Testify

Test Plan

Team 13

Xinpi Du

Art Malinin

Wei Haow Tan

Jun Xiang Tee

Matt Walters

Lirong Yuan

Legend:

Classification of severity: S1 -- Critical to the success of the software.

S2 -- Important.

S3 -- Software could function even with defect in it.

Note: Backlog does not include GUI screenshots, so tests are based off use cases and general instructions.
- Relevant fields = fields that apply to the type of question being created.
- Irrelevant fields = fields not associated with question.

ex. User should not be able to add multiple choice options on a free response question.

1. Instructor Client GUI

1a: Create Test

A. Create Test 001, Create Test Button 001, S1
B. Select "Create" from main screen
C. Next screen should be GUI to add/edit/remove questions

A. Create Test 002, Specify Properties 001, S1
B. Specify test properties
C. Test properties should be applied

A. Create Test 003, Add Question 001, S1
B. Select new question of type multiple choice,
      Attempt to fill relevant, and irrelevant fields
C. User should be able to modify only relevant fields

A. Create Test 004, Add Question 002, S1
B. Select new question of type multiple choice,
      Attempt to fill relevant fields, except one
C. User should not be able to continue without filling all relevant fields
      Repeat, alternating which field is left blank

A. Create Test 005, Add Question 003, S1
B. Select new question of type free response,
      Attempt to fill relevant, and irrelevant fields
C. User should be able to modify only relevant fields

A. Create Test 006, Add Question 004, S1
B. Select new question of type free response,
      Attempt to fill relevant fields, except one
C. User should not be able to continue without filling all relevant fields
      Repeat, alternating which field is left blank

A. Create Test 007, Add Question 005, S1
B. Select new question of type coding,
      Attempt to fill relevant, and irrelevant fields
C. User should be able to modify only relevant fields

A. Create Test 008, Add Question 006, S1

B. Select new question of type coding,

       Attempt to fill relevant fields, except one

C. User should not be able to continue without filling all relevant fields

       Repeat, alternating which field is left blank

A. Create Test 009, Edit Question 001, S1

B. Select a previously created question of type multiple choice

       Attempt to modify relevant and irrelevant fields

C. User should be able to modify only relevant fields

A. Create Test 0010, Edit Question 002, S1

B. Select a previously created question of type multiple choice

       Attempt to delete the content of a relevant field

C. User should be able to proceed with a blank relevant field

       Repeat, alternating which field is left blank

A. Create Test 011, Edit Question 003, S1

B. Select a previously created question of type free response

       Attempt to modify relevant and irrelevant fields

C. User should be able to modify only relevant fields

A. Create Test 012, Edit Question 004, S1

B. Select a previously created question of type free response

       Attempt to delete the content of a relevant field

C. User should be able to proceed with a blank relevant field

       Repeat, alternating which field is left blank

A. Create Test 013, Edit Question 005, S1

B. Select a previously created question of type coding

       Attempt to modify relevant and irrelevant fields

C. User should be able to modify only relevant fields

A. Create Test 014, Edit Question 006, S1

B. Select a previously created question of type coding

       Attempt to delete the content of a relevant field

C. User should be able to proceed with a blank relevant field

       Repeat, alternating which field is left blank

A. Create test 015, Remove Question 001, S1
B. Attempt to remove a question of type multiple choice
C. Question should be removed from GUI

A. Create test 016, Remove Question 002, S1
B. Attempt to remove a question of type free response
C. Question should be removed from GUI

A. Create test 017, Remove Question 003, S1
B. Attempt to remove a question of type coding
C. Question should be removed from GUI

A. Create Test 018, Save Test 001, S1
B. Select "Save Test"
      Browse for location
      Select OK
C. Test should be saved

A. Create Test 019, Save Test 002, S3
B. Select "Save Test"
      Browse for location
      Select Cancel
C. Test should not be saved

A. Create Test 020, Load Test 001, S1
B. Select "Load Test"
      Browse for location
      Select saved test
      Select OK
C. Test should be loaded successfully

A. Create Test 021, Load Test 002, S3
B. Select "Load Test"
      Browse for location
      Select Cancel
C. Test should not be loaded

1b: Edit Test

A. Edit Test 001, Edit Question 001, S1

B. Select previously created test

     Select question of type multiple choice

     Attempt to modify relevant and irrelevant fields

C. User should only be able to modify relevant fields

A. Edit Test 002, Edit Question 002, S1

B. Select previously created test

     Select question of type multiple choice

     Attempt to modify relevant and irrelevant fields

C. User should only be able to modify relevant fields

A. Edit Test 003, Edit Question 003, S1

B. Select previously created test

     Select question of type multiple choice

     Attempt to modify relevant and irrelevant fields

C. User should only be able to modify relevant fields

A. Edit Test 004, Remove Question 001, S1

B. Select previously created test

     Attempt to delete question of type multiple choice

C. Question should be removed from GUI

A. Edit Test 005, Remove Question 002, S1

B. Select previously created test

     Attempt to delete question of type multiple choice

C. Question should be removed from GUI

A. Edit Test 006, Remove Question 003, S1

B. Select previously created test

     Attempt to delete question of type multiple choice

C. Question should be removed from GUI

A. Edit Test 007, Save Test 001, S1

B. Select "Save Test"

     Browse for location

     Select OK

C. Test should be saved

A. Edit Test 008, Save Test 002, S3
B. Select "Save Test"
  Browse for location
  Select Cancel
C. Test should not be saved

1c: Review Test

A. Review Test 001, "Administer" button test 001, S1
B. Select "Administrator" from main screen of test creation interface.
C. Window appears to allow user to select directory where test data is stored.

A. Review Test 002, Student List 001, S1
B. Select the directory where the test data is stored.
C. A list of students should appear on screen.

A. Review Test 003, Student Test Selection 001, S1
B. Select a student from list.
C. Answers from the student should appear on screen.

1d: Begin Test (by instructor)

A. Begin Test 001, Make test accessible 001, S1
B. Select "Begin Test" from main screen of test creation window
C. Test should now be accessible to students

A. Begin Test 001, Storage 001, S1
B. Select a directory on the window for directory selection
C. All data (test answers submitted by the students) should be stored into the directory

A. Begin Test 001, Storage 002, S1
B. Delete the directory for the submitted test answers before the test ends
C. An error message should pop up indicating the directory deletion cannot be carried out due to the test has not ended

2. Student Client GUI

A. Test 001, Open Test, S1
B. Click the open button.

C. A menu with folder navigation should open up.

A. Test 002, Open Test, S1
B. In the folder navigation menu, navigate and click on the test.
C. The test should open up, questions should appear on the screen.

A. Taking a Test 001, Test, S1
B. When you encounter a free response questions, try typing in the box.
C. Program should register keystrokes and display them.

A. Taking a Test 002, Test, S1
B. When you encounter a multiple choice question, click on a choice.
C. Program should register your decision.

A. Taking a Test 003, Test, S1
B. When you select one of the radio buttons for multiple choice, and then click on another one.
C. It should remove the old answer and register the new one.

A. Taking a Test 004, Test, S1
B. After answering a couple questions, clicks on "Finish Test".
C. Tests should be saved to a specified directory.

A. Taking a Test 005, Test, S1
B. Select properties for a test.
C. Program should register the property you have selected.

A. Saved Test 001, Saved Test, S1
B. After navigating to a saved test, open it.
C. It should be exactly as left.

A. Saved Test 002, Saved Test, S1
B. Close the program suddenly (Click 'x' or Alt + F4).
C. When you reopen the test, it should be in the same state as you left it.

3. Database/File system Integrity:

Note: Test cases may be very similar to the cases in section 1a, but are necessary to distinguish the difference between a GUI display error, and a database/file system storage error.

3a: Create Test, database Integrity

A. Database/File system Integrity 001, Create Test 001, S1
B. Select "Create Test" from instructor main menu
      Select new question of type multiple choice
      Fill out relevant fields
      Cycle to new question, and return to this one
C. Question data and type should be the same as you entered before

A. Database/File system Integrity 002, Create Test 002, S1
B. Select "Create Test" from instructor main menu
      Select new question of type free response
      Fill out relevant fields
      Cycle to new question, and return to this one
C. Question data and type should be as you entered before

A. Database/File system Integrity 003, Create Test 003, S1
B. Select "Create Test" from instructor main menu
      Select new question of type coding
      Fill out relevant fields
      Cycle to new question, and return to this one
C. Question data and type should be as you entered before

A. Database/File system Integrity 004, Create Test 004, S1
B. Select "Create Test" from instructor main menu
      Select a previously created question of type multiple choice
      Modify relevant fields
      Cycle to new question, return to this one
C. Question data and type should be the same as you entered before

A. Database/File system Integrity 005, Create Test 005, S1
B. Select "Create Test" from instructor main menu
      Select a previously created question of type free response
      Modify relevant fields
      Cycle to new question, return to this one
C. Question data and type should be the same as you entered before

A. Database/File system Integrity 006, Create Test 006, S1
B. Select "Create Test" from instructor main menu

Select a previously created question of type coding

Modify relevant fields

Cycle to new question, return to this one

C. Question data and type should be the same as you entered before

3b: Edit Test, database integrity

A. Database/File system Integrity 007, Edit Test 001, S1

B. Select "Edit Test" from instructor main menu

Select question of type multiple choice

Modify relevant fields

Close editing menu, reopen it, return to this question

C. Question should reflect changes made

A. Database/File system Integrity 008, Edit Test 002, S1

B. Select "Edit Test" from instructor main menu

Delete a question of type multiple choice

Close editing menu, reopen it

C. Question previously deleted should no longer exist

A. Database/File system Integrity 009, Edit Test 003, S1

B. Select "Edit Test" from instructor main menu

Select question of type free response

Modify relevant fields

Close editing menu, reopen it, return to this question

C. Question should reflect changes made

A. Database/File system Integrity 010, Edit Test 004, S1

B. Select "Edit Test" from instructor main menu

Delete a question of type free response

Close editing menu, reopen it

C. Question previously deleted should no longer exist

A. Database/File system Integrity 011, Edit Test 005, S1

B. Select "Edit Test" from instructor main menu

Select question of type coding

Modify relevant fields

Close editing menu, reopen it, return to this question

C. Question should reflect changes made

A. Database/File system Integrity 012, Edit Test 006, S1

B. Select "Edit Test" from instructor main menu

      Delete a question of type coding

      Close editing menu, reopen it

C. Question previously deleted should no longer exist

3c. Exam/Answer consistency

Note: Create two complete exams, examA, examB. Take each exam with 3 different Identities StudentA, StudentB, StudentC.

A. Exam/Answer Consistency 001, Exam Consistency 001, S1

B. Select "Begin Test" from student menu, select examA

      Complete Test

C. Test questions should match those entered for examA

      Repeat for examB

A. Exam/Answer Consistency 002, Student/Answer Consistency 001, S1

B. Select "Review Test" from instructor menu, select studentA, select examA

      Review Test

C. Answers should be for the correct student, and exam

      Repeat for all combinations of students/exams

Non-Functional Requirements

A. Security 001, Security 001 , S1

B. During the login, enter the correct username but wrong password then click login.

C. There should be a pop up error message stating that "invalid username/password".

A. Security 002, Security 002 , S1

B. During the login, enter the wrong username and correct password then click login.

C. There should be a pop up error message stating that "invalid username/password".

A. Security 003, Security 003 , S1

B. During the login, enter the wrong username and wrong password then click login.

C. There should be a pop up error message stating that "invalid username/password".

A. Security 004, Security 004 , S1

B. During the login, enter the correct username and correct password then click login.

C. It will switch to the main menu page.

A. Security 005, Security 005 , S1

B. During the login, enter the correct username but blank password field then click login.

C. There should be a pop up error message stating that "no password entered".

A. Security 006, Security 006 , S1

B. During the login, enter the username and password.

C. The password field should be hashed.

A. Security 007, Security 007 , S1

B. During the login, leave the username and password field blank then click login.

C. There should be a pop up error message stating that "invalid username/password".

A. Reliability 001, System Shutdown, S1

B. Kill the process or use the task manager on windows to end the task of the program.

C. The data should be saved in the database.

A. Reliability 002, File Saving, S1

B. Answer some questions, save the file, and then check the file, repeat this multiple times

C. The file should always be saved and not just some times

A. Usability 001, Installation, S1

B. Double click on the executable file for the software installation.

C. The software should be opened/installed successfully.

A. Usability 002, Uninstallation, S2

B. Delete the executable file.

C. The software should be deleted/uninstalled successfully.

A. Usability 003, Installation Path, S1

B. Try to open/install the software at different folders.

C. The software should be opened/installed successfully.

A. Usability 004, Main features, S1

B. Open the software and sign in to the main page.

C. The main features like create,edit,grade test etc. should be on the GUI's main page for the user to use the software easily.

A. Usability 005, Multiple windows, S2

B. Sign in using the correct username and password.

C. The login page should disappear and only left the main GUI page.

A. Usability 006, Multiple windows, S2

B. After login, choose a category and click on the add button.

C. The add GUI pops up and the main GUI page should not allow other main features' button to be clickable to avoid multiple windows.

A. Usability 007, Multiple windows, S2

B. After login, choose a category and click on the update button.

C. The update GUI pops up and the main GUI page should not allow other main features' button to be clickable to avoid multiple windows.

A. Usability 008, Multiple windows, S2

B. After login, choose a category and click on the remove button.

C. The remove GUI pops up and the main GUI page should not allow other main features' button to be clickable to avoid multiple windows.