The Database Development and Class Registration paper

CST499

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Enhancing student enrollment management requires the creation of an online course registration system. Building on the framework created in Week 3, this project focuses on combining course registration features with authentication. The system allows users to monitor enrolled classes, change their course schedules, and register for courses using PHP and MySQL in a XAMPP environment. The goal is to efficiently manage student course registrations while guaranteeing a safe and effective user experience.

The following tables were made in order to facilitate course registration:

A screenshot of a computer program

AI-generated content may be incorrect.

These tables track the courses that users have registered for and store the courses that are available.

To communicate with course data, the database connection class was expanded:

A computer screen with white text

AI-generated content may be incorrect.

Database searching and updating are made easier by this link.

The following reasoning can be used by users to register after choosing courses from a list:

A computer screen with white text

AI-generated content may be incorrect.

The following is a display of registered courses:

A computer screen with white text

AI-generated content may be incorrect.

Users choose a course from a dropdown menu and fill out the form to add it. The following query is run in order to remove a course:

A screen shot of a computer

AI-generated content may be incorrect.

The course registration system's development required resolving issues with secure authentication and database integration. Users may now effectively register for and administer their courses by utilizing PHP and MySQL. Future improvements could include more security features and better user interface design. This paper demonstrates the value of online applications that are database-driven in the administration of education.

*References:*

* Tsui, F., Karam, O., & Bernal, B. (2018). [*Essentials of software engineering*](https://uagc.instructure.com/courses/142034/modules/items/7241502)(4th ed.). Jones & Bartlett Learning.
* Kumar, A. (2021). *PHP & MySQL Web Development: A Beginner’s Guide*. McGraw Hill.
* Williams, H. E. (2020). *Web Database Applications with PHP and MySQL*. O'Reilly Media.
* Smith, J. (2022). *Secure Web Application Development with PHP & MySQL*. Pearson.