Test Cases

Login/Create Account Functionality

Test 1: User login with correct credentials

Steps:

- 1. User launches application.
- 2. User selects the "Log in!" Button.
- 3. User selects the full name textbox.
- 4. User enters the full name via the keyboard.
- 5. User selects the username textbox.
- 6. User enters the username via the keyboard.
- 7. User selects the password textbox.
- 8. User enters the password via the keyboard.
- 9. User selects the "Log in" button corresponding to their status (teacher or student).

Expected result: Application verifies the user's full name, username, password, and role then loads their main menu.

Test Status: Passed.

Test 2: Create Account with all fields

Steps:

- 1. User launches application.
- 2. User selects the "Create Account" Button.
- 3. User selects the full name textbox.
- 4. User enters the full name via the keyboard.
- 5. User selects the username textbox.
- 6. User enters the username via the keyboard.
- 7. User selects the password textbox.
- 8. User enters the password via the keyboard.
- 9. User selects the "Create Account" button corresponding to their status (teacher or student).

Output: Take the user to landing

Expected result: Application creates an account with the given information. The user is then directed to the main menu GUI.

Test Status: Passed.

Test 3: User login with wrong case credentials

Steps:

- 1. User launches application.
 - 2. User selects the "Log in!" Button.
 - 3. User selects the full name in the textbox.
 - 4. User enters the full name in the wrong case via the keyboard. (Ex: expected "Teacher", received "teacher")
 - 5. User selects the username textbox.
 - 6. User enters the username in the wrong case via the keyboard. (Ex: expected "Name", received "name")
 - 7. User selects the password textbox.
 - 8. User enters the password in the wrong case via the keyboard.
 - 9. User selects the "Log in" button corresponding to their status (teacher or student).

Output: Log In Failed

Expected result: Log In Failed, the credentials are case sensitive

Test Status: Passed.

Test 4: User login with incorrect credentials

Steps:

- 1. User launches application.
- 2. User selects the "Log in!" Button.
- 3. User selects the full name in the textbox.
- 4. User enters an unregistered full name via the keyboard.
- 5. User selects the username textbox.
- 6. User enters the unregistered username via the keyboard.
- 7. User selects the password textbox.
- 8. User enters an unregistered password via the keyboard.
- 9. User selects the "Log in" button corresponding to their status (teacher or student).

Output: Log In Failed

Expected result: The credentials need to be registered to be recognized as a user.

Test Status: Passed.

Test 5: Create user with empty fields

Steps:

- 1. User launches application.
- 2. User selects the "Log in!" Button.
- 3. User selects the full name in the textbox.
- 4. User enters an empty field.
- 5. User selects the username textbox.
- 6. User enters an empty field.
- 7. User selects the password textbox.
- 8. User enters an empty field.
- 9. User selects the "Log in" button corresponding to their status (teacher or student).

Output: User should be prompted to fill in all the fields without leaving any blank.

Expected result: User should be prompted to fill in all the fields without leaving any blank.

Test Status: Passed

Landing Page/Main Menu Functionalities

Test 6: Edit account in accordance with user status

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Edit Account" Button.
- 3. User selects the full name textbox.
- 4. User enters the full name via the keyboard.
- 5. User selects the username textbox.
- 6. User enters the username via the keyboard.
- 7. User selects the password textbox.
- 8. User enters the password via the keyboard.
- 9. User selects the "Edit Account" button corresponding to their status (teacher or student).

Output: The user can log in with the changed credentials.

Expected result: The user can log in with the changed credentials.

Test Status: Passed.

Test 7: Delete account button and stop before deleting

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Delete Account" Button.
- 3. User is prompted with "Enter password to continue"
- 4. User enters the current password
- 5. User is prompted with a warning window, "do you want to delete the account?"
- 6. User selects Cancel

Output: User returns to Landing Page

Expected result: User should not have deleted the account

Test Status: Passed.

Test 8: Delete account button and complete deletion

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Delete Account" Button.
- 3. User is prompted with "Enter password to continue"
- 4. User enters the current password
- 5. User is prompted with a warning window, "do you want to delete the account?"
- 6. User selects OK

Output: Account deleted message and program shuts down

Expected result: Account to be deleted and not be accessible through login with same credentials

Test Status: Passed.

Test 9: Take Quiz for Student (Normal)

Steps:

1. After the user is logged in, the landing page is visible.

- 2. User selects the "Take Quiz" Button.
- 3. "Select Course" window pops up
- 4. Student selects the course they want to take quiz for
- 5. "Select Quiz" window pops up
- 6. Student selects the quiz they want to take
- 7. Quiz window pops up and timer starts
- 8. Student selects all responses and submits quiz
- 9. Quiz Submitted window pops up
- 10 User selects OK

Output: Program returns to landing page

Expected result: Program worked as expected and let the student take a standard quiz

Test Status: Passed.

Test 10: Take Quiz for Student (Quit midway)

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Take Quiz" Button.
- 3. "Select Course" window pops up
- 4. Student selects the course they want to take quiz for
- 5. "Select Quiz" window pops up
- 6. Student selects the guiz they want to take
- 7. User enters the current password
- 8. Quiz window pops up and timer starts
- 9. Student selects all responses
- 10. Student does not select submit and clicks on exit quiz

Output: Program returns to landing page

Expected result: Program worked as expected and saves the submission regardless.

Test Status: Passed.

Test 11: Create course (specific to Teacher role)

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Create Course" Button.

- 3. Teacher enters the field for course name
- 4. "Course successfully created" message pops up
- 5. User selects ok to close the dialog

Output: Program returns to landing page

Expected result: Program worked as expected and let the teacher create a course with a course name

Test Status: Passed.

Test 12: Create quiz in a course and add question(specific to Teacher role)

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Modify Course" Button.
- 3. User selects the quiz they want to modify
- 4. "Welcome to [course name]" window pops up.
- 5. User clicks on the create quiz button.
- 6. User selects the type of question (Multiple choice, T/F, Fill in the blank)
- 7. Add the question description in the insert question text field
- 8. Specifies the correct answer
- 9. To add more questions, the user clicks on add question and repeats steps 6 through 8
- 10. After satisfied, the user clicks on "Save Quiz" button
- 11. The user is prompted to create a name for the guiz
- 12. Quiz saved dialog pops up
- 13. User selects ok to close the dialog

Output: Program returns to landing page

Expected result: Program worked as expected and lets the teacher create a standard quiz

Test Status: Passed.

Test 13: Create quiz in a course and delete question(specific to Teacher role)

- 1. Assuming the user followed all steps to reach to this point
- 2. User clicks on the create quiz button.
- 3. User selects the type of question (Multiple choice, T/F, Fill in the blank)
- 4. Add the question description in the insert question text field

- 5. Specifies the correct answer
- 6. To add more questions, the user clicks on add question and repeats steps 6 through 8
- 7. User clicks on "Delete Question" button to get rid of unwanted questions

Output: The question gets deleted

Expected result: Program worked as expected and lets the teacher delete a question

Test Status: Passed.

Test 14: Create quiz in a course by importing file(specific to Teacher role)

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Modify Course" Button.
- 3. User selects the quiz they want to modify
- 4. "Welcome to [course name]" window pops up.
- 5. User clicks on the create quiz button.
- 6. In the Quiz Creator window, the user clicks on import quiz
- 7. User selects the file which contains the quiz in a required format
- 8. After satisfied, the user clicks on "Save Quiz" button
- 9. The user is prompted to create a name for the quiz
- 10. Quiz saved dialog pops up
- 11. User selects ok to close the dialog

Output: Program returns to landing page

Expected result: Program worked as expected and lets the teacher create a standard quiz

Test Status: Passed.

Test 15: Create quiz in a course clicking wrong buttons[pt. 1](specific to Teacher role)

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Modify Course" Button.
- 3. User selects the quiz they want to modify
- 4. "Welcome to [course name]" window pops up.

- 5. User clicks on the create quiz button.
- 6. User selects the type of question (Multiple choice, T/F, Fill in the blank)
- 7. Add the question description in the insert question text field
- 8. Specifies the correct answer
- 9. To add more questions, the user clicks next button

Output: Program does nothing

Expected result: Program worked as expected and does not add questions unless specified by the user

Test Status: Passed.

Test 16: Create quiz in a course clicking wrong buttons[pt. 2](specific to Teacher role)

Steps:

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Modify Course" Button.
- 3. User selects the quiz they want to modify
- 4. "Welcome to [course name]" window pops up.
- 5. User clicks on the create quiz button.
- 6. User selects the type of question (Multiple choice, T/F, Fill in the blank)
- 7. Add the question description in the insert question text field
- 8. Specifies the correct answer
- 9. With only one question, the user attempts to click on delete question

Output: Program does nothing

Expected result: Program worked as expected and let the user delete the first question, since at least 1 question should be asked in a quiz.

Test Status: Passed.

Test 17: Exit create quiz window without saving the quiz(specific to Teacher role)

- 1. After the user is logged in, the landing page is visible.
- 2. User selects the "Modify Course" Button.
- 3. User selects the quiz they want to modify
- 4. "Welcome to [course name]" window pops up.

- 5. User clicks on the create quiz button.
- 6. User selects the type of question (Multiple choice, T/F, Fill in the blank)
- 7. Add the question description in the insert question text field
- 8. Specifies the correct answer
- 9. User clicks on exit button

Output: Program returns to modify quiz window

Expected result: Program worked as expected and if the user exits without saving their progress, the quiz will be deleted.

Test Status: Passed.

Test 18: Edit quiz(specific to Teacher role)

Steps:

- 1. Assuming the has followed all the steps correctly to reach the modify quiz window
- 2. Under the "Modify quiz" user clicks on Edit quiz
- 3. User is prompted to select the quiz to edit
- 4. User is able to see the quiz creator window again
- 5. User makes changes to the quiz as desired

Output: Changes made in the specific quiz from the course are visible on backend and student end

Expected result: Program worked as expected and teacher is able to edit quiz without issues

Test Status: Passed.

Test 19: Delete quiz(specific to Teacher role)

Steps:

- 1. Assuming the has followed all the steps correctly to reach the modify quiz window
- 2. Under the "Modify quiz" user clicks on Delete quiz
- 3. User is prompted to select the quiz to delete.
- 4. User selects the quiz
- 5. The specific quiz gets deleted and is not visible again

Output: Deleted quiz is not found either on backend or student end

Expected result: Program worked as expected and teacher is able to delete quiz without issues

Test Status: Passed.

Test 20: View/Grade quiz(specific to Teacher role)

Steps:

- 1. Assuming the has followed all the steps correctly to reach the modify quiz window
- 2. Under the "Modify quiz" user clicks on Edit quiz
- 3. User is prompted to select the quiz to edit
- 4. User is able to see the quiz creator window again
- 5. User makes changes to the quiz as desired

6.

Output: User is redirected to modify quiz window.

Expected result: Program worked as expected and teacher is able to view student submissions without issues

Test Status: Passed.

Test 21: Modify grade for specific student(specific to Teacher role)

Steps

- 1. Assuming the has followed all the steps correctly to reach the submission window for specific student
- 2. User clicks on edit grades
- 3. User is prompted to select question number to modify grade for
- 4. User selects the desired question number
- 5. User is prompted with maximum points earned
- 6. User enters the desired score and clicks on Ok button to save or cancel
- 7. User gets prompted for maximum points earned for the specific question
- 8. User enters the desired score and clicks on Ok button to save or cancel
- 9. User clicks on close button

Output: User is redirected to modify quiz window.

Expected result: Program worked as expected and teacher is able to view student submissions and edit scores without issues.

Test Status: Passed.

Test 22: Modify quiz for teacher and student takes edited version (Concurrency Test)

Steps

1. Teacher does the following:

- 2. Assuming the has followed all the steps correctly to reach the modify quiz window
- 3. Under the "Modify quiz" user clicks on Edit quiz
- 4. User is prompted to select the quiz to edit
- 5. User is able to see the quiz creator window again
- 6. User makes changes to the quiz as desired

7. Now the student does the following:

- 8. After the user is logged in, the landing page is visible.
- 9. User selects the "Take Quiz" Button.
- 10. "Select Course" window pops up
- 11. Student selects the course they want to take quiz for
- 12. "Select Quiz" window pops up
- 13. Student selects the quiz they want to take
- 14. Quiz window pops up and timer starts
- 15. Student selects all responses and submits quiz
- 16. Quiz Submitted window pops up
- 17. User selects OK

Output: The student takes the edited quiz version

Expected result: The student takes the edited quiz version rather than the old version.

Test Status: Passed.