

Description Of Project:

Project: Create an online quiz portal, where users can explore multiple quiz, attempt the quiz, and save their position on the leaderboard.

Project Modules:

Login and registration

User Login: To access the exam user must be registered in the application. Once the user will register in the examination system and project user will be able to view all exams. The user can choose an exam and start the test.

Admin Login: Admin can log in to the application and perform operations like manage exams, manage users, manage questions.

Admin:

Admin can add the exam type. Questions in existing exams and admin can modify the complete database Like adding users, deleting user, Adding new exams, Adding question answers, printing the complete result seat in the pdf format, and so on.

User:

The user can view all the tests (Exams). The user can check the result history. The user can select an exam on the basis of category also. Once the user will select a category then the user will get those exams that come under the selected category.

Project Requirements to Configuration(Online Quiz project in java) .

Database: MySQL Workbench

Language : HTML,JSP,servlet,css,jsp

Server: Tomcat 8.5

IDE: Spring STS tool or eclipse.

libraries: Tomcat ,SQL connector, jsp,servlet api, jsp,
jstl,hiberbate,JDBC

Flow Of Project:

Index Page:

Users access the index page, which contains options for user login, admin login, and new user registration.

User Registration:

New users click on the registration link and are directed to the registration form (register.jsp) .

Users enter their desired username and password.

The registration form data is submitted to the RegisterServlet.java.

The RegisterServlet.java validates the registration form inputs.

If the inputs are valid, the servlet registers the user by inserting their details into the database.

Upon successful registration, the user is redirected to the login page (login.jsp).

User Login:

Users enter their username and password in the login form (login.jsp) and submit the form.

The login form data is submitted to the LoginServlet.java.

The LoginServlet.java validates the user's credentials by checking them against the database.

If the credentials are valid, the servlet creates a session for the user and redirects them to the user dashboard (user_dashboard.jsp).

If the credentials are invalid, the user is redirected back to the login page with an error message.

Admin Login:

Admins access the admin login page (admin_login.jsp) using a separate URL.

Admins enter their username and password in the admin login form and submit it.

The admin login form data is submitted to an AdminLoginServlet.java (similar to the User Login flow).

The AdminLoginServlet.java validates the admin's credentials against the database.

If the credentials are valid, the servlet creates a session for the admin and redirects them to the admin dashboard (admin_dashboard.jsp).

If the credentials are invalid, the admin is redirected back to the admin login page with an error message.

Admin Dashboard:

Admins can create quizzes, manage categories, and update their password in the admin dashboard (admin_dashboard.jsp).

Admins can access the quiz creation page (create_quiz.jsp) to add multiple-choice questions and their answers for each quiz.

The quiz data is submitted to a CreateQuizServlet.java, which stores the quiz details in the database.

Admins can also manage categories, update their password, and perform other administrative tasks.

User Dashboard:

After successful user login, users are redirected to the user dashboard (user_dashboard.jsp).

The user dashboard displays available quizzes retrieved from the database.

Users can select a quiz to attempt and are directed to the quiz page.

Users answer the multiple-choice questions and submit their answers.

The user's answers are validated against the correct answers stored in the database.

The score is calculated and stored in the database.

Leaderboard:

Users and admins can view the leaderboard (leaderboard.jsp).

The leaderboard retrieves the scores from the database and ranks users based on their scores.

The leaderboard page displays the scores in descending order.

Logout:

Users and admins can click on the logout option, which invokes the LogoutServlet.java.

The servlet invalidates the session and redirects the user or admin to the login page.

This Project is uploaded to Github Repo:

<https://github.com/Aryan9605garg/AryanPracticeRepo>