**ONLINE QUIZ PORTAL**

A REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE COURSE

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OVERVIEW OF PROJECT

* The OnlineQuiz Portal is a web application for candidates to appear for an online test in an effective way and there is no loss of time to check the paper. The main aim of Online**Quiz** is to effectively estimate the candidate completely via a totally automated system which besides preserving time, offers swifter outcomes.
* This Web Application provides facility to conduct online examination It saves time as it allows number of students to give the exam at a time and displays the results as the test gets over, so no need to wait for the result. It is automatically generated by the server.
* Administrator has a privilege to create, modify and delete the test papers and its particular questions.
* User can register, login and give the test with his specific id, and can see the results as well
* It is to efficiently evaluate the candidate thoroughly through a fully automated system that not only saves lot of time but also gives fast results.
* For students they give papers according to their convenience and time and there is no need of using extra thing like paper, pen etc.
* This can be used in educational institutions as well as in corporate world.
* It Can be used anywhere, any time as it is a web-based application (user location doesn’t matter).
* No restriction that examiner has to be present when the candidate takes the test.
* This project is helpful to cut back the time and quality of maintaining the records.

SCENARIO:

Suppose a student login to the index page for taking the test.

1. Presentation Layer:
   1. As soon as the home page loads, it will ask for login/signup as a student.
   2. The user will have two scenarios:
      1. If the user is new user, then it will move to signup option. Then it will enter name, password, email, etc. for new user registration.
      2. If the user is existing one i.e. student then it will move to login page. Then it will enter username and password and after login it will move to quiz page and proceed for quiz.
      3. If user entered wrong credentials, then it will show login failed.
   3. User will then click on the Quiz which admin has already set/uploaded on the portalearlier.
   4. User then will attempt the quiz by answering the correct option among them.
   5. After completion of quiz then click on submit and it will show scores of the user and user get the result instantly.
   6. After completion of test then it will click on logout and then it will return to the home page.
2. Service Layer:
3. The main function of service layer is to provide logic to operate on the data sent to and from the DAO and the client.
4. On clicking login function then service interface has abstract function user registration then it will move to service implementation and perform the task of user registration.
5. If the user clicks on signup function,then different abstract for new user and accordingly service implementation class is there for performing the required function.
6. Now for taking the quiz service layer has function of taking quiz which will fetch data from the database and return to jsp page for user.
7. Now after entering the answers service function reads and save it to the required table of the database.
8. Basically all the logic functions are there in service interface and by implementing that interface all the function bodies are defined as per logic and called accordingly using controller class.
9. DAO Layer:
   1. DAO is used to separate low level data accessing API or operations from high level business service.
   2. There is DAO interface and some abstract functions in it and they connect with database and required tables.
   3. Following are the tables which are used for the scenario:
      1. Users
      2. Quizzes
      3. User\_answers
      4. Questions
      5. Games
   4. Now for performing the task then controller send to DAO implementation class and action is performed.
   5. In same way rest operations or functions are performing in the DAO layer.
   6. Basicallyservice layer asks anything then DAO layer communicates with the database and sent back the requires result. In this way all three layers are working over this scenario.

CHALLENGES:

1) first Challenge :

When administrator try to add and create new quizzes that quizzes was not inserting into database properly

2) Second Challenge:

In this project

If suppose student forget their password. We have given an option for forget password by using this button.

Student can easily retrieve their password on their own email id...that button not functioning well.

That was the biggest challenge to make this forgot button work properly

3) Third challenge.

Initially we are using jdbc api technology...that was not efficient for error and exception handling and as we know jdbctemplate is powerful mechanism to connect to the database.

We used jdbctemplate technology to overcome the problem which were coming in jdbc api.

4) Forth challenge:

We have faced a lot of problem when we had to upload our project on git. and creating a branch individually and make changes and modification in individual branch.

5) Fifth challenge:

Jsp java server pages we have used for front end part. It separates both business logic and presentation logic.

We faced some issues with login part .

6) Sixth challenge:

If teacher try to edit question it was little bit time taking process for editing question initially but now working fine.

LEARNINGS:

# Project planning

* + Preparing product backlog
  + Discussion with team how to work

# Project designing

* + Service layer design
  + User Interface
  + JSP Design
  + DAO layer Implementation

# Working inteam

* + Implementation of scrum methodology using JIRA scrumboard
  + Implementationofgitforversioncontrollingwhichhelpedalltheteammembers to get updated with the latest version of the app viaGitHub

# Unit testing

* + How to test a component of the program for itsperformance

# Technologies suchas

* + Git
  + GitHub
  + J2EE
  + JIRA