

User Guide

WEBBISKOOLS QUIZ MANAGER

AIMEE CRAIG

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OVERVIEW

This web application has been designed to allow users to create, read, update, and delete quizzes and their containing questions and answers. You must have a pre-existing account to login and use the web application.

PREREQUISITES

In order to run the web application, you will need the following:

- [.NET Core 3.0 SDK](#)
- [Google Chrome](#)
- Windows operating system

RUNNING THE APPLICATION

1. Open the project folder and double-click on **RunApplication.bat** to start the web application.

| Name | Date modified | Type | Size |
|---|------------------|-----------------------|------|
| .git | 07/11/2019 14:36 | File folder | |
| .vs | 04/11/2019 14:03 | File folder | |
| Documentation | 07/11/2019 14:38 | File folder | |
| WebbiSkools.QuizManager.FunctionalTests | 07/11/2019 12:59 | File folder | |
| WebbiSkools.QuizManager.Tests | 06/11/2019 18:08 | File folder | |
| WebbiSkools.QuizManager.Web | 07/11/2019 14:34 | File folder | |
| .gitignore | 04/11/2019 15:20 | Text Document | 7 KB |
| RunApplication.bat | 07/11/2019 14:26 | Windows Batch File | 1 KB |
| RunApplicationDev.bat | 07/11/2019 14:31 | Windows Batch File | 1 KB |
| RunTests.bat | 07/11/2019 14:30 | Windows Batch File | 1 KB |
| WebbiSkools.QuizManager.sln | 04/11/2019 15:20 | Visual Studio Solu... | 3 KB |

Figure 1: RunApplication.bat file location

2. Access the web application by opening a browser and navigating to <https://localhost:5001>.



Your connection is not private

Attackers might be trying to steal your information from **localhost** (for example, passwords, messages or credit cards). [Learn more](#)

NET::ERR_CERT_AUTHORITY_INVALID

Advanced

Back to safety

Figure 2: Navigating to <https://localhost:5001>

3. Click the **Advanced** button and then click the “Proceed to localhost (unsafe)” link.



Your connection is not private

Attackers might be trying to steal your information from **localhost** (for example, passwords, messages or credit cards). [Learn more](#)

NET::ERR_CERT_AUTHORITY_INVALID

Hide advanced

Back to safety

This server could not prove that it is **localhost**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

[Proceed to localhost \(unsafe\)](#)

Figure 3: Navigating past “connection is not private” warning

4. You should now see the first page of the web application.

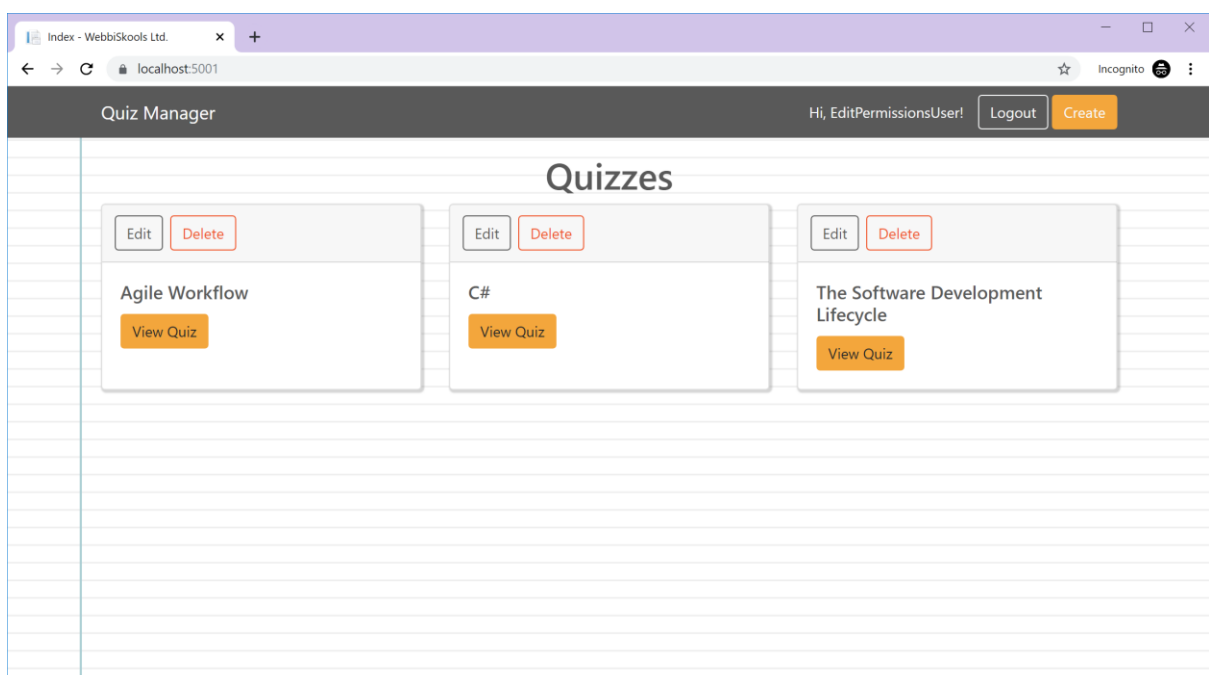


Figure 4: Quiz Manager homepage

RUNNING THE TEST SUITE

1. Run the application in development mode by double-clicking on the **RunApplicationDev.bat** file in the project folder.

| Name | Date modified | Type | Size |
|---|------------------|-----------------------|------|
| .git | 07/11/2019 14:36 | File folder | |
| .vs | 04/11/2019 14:03 | File folder | |
| Documentation | 07/11/2019 14:37 | File folder | |
| WebbiSkools.QuizManager.FunctionalTests | 07/11/2019 12:59 | File folder | |
| WebbiSkools.QuizManager.Tests | 06/11/2019 18:08 | File folder | |
| WebbiSkools.QuizManager.Web | 07/11/2019 14:34 | File folder | |
| .gitignore | 04/11/2019 15:20 | Text Document | 7 KB |
| RunApplication.bat | 07/11/2019 14:26 | Windows Batch File | 1 KB |
| RunApplicationDev.bat | 07/11/2019 14:31 | Windows Batch File | 1 KB |
| RunTests.bat | 07/11/2019 14:30 | Windows Batch File | 1 KB |
| WebbiSkools.QuizManager.sln | 04/11/2019 15:20 | Visual Studio Solu... | 3 KB |

Figure 5: RunApplicationDev.bat file location

2. Double-click on **RunTests.bat** to run the test suite.

| Name | Date modified | Type | Size |
|---|------------------|-----------------------|------|
| .git | 07/11/2019 14:36 | File folder | |
| .vs | 04/11/2019 14:03 | File folder | |
| Documentation | 07/11/2019 14:37 | File folder | |
| WebbiSkools.QuizManager.FunctionalTests | 07/11/2019 12:59 | File folder | |
| WebbiSkools.QuizManager.Tests | 06/11/2019 18:08 | File folder | |
| WebbiSkools.QuizManager.Web | 07/11/2019 14:34 | File folder | |
| .gitignore | 04/11/2019 15:20 | Text Document | 7 KB |
| RunApplication.bat | 07/11/2019 14:26 | Windows Batch File | 1 KB |
| RunApplicationDev.bat | 07/11/2019 14:31 | Windows Batch File | 1 KB |
| RunTests.bat | 07/11/2019 14:30 | Windows Batch File | 1 KB |
| WebbiSkools.QuizManager.sln | 04/11/2019 15:20 | Visual Studio Solu... | 3 KB |

Figure 6: RunTests.bat file location

The script first runs all the unit tests and the result can then be seen in the command line window.

```
C:\WINDOWS\system32\cmd.exe
C:\Projects\aimée-craig-sp>dotnet test
Test run for C:\Projects\aimée-craig-sp\WebbiSkools.QuizManager.FunctionalTests\bin\Debug\netcoreapp3.0\WebbiSkools.QuizManager.FunctionalTests.dll(.NETCoreApp,Version=v3.0)
Microsoft (R) Test Execution Command Line Tool Version 16.3.0
Copyright (c) Microsoft Corporation. All rights reserved.

Starting test execution, please wait...

A total of 1 test files matched the specified pattern.
Test run for C:\Projects\aimée-craig-sp\WebbiSkools.QuizManager.Tests\bin\Debug\netcoreapp3.0\WebbiSkools.QuizManager.Tests.dll(.NETCoreApp,Version=v3.0)
Microsoft (R) Test Execution Command Line Tool Version 16.3.0
Copyright (c) Microsoft Corporation. All rights reserved.

Starting test execution, please wait...

A total of 1 test files matched the specified pattern.

Test Run Successful.
Total tests: 28
  Passed: 28
Total time: 4.7924 Seconds
```

Figure 7: Unit tests output

The script will then begin opening multiple instances of the Google Chrome browser as it runs each functional test. Once all functional tests have finished running, the result can then be seen in the command line window.

```
C:\WINDOWS\system32\cmd.exe
C:\Projects\aimée-craig-sp>dotnet test
Test run for C:\Projects\aimée-craig-sp\WebbiSkools.QuizManager.FunctionalTests\bin\Debug\netcoreapp3.0\WebbiSkools.QuizManager.FunctionalTests.dll(.NETCoreApp,Version=v3.0)
Microsoft (R) Test Execution Command Line Tool Version 16.3.0
Copyright (c) Microsoft Corporation. All rights reserved.

Starting test execution, please wait...

A total of 1 test files matched the specified pattern.
Test run for C:\Projects\aimée-craig-sp\WebbiSkools.QuizManager.Tests\bin\Debug\netcoreapp3.0\WebbiSkools.QuizManager.Tests.dll(.NETCoreApp,Version=v3.0)
Microsoft (R) Test Execution Command Line Tool Version 16.3.0
Copyright (c) Microsoft Corporation. All rights reserved.

Starting test execution, please wait...

A total of 1 test files matched the specified pattern.

Test Run Successful.
Total tests: 28
  Passed: 28
Total time: 4.7924 Seconds

Test Run Successful.
Total tests: 49
  Passed: 49
Total time: 8.2932 Minutes

C:\Projects\aimée-craig-sp>pause
Press any key to continue . . .
```

Figure 8: Functional tests output

Once you have read the results of the unit and functional tests, you can close the command line window by pressing any key.

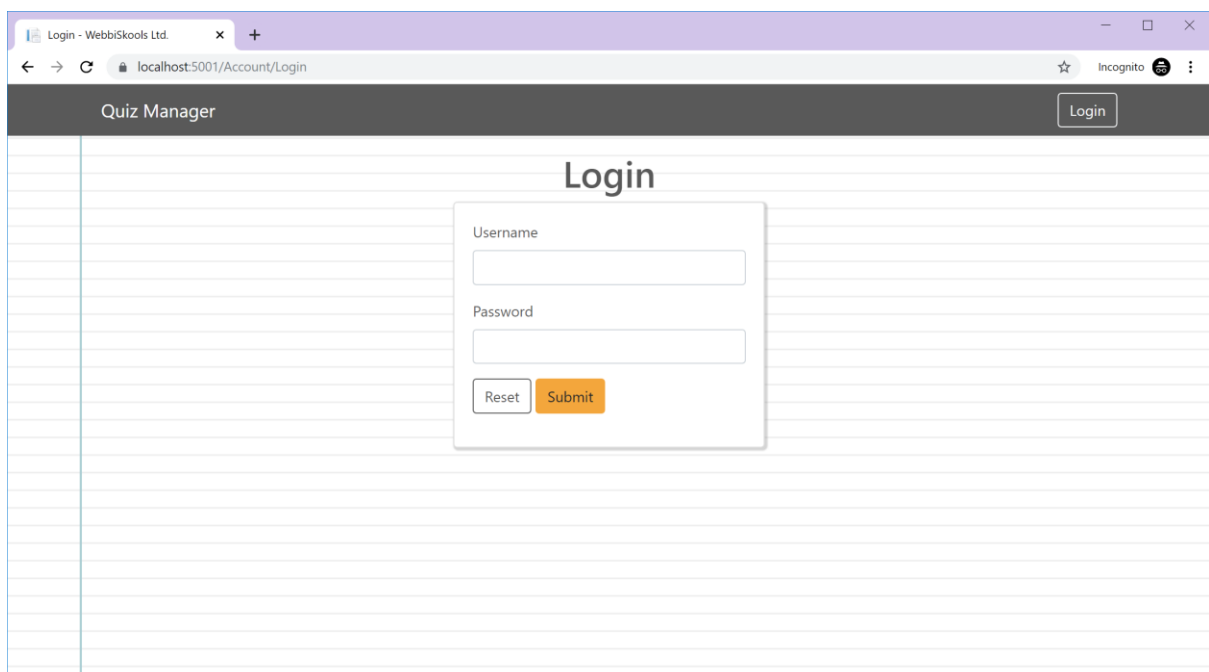
USING THE APPLICATION

LOGIN

Users are given one of three permission levels, restricted, view or edit. There are test accounts for each of these permission levels already added into the database for you to use. The details for each of these are below.

| Permission Level | Username | Password |
|-------------------|---------------------------|----------|
| Restricted | RestrictedPermissionsUser | password |
| View | ViewPermissionsUser | password |
| Edit | EditPermissionsUser | password |

To log in to one of these accounts, navigate to <https://localhost:5001>. This will take you to the login page where you can fill in your username and password. Note that the username is not case sensitive. Upon successful login, you will be redirected to the list of all available quizzes.



The screenshot shows a web browser window with the address bar displaying 'localhost:5001/Account/Login'. The page title is 'Login - WebbiSkools Ltd.'. The page content features a dark header bar with the text 'Quiz Manager' on the left and a 'Login' button on the right. The main body of the page has a light gray background. In the center, there is a white login form with a title 'Login'. The form contains two input fields: 'Username' and 'Password'. Below these fields are two buttons: 'Reset' and 'Submit'.

Figure 9: Login page

LOGOUT

Providing you are logged in to an account, the **Login** button will be replaced with a **Logout** button. Clicking this button will sign you out of that user account and redirect you back to the Login page. If you are unable to see this button it is likely the screen size of the device you are browsing on is too small. In this case, click on the button with three horizontal lines in the top right-hand corner to show the **Logout** button.

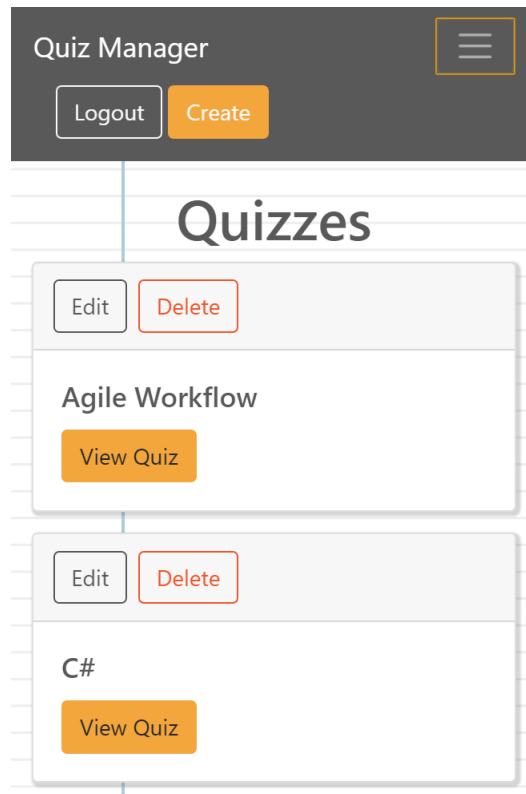


Figure 10: Logout button

VIEWING A QUIZ

To view a quiz, click on the **View Quiz** button of the particular quiz you'd like to view. You will be redirected to a page that displays all the questions within that quiz.

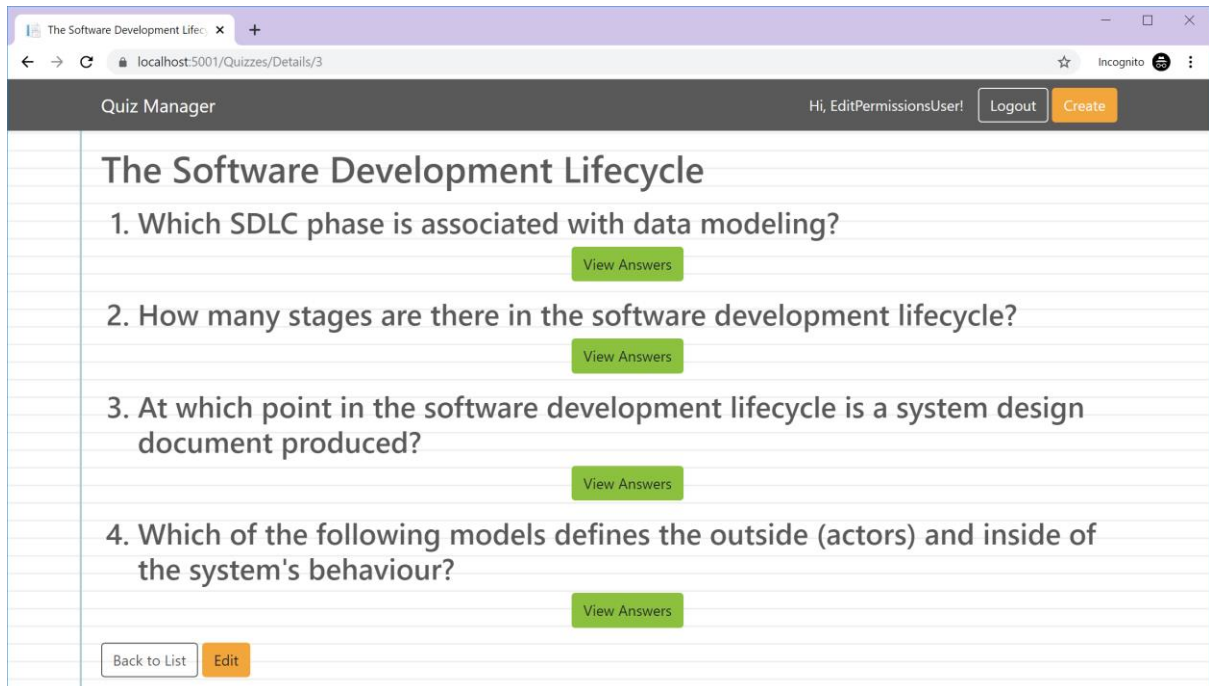


Figure 11: View quiz

If you are logged in as a user that has the View or Edit permission level then you will also see a button underneath each question labelled **View Answers**. Click the **View Answers** button to reveal the possible answers to each quiz. Users with the Restricted permission level will not see this button and will not be able to view the possible answers for each question.

CREATING A QUIZ

To create a quiz, you must be logged in as a user with the Edit permission level. Once you are logged in as a user with the Edit permission level you will see a new button in the top right-hand corner of the page labelled **Create**. If you are unable to see this button it is likely the screen size of the device you are browsing on is too small. In this case, click on the button with three horizontal lines in the top right-hand corner to show the **Create** button.

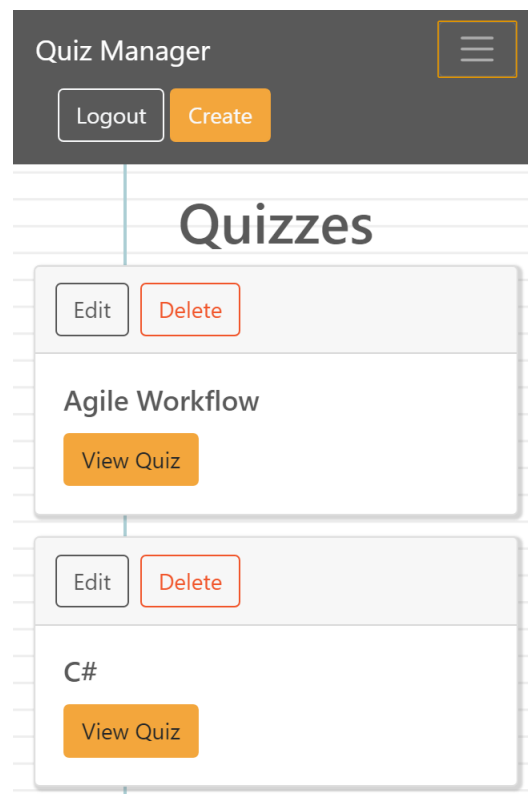


Figure 12: Create button

You will be presented with a form asking for the quiz's title, a question and at least three answers. You can add a question by clicking on the **Add Question** button. This will add another question box and three answer boxes. This button can be used to add a question in between two existing questions if needed. If you want to add an answer to a question you can click the **Add Answer** button. This will add a blank answer to the end of the list of answers for that question. You can only have a maximum of five answers for any one question.

The screenshot shows a web browser window with the title 'Create Quiz - WebbiSkools Ltd.' and the URL 'localhost:5001/Quizzes/Create'. The page has a dark header bar with 'Quiz Manager' on the left, 'Hi, EditPermissionsUser!' in the center, and 'Logout' and 'Create' buttons on the right. The main content area is titled 'Create Quiz' and contains a form with the following elements: a 'Quiz Title' input field, a 'Question' input field, and three 'Answer' input fields. Each 'Answer' field has a corresponding 'Delete Answer' button to its right. Below the answer fields are three buttons: 'Add Question' (green), 'Add Answer' (green), and 'Delete Question' (red). At the bottom of the form are 'Reset' and 'Submit' buttons, and a 'Back to List' link.

Figure 13: Create quiz

If you want to delete a question, you can do so by clicking its corresponding **Delete Question** button. This will remove the question and its associated answers. Each answer will also have a corresponding **Delete Answer** button. This will remove the associated answer. You can only delete answers if there are more than three answers for that particular question.

To save the quiz click the **Submit** button. This will add the quiz to the database and redirect you back to the list of available quizzes where you should now see your newly created quiz. You can now view that quiz and its associated questions and answers by clicking on its **View Quiz** button.

EDITING A QUIZ

To edit a quiz, you must be logged in as a user with the Edit permission level. Once you are logged in as a user with the Edit permission level you will see a button labelled **Edit** above every quiz on the list of quizzes page. Once you click this button you will be redirected to the edit quiz page.

Quiz Manager

Hi, EditPermissionsUser! Logout Create

Edit Quiz

The Software Development Lifecycle

Which SDLC phase is associated with data modeling?

None of the above. Delete Answer

Design. Delete Answer

Maintenance. Delete Answer

Analysis. Delete Answer

Add Question Add Answer Delete Question

How many stages are there in the software development lifecycle?

10. Delete Answer

7. Delete Answer

5. Delete Answer

4. Delete Answer

Add Question Add Answer Delete Question

Figure 14: Edit quiz

You will be presented with a form similar to the one you saw when creating a quiz, except this one will be populated with the values from the quiz you have selected. From here you can add questions, add answers, delete questions, and delete answers the same way you do when creating a quiz.

DELETING A QUIZ

To delete a quiz, you must be logged in as a user with the Edit permission level. Once you are logged in as a user with the Edit permission level you will see a button labelled **Delete** above every quiz on the list of quizzes page. Once you click this button you will be redirected to the delete quiz page.

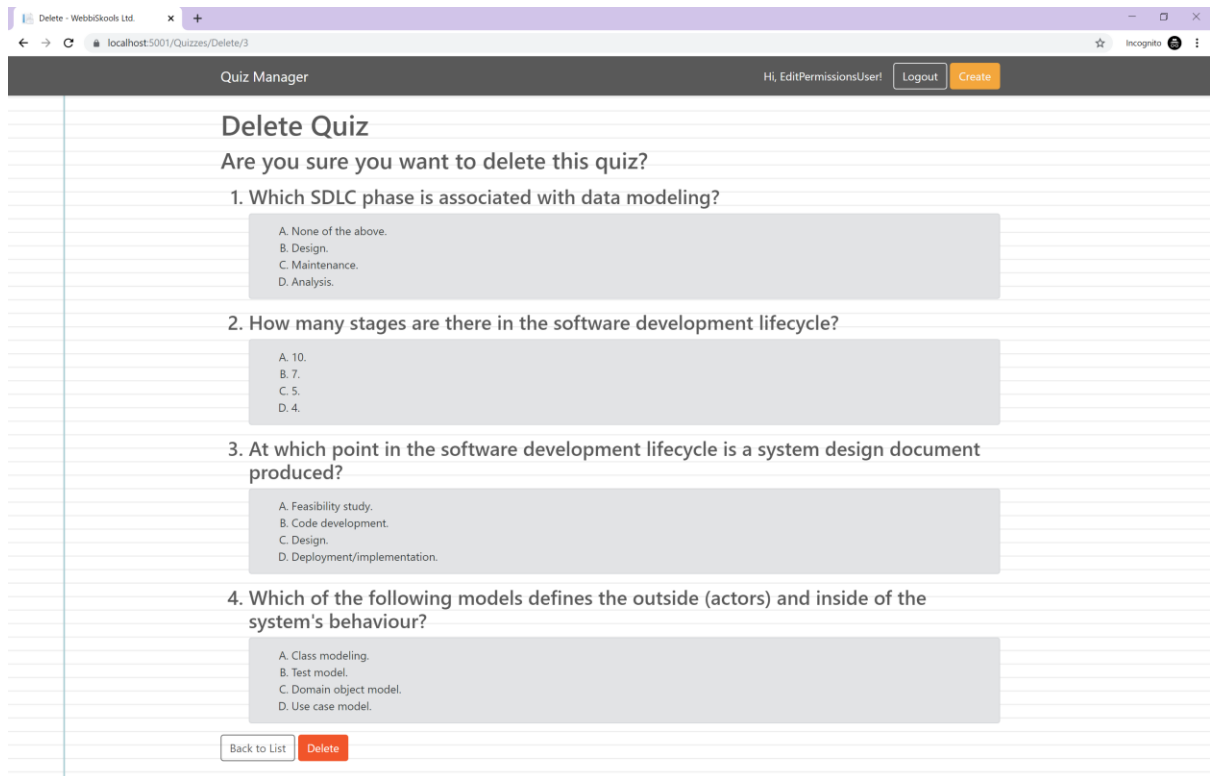


Figure 15: Delete quiz confirmation

The delete quiz page will show you the quiz and its associated questions and answers with a message asking you to confirm that you want to delete the quiz. Once you are happy for the quiz to be deleted, click the **Delete** button at the bottom of the page. The quiz will be removed from the database and you will be redirected to the list of quizzes page where you will no longer see the quiz you have just deleted.