**Database Development and Class Registration**

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1. The Class Registration System is designed to provide a user-friendly interface for students to register for classes and manage their registrations efficiently. The implementation phase focused on incorporating the required features, such as user registration, class selection, and the ability to delete individual classes.
2. Design and Planning: Prior to implementation, a thorough design and planning phase was conducted to identify the system requirements, define the database structure, and outline the user interface. This phase ensured a clear understanding of the project scope and facilitated a smooth transition to the implementation phase.
3. HTML and CSS: The implementation phase began by creating the necessary HTML and CSS files. The HTML file, index.php, served as the main page, providing links for user login, registration, and class selection. The CSS file was used to define the styling and layout of the user interface, ensuring a visually appealing and intuitive design.
4. User Registration: The registration functionality was implemented using PHP. Upon submitting the registration form, user details such as name, email, password, address, and phone number were captured and stored in a database table. Basic form validation was implemented to ensure that required fields were not left empty.
5. Class Selection and Deletion: To enable class selection, checkboxes were added to the registration form, allowing users to choose from a list of available classes. The selected classes were stored in an array and displayed to the user upon successful registration. Each registered class was accompanied by a "Delete" link, allowing users to remove individual classes from their registration.
6. Database Integration: The implementation involved integrating a database to store user registrations and registered classes. MySQL was utilized as the database management system. Prepared statements were used to prevent SQL injection and enhance security.
7. Handling Class Deletion: To handle class deletion, the PHP code was extended to process the "delete" requests. When the user clicks the "Delete" link next to a class, the corresponding entry is removed from the database. After successful deletion, the updated list of registered classes is displayed to the user.
8. Testing and Refinement: Throughout the implementation phase, comprehensive testing was performed to ensure the system's functionality, reliability, and security. Test scenarios included registering for classes, deleting individual classes, and validating user input. Any identified issues were addressed and refined to improve the system's performance and user experience.
9. Conclusion: The implementation of the Class Registration System proved to be an insightful and rewarding experience. The project successfully achieved its goals of providing a user-friendly interface for class registration and incorporating the functionality to add and delete individual classes. The development process involved careful planning, systematic implementation, and rigorous testing. The use of PHP, HTML, CSS, and MySQL facilitated the creation of a robust and efficient system. This implementation experience demonstrated the importance of proper planning, attention to detail, and continuous testing to ensure the delivery of a reliable and user-friendly application.
10. Future Work: Although the Class Registration System has been implemented successfully, there are opportunities for further enhancement. Future work could include additional features, such as class search functionality, schedule conflict detection, and advanced registration management options. Additionally, user feedback and suggestions can be incorporated to improve the system's usability and address any identified limitations.

In conclusion, the implementation of the Class Registration System was a valuable learning experience, showcasing the practical application of web development techniquesand principles. The process involved a systematic approach to design, development, and testing, resulting in a functional and user-friendly system. The successful implementation of class selection and deletion features demonstrated the effective utilization of PHP, HTML, CSS, and MySQL technologies. The lessons learned from this experience will contribute to future projects, emphasizing the significance of proper planning, attention to detail, and continuous improvement. By incorporating user feedback and exploring opportunities for further enhancements, the Class Registration System can evolve into a comprehensive and efficient tool for managing class registrations.

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**Source code:**



**References:**

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