Special Coding Considerations

**1. Session Management:**

* Ensure that session management is handled securely and appropriately.
* Use session\_start() at the beginning of scripts where session data is accessed or modified.
* Store sensitive user information (like user\_id, username, and email) in session variables after successful login or registration to maintain user state across different pages.

**2. Database Interaction:**

* For MySQLi, ensure proper use of prepared statements to prevent SQL injection attacks.

**3. Input Validation:**

* Validate user inputs both on the client side using JavaScript and on the server side using PHP.
* Ensure email validation is performed using filter\_var with the FILTER\_VALIDATE\_EMAIL filter.
* Check that password and confirm password fields match before proceeding with user registration.

**4. Error Handling:**

* Provide clear and user-friendly error messages for different validation failures and database errors.
* Use htmlspecialchars to escape output, preventing XSS attacks when displaying user-provided data.

**5. Directory Structure:**

* Maintain a clear and organized directory structure:
  + server/Dao/ for database access objects (DAO) and connection files.
  + CSS/ for stylesheets.
  + Scripts/ for JavaScript files.
  + server/ for server-side scripts and logic.

**6. Code Maintainability:**

* Use consistent naming conventions and indentation for better readability and maintainability.
* Include comments to explain the purpose and functionality of key sections of the code, especially where complex logic is involved.

**7. Security Considerations:**

* Sanitize all user inputs to prevent SQL injection and XSS attacks.
* Use prepared statements for all database queries to enhance security.
* Ensure session data is properly managed and secured against session hijacking.

**8. User Experience:**

* Provide immediate feedback to users during form submission using JavaScript.
* Redirect users to appropriate pages upon successful registration or login, ensuring a smooth and intuitive user experience.