**Database Development and Class Registration**

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The development of the MySQL database for the student portal project represents a significant milestone in the creation of a streamlined and effective platform for student engagement. The student portal, as a web-based software application, is designed to provide students with a comprehensive and efficient platform to manage their course enrollments. Its purpose is to streamline the course enrollment process, facilitate seamless communication between students and the academic institution, and offer a user-friendly interface for accessing relevant information and resources. The successful establishment of connections between vital pages, such as registration, profile, and login, to the database has enabled us to securely store and retrieve essential user information, thereby fostering a personalized and protected user experience. By leveraging the capabilities of the MySQL database, we aim to enhance the functionality and efficiency of the student portal, ultimately providing students with a reliable and convenient tool to manage their academic journeys.

Firstly, the user table developed in PHPMyAdmin serves as a fundamental component of our student portal project. It plays a vital role in capturing and storing user information with precision and reliability (DSouza, 2022). When a user registers on the platform by completing the comprehensive form provided, their details are seamlessly stored in the user table within the database. This process ensures the persistence of critical information such as the user's first name, last name, email, address, username, password, phone number, and date of birth. By securely storing this data, we enable users to access and manage their profiles, facilitating a personalized experience tailored to their specific needs. This robust integration between the registration form and the user table underscores the commitment to data integrity and user-centric functionality, enhancing the overall effectiveness and efficiency of the student portal.

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Upon successful registration, users gain access to their personalized student portal by logging in with their unique username and password, securely stored in the database. Once authenticated, students can conveniently view their comprehensive profile information, which is dynamically pulled from the database. (‘PHP connect to mysql’, n.d.) Additionally, they have the privilege of reviewing their grades for previous courses in which they were enrolled, allowing them to track their academic progress. Moreover, students can take advantage of the resources provided by the institution, accessing a wealth of educational materials and support. However, the process of enrolling in a new course requires further exploration. While students can select a course from the dropdown menu and click the "Enroll" button, the challenge lies in storing this course enrollment information into the database for the respective student. Despite initial attempts to manually add entries to the registration table, the PHP code has not been successful in automating this process based on user selection. To resolve this matter, further investigation is underway, including the examination of relevant resources on platforms like Stack Overflow. Once a solution is found, students will be able to view their enrolled courses and also remove them, thus enhancing their control over their academic journey.

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In conclusion, the development of the MySQL database for the student portal project marks a significant achievement in creating a streamlined and efficient platform for student engagement. The student portal, with its web-based software application, offers students a comprehensive tool to manage their course enrollments, facilitating a seamless and user-friendly experience. The successful integration of essential pages, such as registration, profile, and login, with the database enables secure storage and retrieval of user information, ensuring a personalized and protected user experience. Although challenges were encountered in connecting enrolled classes to the database, further research and exploration will be pursued to overcome these obstacles and enhance the functionality of the student portal. By leveraging the capabilities of the MySQL database, we strive to continuously improve the system, providing students with a reliable and convenient tool to effectively navigate their academic journeys. The development of the student portal and its integration with the MySQL database is a testament to our commitment to delivering a high-quality software solution that meets the needs of students and fosters their success in their educational endeavors.

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References

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