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Requirements Document

Quiz Manager

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OVERVIEW

These are the Requirements which the Project build will be based on, all sections of the document must be completed to ensure the Clients needs have been met and the User experience is one which inspires others to use the site. These requirements have been based on the findings from the Feasibility study and have been signed off by the Client.

GOALS

1. Create a login screen when the User first navigates to the site. This will prompt those with an existing account to sign up.
2. Have 3 levels of authentication for the site
    a. Edit User - Has permissions to Add/Edit Quizzes, Has permission to create new users, as well as Amend existing accounts. Can take Quizzes and Review Answers at the end of the Quiz.
    b. View User - Has permissions to take Quizzes and Review Answers at the end of the Quiz.
    c. Restricted User - Has Permissions to Take Quizzes, They may not see the answers at the end of the Quiz.
3. Create a Homepage where the User can view all Quizzes
4. Create a Take Quiz system where the user can take any Quiz and receive a Pass/Fail Score
5. Precompile User Accounts using CSV

SPECIFICATIONS

Create a Login Screen and Multi-level authentication

We will need to make use of Microsoft's MVC Authentication features to speed this process up. Since the level of authentication will differ between users it will be beneficial to make use of the Role attribute of the Authentication libraries. As standard, the login screen will include the registration screen, however, since the User Accounts will be pre-compiled the code associated with Registering new users would be better suited to uploading users from a CSV to the DB and then removing the Register features that would be accessible to Users. This will prevent users being able to choose their own access rights. The process for signing up to this service would then be the User applying for access via the Clients existing portfolio of services website and then an Edit User creating the new account once a payment plan has been arranged separately to this process and emailing the credentials securely to the new user along with the URL for this site.

Create a Homepage

Once a user has logged in they should be redirected to the Home Page. This page will look the same for both View and Restricted Users, however, the tabs "Add/Edit Quiz" and "Manage Users" will be added to the Navbar for Edit Users.

On the home page, the user should see a table of all available quizzes displaying the 'Title', 'Author', and 'Description' for each quiz. The List of Quizzes may grow over-time so it would be beneficial to add a Search bar where the user can search for a quiz by title in order to improve the efficiency of the system.

All users must also see the Logout button in the top right.

Create a Take Quiz System

Once a User has selected a quiz, they should see a Quiz information page. This is because, in the event that a user is unsure which quiz they are supposed to be taking, the information page will provide them with a more detailed explanation of the quiz they have selected. This offers them the chance to decide whether to take the quiz or whether to return to home and choose a different one.

Once the User has chosen a quiz they may Begin. Now, the order of Questions must change with every initiation of the quiz to ensure that Users will not more easily memorize the answers, this is imperative as part of the quizzes becoming educational tools. When a Question is displayed, the Question must be clear and concise at the top of the page, and the answer options presented

below. The User must see the next question button at the bottom of the page. On the final Question, the next question button must change to display "Finish Quiz" instead and redirect the user to the Finish Quiz page once selected.

On the Finish Quiz page, the user (if they are a Restricted User) must see their Pass Score

"We're sorry, you did not pass." or "Congratulations You passed!", A Percentage Pass Rate, and a Back to Home button.

If the User is a View or Edit User, they must also see their Q&A pairs, and whether they answered the Question correctly or not, along with the Answers Explanation.

Add Quiz

Edit Users should have access to the Add Quiz Pages. The User should see a Page where the User can Add a new Category if they wish, since the new quiz could belong to a category that does not currently exist. Otherwise, the new quiz input boxes will be on the same page below the new category option. Once they enter the Quiz details into the form and click save the changes should be added to the DB. Then they will be taken to the add questions page. Here they can add a question and it's associated answers. At the bottom of the form, the user should see a 'add new question' button and 'finish creating quiz' button. Once the user has clicked 'finish creating quiz' they should be taken to the home page and see their new quiz in the available quizzes list.

Edit Quiz

On this page, the User should see the input boxes for Quiz Details at the top of the screen, and a table of all Q&As for the Quiz below those input boxes. All details should be editable by the user, The User should be able to change the appropriate details and click save. Once they save the changes, the data will be saved to the DB and the User should be returned to the Home screen where their changes are reflected in the available quizzes table.

MILESTONES

Week 1

I expect that all of the sections above should be built and tested within the First week of Development, making use of MVC helper tools to speed up the process and using the included Bootstrap design features to save having to create a custom front end design. The site will be built using a TDD structure so each method should have an associated Unit Test.

Further development

These are changes which will be implemented if there is residual time at the end of development before the week is finished:

Manage Users

The Edit User should be able to amend the details of any existing user on the sit as well. In the event that a user has changed job roles and their level of access needs to be amended, it is the Edit user who should be able to find their account and change their role accordingly.

Delete Quiz

In the event that a Quiz becomes outdated, Edit users should be able to Delete a Quiz from the DB using a Delete Quiz form.

The Next Stage in the process is Design. Please See the Wireframes for Front End Design Guides, and a Flow Chart for the Design of the User Journey.