

Online Quiz Portal WriteUp

User Module:

1. User Registration:

- Implement the `User` entity class with attributes like name, email, and password.
- Create the `UserDAO` class to handle user-related database operations (e.g., register, login, retrieve user details).
- Develop the registration form (`userregistration.jsp`) that collects user information such as name, email, password, and date of birth.
- Implement the `RegisterServlet` to handle user registration, which calls the appropriate methods from `UserDAO` to store the user details in the database.

2. User Login:

- Create the login form (`userlogin.jsp`) that collects user credentials (email and password).
- Implement the `UserLoginServlet` to handle user login, which calls the `validateUser` method from `UserDAO` to check if the provided email and password are valid.
- If the credentials are valid, create a session for the user and redirect them to the user dashboard (`userdashboard.jsp`).
- If the credentials are invalid, display an error message and redirect the user back to the login page.

3. User Dashboard:

- Implement the `UserDashboardServlet` to handle requests to the user dashboard.
- Retrieve the user details from the session and pass them to the user dashboard page (`userdashboard.jsp`).
- Display a welcome message to the user along with any relevant information or actions available in the user dashboard.

4. View Quizzes:

- Retrieve the list of available quizzes from the `QuizDAO` in the user dashboard servlet.

- Pass the list of quizzes to the user dashboard page (`userdashboard.jsp`) for display.
- Display the quiz details (e.g., title, description) along with a link or button for each quiz that redirects the user to the quiz details page.

5. Quiz Details and Submission:

- Implement the `QuizDetailsServlet` to handle requests for viewing quiz details.
- Retrieve the quiz details, including questions and options, from the `QuizDAO` and pass them to the quiz details page (`quizdetails.jsp`).
- Display the questions and options to the user, along with a form for submitting their answers.
- Implement the `SubmitQuizServlet` to handle quiz submission.
- Retrieve the submitted answers from the request parameters and compare them with the correct answers stored in the database.
- Calculate the user's score and store the quiz result in the database.
- Redirect the user to the result page (`result.jsp`) to display their score and provide feedback on their answers.

Admin Module:

1. Admin Login:

- Create the admin login form (`adminlogin.jsp`) that collects admin credentials (email and password).
- Implement the `AdminLoginServlet` to handle admin login, which calls the `validateAdmin` method from `AdminDAO` to check if the provided email and password are valid.
- If the credentials are valid, create a session for the admin and redirect them to the admin dashboard (`admindashboardpage.jsp`).
- If the credentials are invalid, display an error message and redirect the admin back to the login page.

2. Admin Dashboard:

- Implement the `AdminDashboardServlet` to handle requests to the admin dashboard.
- Retrieve the admin details from the session and pass them to the admin dashboard page (`admindashboardpage.jsp`).

- Display a welcome message to the admin along with any relevant information or actions available in the admin dashboard.

3. Manage Quizzes:

- Implement the `AddSQLQuestionServlet`

``` to handle requests for adding SQL questions to the quiz.

- Create the form (`addquestionsql.jsp``) to collect the SQL question details (e.g., question text, options, correct answer) and submit them to the servlet.

- Implement the `ViewSQLQuestionServlet`` to retrieve and display a list of SQL questions in the admin dashboard.

- Create the page (`viewsqlquestions.jsp``) to display the list of SQL questions and provide options to edit or delete each question.

- Implement the `EditSQLQuestionServlet`` to handle requests for editing an existing SQL question.

- Create the form (`editsqlquestion.jsp``) to display the details of an SQL question and allow the admin to modify them.

- Implement the `DeleteSQLQuestionServlet`` to handle requests for deleting an SQL question from the database.

### **4. Manage Users:**

- Implement the `EditUserServlet`` to handle requests for editing user details.

- Create the form (`edituser.jsp``) to display the details of a user and allow the admin to modify them.

- Implement the `DeleteUserServlet`` to handle requests for deleting a user from the database.

### **5. Logout:**

- Implement the `LogoutServlet`` to handle user and admin logout requests.

- Invalidate the session and redirect the user or admin to the logout page (`loggedout.jsp``).

This workflow outlines the steps involved in implementing the user and admin modules in your online quiz project. Make sure to adjust the implementation based on your specific requirements and naming conventions.

If you have any further questions or need assistance with specific parts of the project, feel free to ask!