Learning Management System With PHP

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Abstract. Learning Management System with PHP is a web-based educational platform designed to provide programming education through structured digital content. The main targets of this system are children, students, and beginner programmers who want to develop or improve their coding skills. Across the globe, especially in regions where digital learning access is limited, interest in self-paced online education is rapidly growing. Providing easy access to organized lessons, interactive quizzes, and video-based learning materials helps students grasp foundational to advanced programming concepts. Combining these tools with progress tracking and student feedback features contributes to a flexible, effective, and supportive learning environment for all learners.

Keywords: online, coding, education, LMS, programming, web-based platform.

INTRODUCTION

Most people are busy with work, school, or daily responsibilities, and some are not aware of the growing need for digital skills like programming in today's world. Nowadays, many students and beginners want to learn coding, but they face difficulties due to the lack of clear instruction and access to reliable resources. For example, they don't know which programming language to start with, how to practice, or how to track their progress, and they often lose motivation and give up. This system is needed to develop to provide basic programming knowledge in a structured and user-friendly way so that the users can overcome these challenges. The Learning Management System with PHP plays a key role in helping learners improve their coding skills through guided lessons and interactive tools. The general objective of this study is to deliver programming knowledge effectively and accessibly through a web-based learning platform.

PROBLEM

This system is very useful for students, beginners, and children who are interested in learning programming but do not know where to start or how to progress. Learning to code is becoming essential in today's digital age, and programming skills are highly valuable for academic success and future careers. However, many learners feel lost due to the lack of proper guidance and structured resources. As a result, they may lose interest or confidence. The Learning Management System with PHP is designed to solve these challenges by providing a clear, step-by-step learning path. Therefore, the aim to focus on the design part of the system.

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Learners can gain accurate and beginner-friendly programming knowledge through this platform. In addition, students of the system can easily access lessons, updates, and tools that address the common difficulties faced by new learners in the programming world.

APPROACH

The system is divided into two main roles: Administrator and Student. Students are further classified into non-registered students and registered students. Non-registered students can access the home page, About us, Contact us, and Courses pages, as well as free courses designed for all ages. To access the premium courses, students need to register, log in, and request enrollment. After admin approval, registered students can view full lessons, take quizzes, submit feedback, and manage their profiles. They also have the option to log out once they are done using the system.

Administrators must log in to access the system's features. They can view student information and manage all learning content. Admins perform CRUD operations on categories, courses, lessons, and quizzes, and approve student enrollment requests for premium courses. They also monitor system usage, review feedback, and ensure the platform operates smoothly. Figure 1 show the system flow diagram for the system.

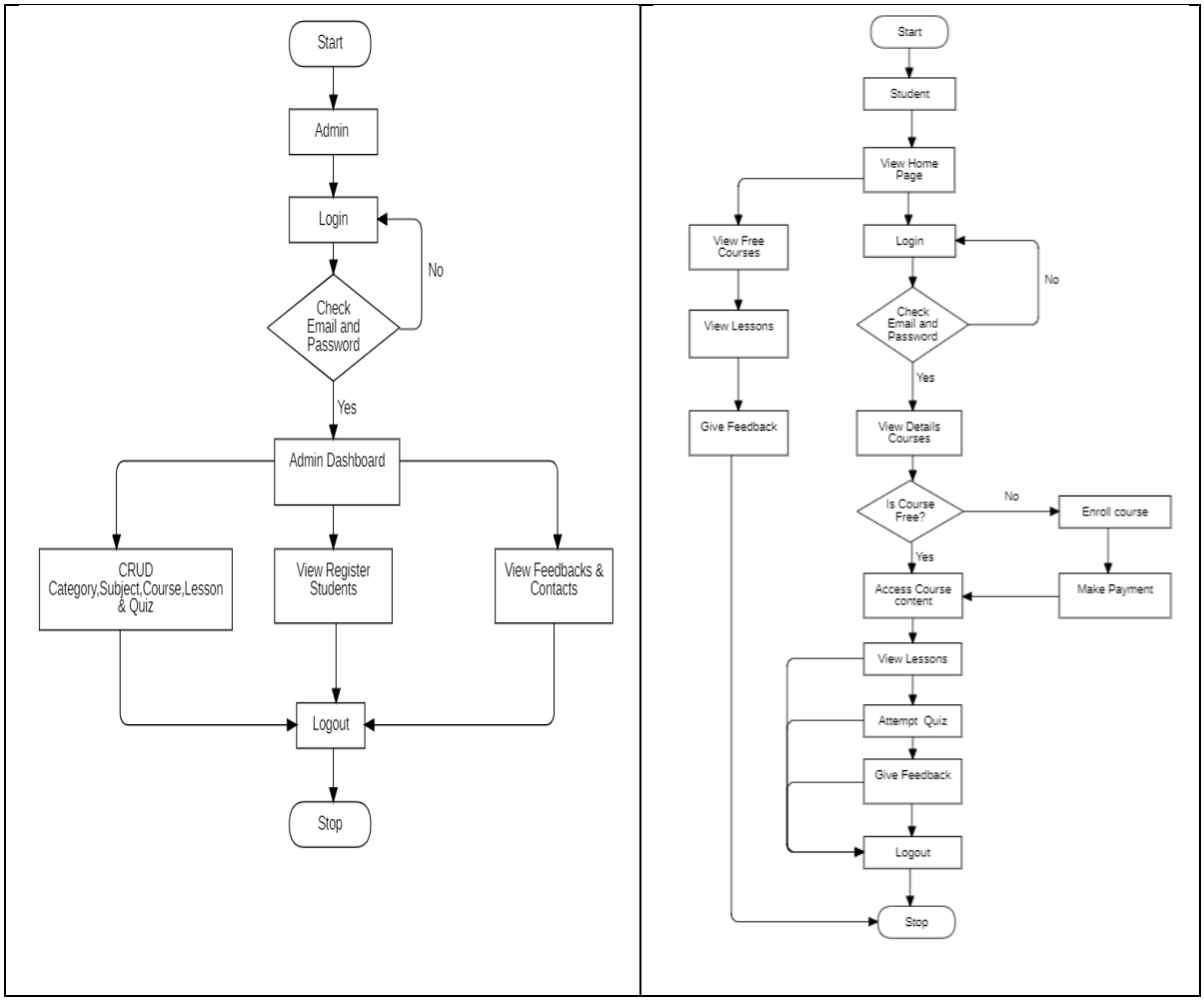

Figure 1: System Flow Diagram

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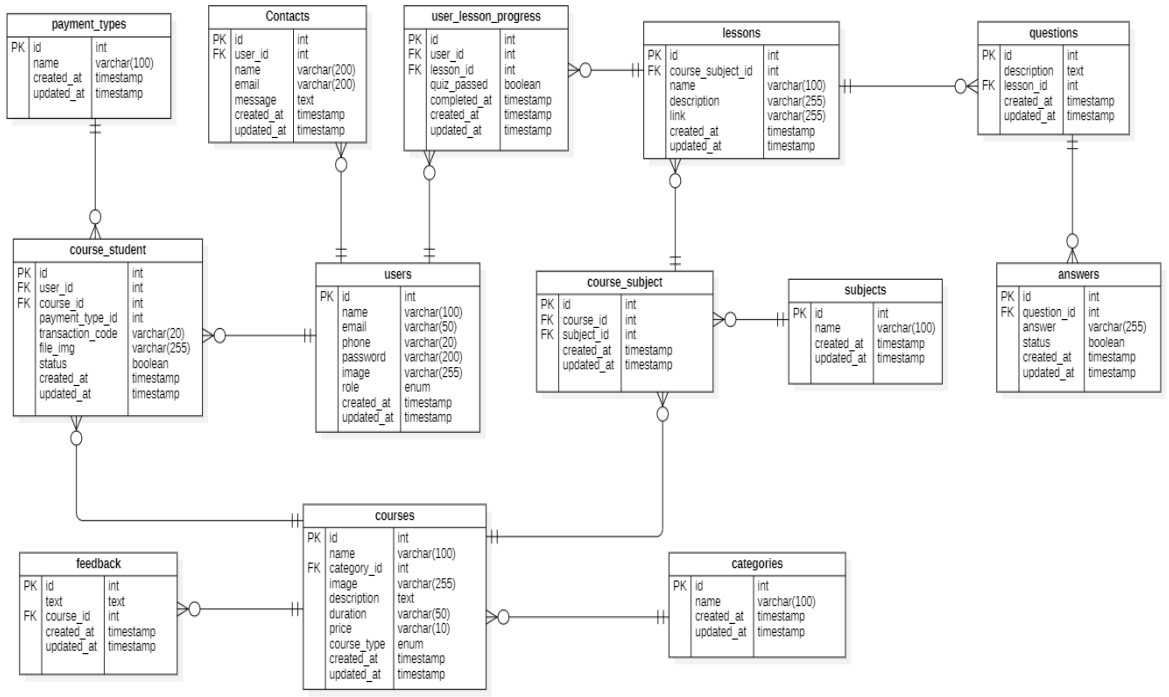

Figure 2: Database Design

An Entity Relationship Diagram (ERD) makes the use of data modeling techniques to visually outline system processes and provides the structural basis for creating a relational database. Attributes within an ERD can be defined as primary keys, which uniquely identify each record, or as foreign keys, which create logical connections between related tables. The use of cardinality notation allows the definition of relationship types and constraints between entities in the model. In this project's database, there are ten data tables dedicated to the user side and ten data tables assigned to the administrator side. The tables involve: users, categories, courses, course_subject, lessons, user_lesson_progress, payment_types, course_student, feedback, contacts, questions, and answers. Figure 2 displays the entity relationship diagram, showing all tables and how they are linked to represent the overall data relationships within the system.

RESULTS

The design of each page in the Learning Management System with PHP has been thoughtfully developed to be simple, user-friendly, and accessible. Regarding the learning platform, visitors can freely explore the home page, access free programming courses for kids, learn more about the system from the About Us page, and easily reach out via the Contact Us section. All of these features are available without the need to register or log in.

Once registered students log in, they gain access to more features such as viewing detailed information about premium courses, enrolling in those courses, and tracking their learning journey. After an admin reviews and approves the enrollment, the student is able to view the full lesson content, take quizzes, and submit feedback to help improve the system or share their thoughts. One limitation is that the system requires an active internet connection; if the users are in areas with no internet access, they will be unable to benefit from the platform's

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services. Overall, this system serves as a convenient digital platform that allows students to connect, learn, and engage with programming education remotely, without visiting a physical training center. Figure 3 show the home page of the system.

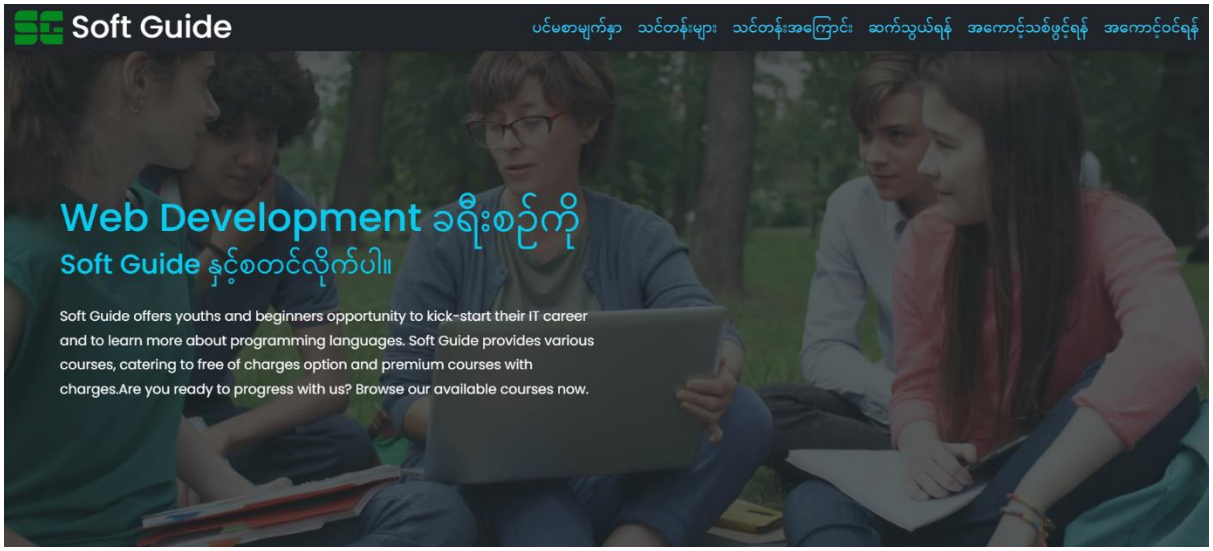

Figure 3: Home Page

The admin dashboard of the Learning Management System with PHP provides the administrators with a complete overview of the platform's performance. It displays the total number of users, total courses, enrollments, and overall revenue generated from premium courses. Recent enrollments and recent feedback are also shown, allowing admins to stay updated on the user activity and student suggestions. In addition, the dashboard includes an attendance chart and course-wise attendance records, helping administrators effectively monitor learning participation. Figure 4 show the report of LMS with PHP.

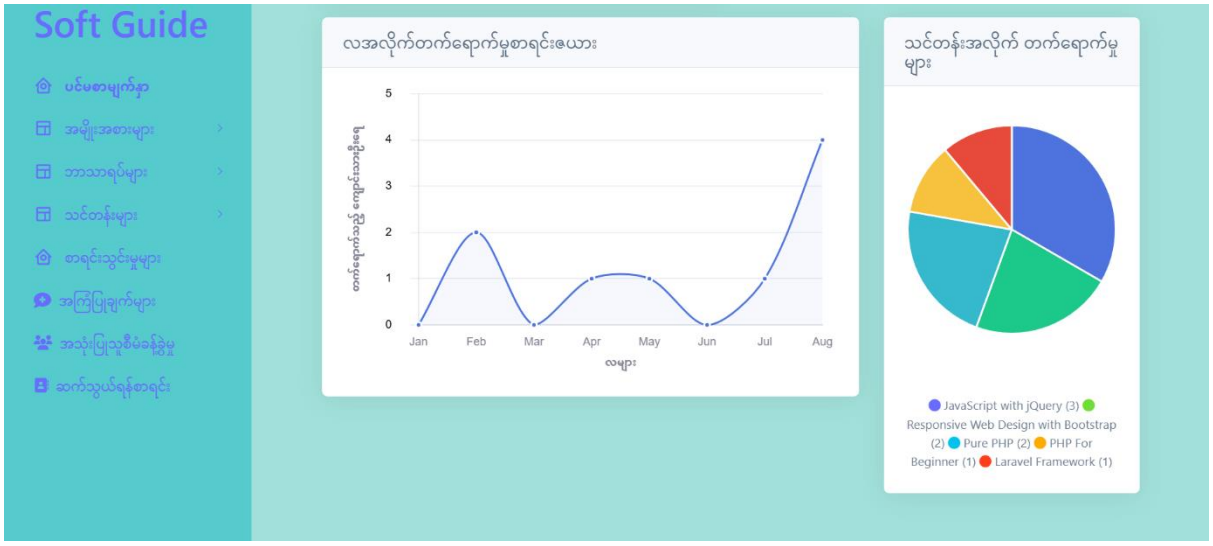

Figure 4: System Report

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CONCLUSION

The Learning Management System with PHP presents an innovative approach to accessible programming education, especially for children, beginners, and self-learners. Built using PHP, MySQL, HTML, CSS, and JavaScript, the platform offers a structured and user-friendly interface that simplifies the learning process. Through interactive video lessons and quizzes, learners can test their understanding and reinforce key programming concepts at their own pace. The system promotes independent learning and helps users gain the foundational knowledge needed to enter the technology world with confidence. As digital skills become essential in all fields, the platform like Soft Guide plays a vital role in preparing the next generation of programmers and encourages equal access to technology-driven opportunities.

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