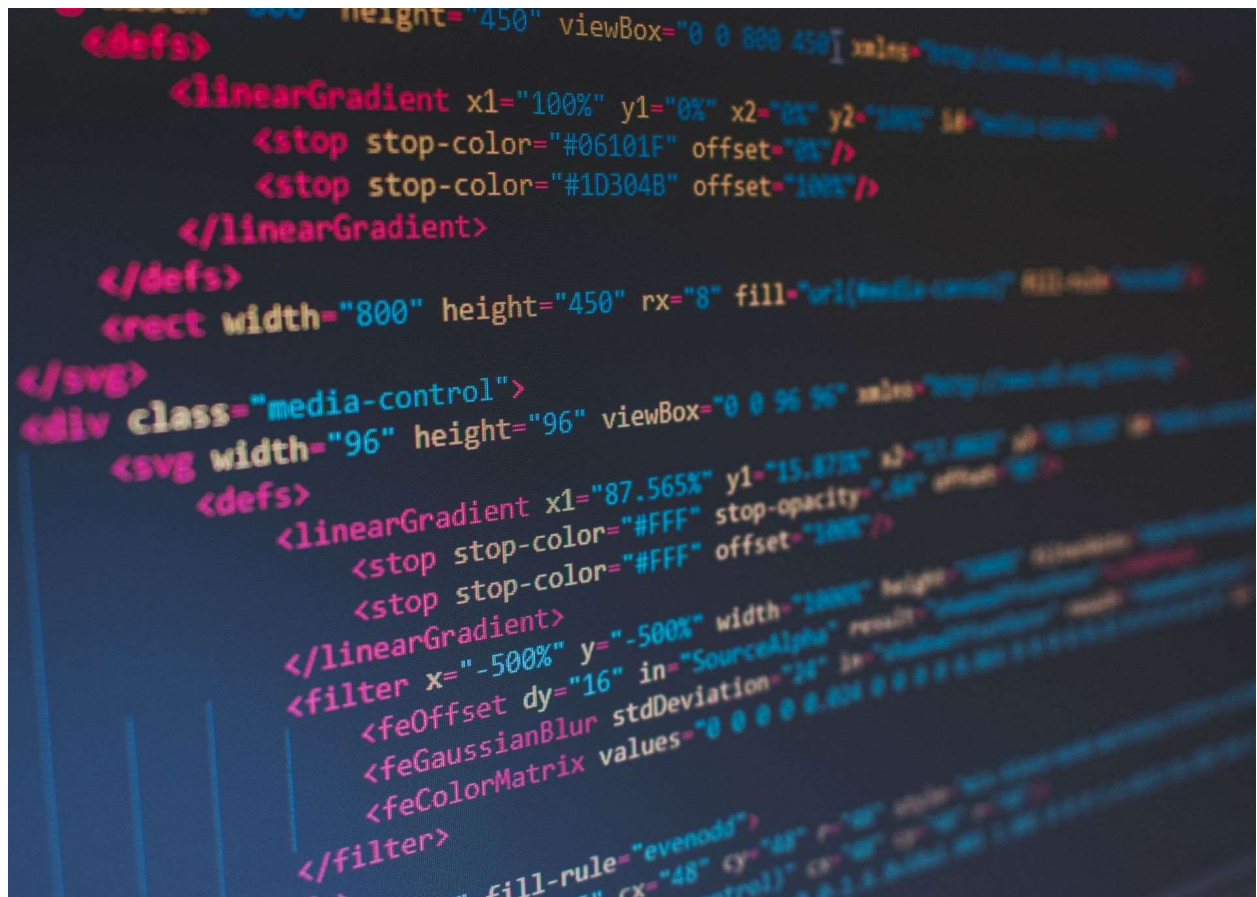


# Report: Developing a Web Content Management System (WCMS) using PHP and MySQL

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# **1. Introduction**

## **1.1 About the Project**

The purpose of this project was to develop a robust and user-friendly Web Content Management System (WCMS) using PHP and MySQL. The WCMS aimed to address the challenges of managing web content, particularly for an organization that frequently updates its content. The goal was to create a system that allows non-technical staff to create and update content easily through a web interface.

## **1.2 About the Report**

This report outlines the journey of developing the WCMS PHP Application, from planning to implementation. It analyzes the initial project strategy, discusses any deviations from the plan, details encountered problems and their solutions, and concludes with reflections on the project's completion.

# **2. Analysis**

## **2.1 Project Realization Plan**

The project was planned to be realized in several phases: File Creation and template Integration, Table Creation, Website Pages, and Users Permission. The aim was to create a WCMS that provided real-time content updates, and a user-friendly interface.

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## 2.2 Deviations from the Plan

While the project largely followed the Gantt chart, deviations occurred due to unforeseen complexities in the Home, Services, Team, Contact tables; Personal and Technical Problems. These deviations caused major delays in the timeline but were ultimately resolved.

## 2.3 Encountered Problems and Solutions

- During the initial coding phase of the "Services" section, a single table with only one row was used. This design limitation resulted in the system being able to handle only a fixed number of services. To overcome this limitation, the solution involved utilizing arrays to dynamically manage and store service-related data. This allowed for greater flexibility and the ability to accommodate a variable number of services within the system.
- Understanding the "Home" section took some time, but with the expert guidance of the teacher, the issues were swiftly resolved.
- Similar to the "Services" section, the "Team" section faced a challenge during the coding phase. It involved managing multiple tables for a single section, leading to complexities. To address this challenge, the solution also involved employing arrays. By implementing arrays, the system gained the ability to efficiently organize and handle data related to team members, facilitating a more dynamic and scalable approach to managing the team section's content.
- On several occasions, I inadvertently omitted the use of `fetchAll()` in my methods that needed it.
- Multiple times, the names of the database columns did not align with those used in my query statements.
- The management of folder files and file paths for various templates, including my own, was extremely challenging, and I only managed to overcome it through persistent trial and error.

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- Initially, the login and registration functionalities were integrated within the admin panel. However, this approach raised concerns as it could potentially grant access to non-administrative or non-moderator users to sensitive sections of the admin panel. To address this issue, the decision was made to separate the login functionality. As a result, the login process was extracted from the admin panel and provided its dedicated page. With this setup, any attempt to access the admin panel, regardless of the approach taken, would automatically redirect users to the login page, ensuring proper authentication and access control.

## **2.4 What Makes the Application Stand Out**

The WCMS developed for this project stands out due to its user-friendly interface, allowing non-technical users to manage content easily. Moreover, the real-time content update feature further distinguishes the application by providing instant visibility to changes, eliminating any delays in content diffusion .

## **3. Conclusion**

### **3.1 Project Completion**

The project was brought to a conclusion, resulting in a functional WCMS PHP Application. While the core functionalities were successfully implemented, it is important to note that certain features were not included in the final version. Notably, functionalities such as user profile modification, content addition, and content deletion were not fully realized within the time scope of this project. Despite these missing features, the developed system offers real-time content management and addresses the initial goals effectively.

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### **3.2 Reflections and Lessons Learned**

Throughout the project, effective time management played a pivotal role in ensuring steady progress. While the core objectives were achieved, the absence of certain features such as user profile modification and content manipulation highlighted the importance of prioritization. Stubbornly adhering to the initial scope without allowing room for adjustments hindered the incorporation of these features. The project journey also underscored the significance of proper rest and breaks during development. In the pursuit of meeting deadlines and overcoming challenges, neglecting adequate rest can lead to burnout and diminished productivity. Recognizing this, future projects will emphasize the implementation of a structured work-rest cycle to maintain optimal performance and sustain creativity.

### **3.3 Areas for Improvement**

Given the opportunity to tackle this project again, I would focus more on comprehensive planning, enhancing efficiency, and improving time management.