous technologies and API services.
 - **Scalability** – capable of supporting websites of all sizes.
 - **Community and support** – a global network of developers, translators, and educators.
- Thanks to these features, **WordPress** also has **pedagogical value** – serving as a tool that introduces students to the concepts of digital production.



Typology of WordPress Websites

- **WordPress** enables the creation of almost any type of website:
 - **Educational portals** (e.g., Moodle integration)
 - **Online magazines and blogs**
 - **E-commerce websites** (WooCommerce)
 - **Portfolios and project presentations**
 - **Communities and forums** (BuddyPress)
 - **Educational platforms** (LearnPress)
- This versatility demonstrates that **WordPress** is not merely a technical system, but also a tool for **communication, branding, and knowledge**.



Typology of WordPress Websites

- **WordPress** requires a stable environment to operate properly:
 - **PHP version 8.0 or newer**
 - **MySQL 5.7 / MariaDB 10.4 or newer**
 - **HTTPS protocol and SSL certificate support**
 - **Server** (Apache, NGINX, or LiteSpeed)
- The recommended configuration is the **LAMP stack** (Linux, Apache, MySQL, PHP), although **WordPress** can also run on other setups.
- This environment ensures performance, security, and compatibility with newer versions of the WordPress core.



Fun Fact about WordPress

- **WordPress** goes beyond the role of a simple CMS – it is an **educational and technological resource** that enables the understanding of the structure of the modern Internet.
- For students, learning WordPress means learning the principles of **systemic organisation of information, user experience, and web architecture**.
- “WordPress is a tool that turns digital literacy into digital capability.”
(Mullenweg, 2021)





Co-funded by
the European Union

Questions & Answers

"Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them."

Network of centers for regional short study programs in the countries of the Western Balkans

Call: ERASMUS-EDU-2023-CBHE

Project number: 101128813



UNIVERSITY OF LJUBLJANA
Faculty of Electrical Engineering



University of Pristina
Kosovska Mitrovica

