README2

All tests were done manually due to the challenge of programmatically testing user submitted forms. What follows is the steps taken by group members in performing each unit test. These unit tests have been greatly expanded since Demo 1.

Connection

Test Covered Class: Connection.cs

Testing Functions

Function RunSQL

Pass any output producing SQL query to the function

Expected: The output of the SQL query is returned as a Datatable

Fails if:

- The function cannot connect to the database
- There is errors in the SQL query

Function RunNonQuerySQL

Pass any non-output producing SQL query to the function

Expected: An integer with the number of rows affected by the SQL query is returned

Fails if:

- The function cannot connect to the database
- There is errors in the SQL query

Compare

Test Covered Class: Compare

Testing

Steps:

- Provide GET array containing the variable CompareType
- Provide SESSION array containing the variable Compared
- Provide dataTable containing results of the SQL Query generated by the Class. This will either be done using the Connection.cs class if it has passed full unit testing or by manually running the SQL and collecting

the output as this is a very time consuming process.

Expected: HTML will be generated containing tabular data of either complexes or reviews based on the value of CompareType and will contain either the reviews or complexes specified in Compared

Fails if:

- Invalid CompareType or Compared provided
- Invalid SQL Statement Generated
- Unable to display all data provided in dataTable
- Unable to display placeholders when data not provided by dataTable

List

Test Covered Class: List

Testing

Steps:

- Provide GET array containing the variable ListType
- Provide SESSION array containing the variable Listed
- Provide dataTable containing results of the SQL Query generated by the Class. This will either be done using the Connection.cs class if it has passed full unit testing or by manually running the SQL and collecting the output as this is a very time consuming process.

Expected: HTML will be generated containing the data of either a single complexe or review based on the value of ListType and will contain either the reviews or complexes specified in Listed. HTML will also contain buttons for viewing or comparing based on the value of ListType

Fails if:

- Invalid ListType or Listed provided
- Invalid SQL Statement Generated
- Unable to display all data provided in dataTable
- Unable to display placeholders when data not provided by dataTable
- Displayed no or incorrect button or checkbox based on value of ListType

Test Covered Class: View

Testing

Steps:

- Provide GET array containing the variable ViewType
- Provide SESSION array containing the variable Viewed
- Provide dataTable containing results of the SQL Query generated by the Class. This will either be done using the Connection.cs class if it has passed full unit testing or by manually running the SQL and collecting the output as this is a very time consuming process.

Expected: HTML will be generated containing the data of either a single complexe or review based on the value of ViewType and will contain either the review or complex specified in Viewed

Fails if:

- Invalid ViewType or Viewed provided
- Invalid SQL Statement Generated
- Unable to display all data provided in dataTable
- Unable to display placeholders when data not provided by dataTable

Layout

Test Covered Class: Layout

Testing

Steps:

Provide SESSION array containing username variable

Expected: HTML for a navigation bar will be output. This navigation bar will contain working links to all other pages in the system. The navigation bar will display either login button or a user profile button based on the contents of username.

Fails if:

- Any button has an invalid hyperlink
- The navigation bar has irregular formatting and is not aesthetically pleasing
- Login button is present while username is not NULL
- User profile button is present while username is NULL

Login

Test Covered Class: Login

Testing

Steps:

- Provide POST array containing username and password variables
- Provide GET array containing isLogin variable.
- Provide dataTable containing results of the SQL Query generated by the Class. This will either be done using the Connection.cs class if it has passed full unit testing or by manually running the SQL and collecting the output as this is a very time consuming process.

Expected: If logging in, user will be logged in if username and password match what is returned from the sql query. If match not found, an error will be provided. If user is registering, a new entry will be created in the database and the user will be logged in.

Fails if:

- Invalid Username, Password, or isLogin provided
- Invalid SQL Statement Generated
- SESSION variable Username not set after successful login
- No error provided after failed log in
- No error provided after failed register

Homepage

Test Covered Class: Homepage

Testing

Steps:

None

Expected: Aesthetically pleasing HTML is provided. There is no function or content to this page.

Fails if:

HTML is not aesthetically pleasing.

ManageReview

Test Covered Class: ManageReview

Testing

Steps:

- Provide GET array containing the variable isAdd
- Provide SESSION array containing the variable username and ReviewID
- Provide dataTable containing results of the SQL Query generated by the Class. This will either be done using the Connection.cs class if it has passed full unit testing or by manually running the SQL and collecting the output as this is a very time consuming process.

Expected: HTML will be generated containing a blank form or a form containing an existing review based on the value of isAdd. Upon submitting the form, all data will be validated, and if it is valid, will be added or updated in the database.

Fails if:

- Invalid isAdd or ReviewID provided
- Invalid SQL Statement Generated
- Unable to display all data provided in dataTable
- Unable to display placeholders when data not provided by dataTable
- Failed to validate data in form
- Fail to show error if unable to validate data in form
- Generated SQL if failed to validate data in form