



SOFTWARE PROGRAMMING

Instructions

- Complete all tasks below.
- Use HTML, CSS, PHP, SQL and JavaScript for your implementation.

QUESTION 1

User Registration and Login System

Create a web application that includes a user registration form, a login form, and a corresponding MySQL database to store user data.

PART 1: Database Design

1. **Database Name:** `school_management`
2. **Table Name:** `students`
3. **Fields and Data Types:**
 - o `id` (INT, PRIMARY KEY, AUTO_INCREMENT)
 - o `name` (VARCHAR(100))
 - o `age` (INT)
 - o `date_of_birth` (DATE)
 - o `address` (VARCHAR(255))
 - o `gender` (ENUM('Male', 'Female', 'Other'))
 - o `phone` (VARCHAR(15))
 - o `email` (VARCHAR(100), UNIQUE)
 - o `parent_name` (VARCHAR(100))
 - o `parent_phone` (VARCHAR(15))
 - o `school_name` (VARCHAR(100))
 - o `school_address` (VARCHAR(255))
 - o `country` (VARCHAR(100))
 - o `username` (VARCHAR(50), UNIQUE)
 - o `password` (VARCHAR(255)) - Store hashed password for security

Create the SQL statements to set up this database and table.

PART 2: User Registration Form

Create a PHP web form (`register.php`) with the following fields:

- Name
- Age
- Date of Birth
- Address
- Gender (Dropdown)
- Phone
- Email
- Parent's Name
- Parent's Phone
- School's Name
- School's Address
- Country
- User Name
- Password

Validation: Ensure that all fields are filled correctly and that the email and phone formats are valid.

PART 3: User Login Form

Create another PHP web form (`login.php`) with the following fields:

- User Name
- Password

Validation: Ensure that the entered user credentials match the stored values in the database.

Part 4: Code Implementation

1. **Database Connection:** Write a PHP script to connect to the MySQL database using PDO or MySQLi.
2. **Registration Script:** Implement the logic to insert user data into the database upon form submission. Hash the password before storing.
3. **Login Script:** Implement the logic to verify user credentials upon form submission. Use session management to handle authentication.
4. **Error Handling:** Ensure that your application gracefully handles errors and user input issues.

END