Testify White Box Test

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Black Box Defects

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| Defect No. | Defect Description | How to correct  the defect | Module in which the  defect is found | Severity |
| 1 | The file chooser should not pop up after select “create test” | In createTestButtonActionPerformed() change the call to edit test to create test | InstructorFirstScreen | S3 |
| 2 | Answer is not saved in “create test” and “modify test” | Call setAnswer() when saving the test | InstructorTestify | S1 |
| 3 | The “next” button on “create” and “modify” will not take me to the next question | Implement nextQButtonMouseClicked() | InstructorTestify | S2 |
| 4 | The “next” button is not grey out even I am on the last question | Check if the user is on the last page, if he/she is, disable the button | InstructorTestify | S2 |
| 5 | When click on “modify test”, the grading view pops up | In createTestButtonActionPerformed() change the call to grading test to modify test | InstructorFirstScreen | S1 |
| 6 | When there is a failure i.e. did not fill in the points possible, I am still able to save the test | Check if all the fields are filled in before saving the test | InstructorTestify | S2 |
| 7 | After delete a question, the total number of questions will not be changed | Update the number of questions after the deletion | InstructorTestify | S2 |
| 8 | I am not able to save the properties of the test | When the user close the properties window, save the user chose | TestProperties | S1 |
| 9 | I need to close the properties window twice in order to close it | Call the creation of the properties window only once | InstructorTestify | S3 |
| 10 | There are no format check for the time/ date in the properties window | Implement a time/date check inside TestProperties | TestProperties | S2 |
| 11 | When I finish up setting up properties, I need to click apply twice. | Make property window invalid after clicking apply button once. | TestProperties | S3 |
| 12 | When user comes to properties dialogue, cancel button is not working. | Make property window invalid after clicking cancel. | TestProperties | S2 |
| 13 | Next button is unable to make app go to next question. | Implement the nextButtonActionPerformed() | InstructorTestify | S2 |
| 14 | Previous button is is not able to make app go to previous question. | Implement the previousButtonActionPerformed() | InstructorTestify | S2 |
| 15 | After entering the properties view, the result are not shown | Save the information when the property window is closed | TestProperties | S1 |
| 16 | The cancel button for properties does not work | Hide or destroy the properties window in side canelButtonActionPerformed() | TestProperties | S2 |
| 17 | The question selector does not take me to the question I selected in the “Create” and “Modify” view | repaint the panel to show the selected question | InstructorTestify | S1 |
| 18 | “Next” button take me to the previous question | Implement the nextButtonActionPerformed() | InstructorTestify | S1 |
| 19 | “Previous” button take me to the next question | Implement the previousButtonActionPerformed() | InstructorTestify | S1 |
| 20 | When click on “exit”, the program did not ask me to save the current progress before exit the program | Notify the user by a pop up window to save the unsaved information | InstructorTestify | S2 |
| 21 | In “create” mode, if I have not new a test, the question button should be grey out | Disable the button before the user creates a new test | InstructorTestify | S1 |
| 22 | In “create” mode, if I have not new a test, the save/ save as/ properties button should be grey out | Disable the button before the user creates a new test | InstructorTestify | S1 |
| 23 | When create a new choice for multiple choice. Two choices will pop up. | Only add the new option once when a new option is created | InstructorTestify | S1 |
| 24 | The points possible will not be saved | Set the points possible field before saving the exam | InstructorTestify | S1 |
| 25 | After an instructor opened an answered exam, answers couldn’t be popped out correctly. | Set the answer field before saving the exam | InstructorTestify | S1 |
| 26 | The points possible will not not update for different questions | Reset the points possible field when a new question is loaded | InstructorTestify | S2 |
| 27 | After an instructor opened an test, the instructor is able to change the answer. | Disable the edit mode of the input textfield | InstructorTestify | S2 |
| 28 | The “save as” button does not work | Implement the saveAsActionPerformed() method | InstructorTestify | S1 |
| 29 | After an instructor opens an exam, he or she is able to change the points possible where were already assigned. | Disable the edit mode of the points possible | InstructorTestify | S2 |
| 30 | ‘Exit’ in Edit Test did not work properly. | Pop up and call associated save current status function if user prefer to do so | InstructorTestify | S1 |
| 31 | On the main UI there is text field named ‘JLabel’ that a user can see. | The content of ‘JLabel’ should be modified instead of ‘jLabel 3’ we can use a default language name | GraderTestify | S2 |
| 32 | In edit test, before giving any operation text field for ‘Comments’ is able for taking input. | set the text field of ‘Comments’ to be invalid initially | GraderTestify | S2 |
| 33 | Text field is not cleared after giving operation in the main menu. | Refresh the content of text field by setText(“”); | GraderTestify | S3 |
| 34 | When opening a file does not exist it do not give any warning but continue. | Check the format first and add according exception handler | GraderTestify | S2 |
| 35 | For defining multiple question, there will be multiple ‘a’, multiple ‘b’ showing up. | Instance for multiple question should be freshed after each creation but not create list of choices again | InstructorTestify | S2 |
| 36 | Function of ‘Previous’ and ‘Next’ is reversed. | The code in actionPerformed associated with prev,next should be swaped | InstructorTestify | S2 |
| 37 | It did not ask to save, after I click exit. | Pop up asking whether to save current content before exit | InstructorTestify | S1 |
| 38 | The ‘save’ performs what the ‘save as’ should do | They should differ and save should just save the current content a JFile chooser should only appear when its a new archive that needed to be saved | InstructorTestify | S2 |
| 39 | When delete one question, it did not denotes to current question | the delete sentinal should only  point to the wanted obj | InstructorTestify | S1 |
| 40 | After delete a question, the total number did not change. | Up completion we should refresh the int for counting question num | InstructorTestify | S2 |
| 41 | After delete a question, the choice bar still allows us to choose those already deleted. | We need to refresh the multiple choice scroll bar | InstructorTestify | S2 |
| 42 | After open key or open exam the next is not working | Readjust the navigation for next button | InstructorTestify | S2 |
| 43 | There is a JLabel ‘Compiles?’ in initial UI of edit test. | set the JLabels to something else that not confusing | GraderTestify | S3 |
| 44 | The label of ‘Key answer’ and ‘Student answer’ did not match well | Its a formating issue we need the tile to be on the right textfield | GraderTestify | S3 |
| 45 | The ‘open student exam’ only worked after several try. | code associated with open student exam should be corrected | GraderTestify | S1 |
| 46 | When opening new content, the previous did not update. | The action performed code for previous page should be refreshed whenever a new page is there | GraderTestify | S2 |
| 47 | The total points of possible is calculating improperly thus negative value exist. | We should check for invalid value say negative value | InstructorTestify | S3 |
| 48 | The total percent is also showing negative value. | This is the consequence of negative total .We should check for invalid value say negative value | InstructorTestify | S3 |
| 49 | ‘Next’ for navigation did not work. | Correct the update and paging. | InstructorTestify | S2 |
| 50 | After we try to re-open a invalid file the screen stuck at original question. | We need to delete content from the layout and then gui.repaint() | InstructorTestify | S1 |
| 51 | After we open an invalid file there is no warning or error handling. | A warning msg or window should be there if not valid file. | InstructorTestify | S2 |
| 52 | After opening invalid file we can still do operation to original one navigating using scroll bar on upper-left corner. | The screen should be locked out in order to protect the previous works. | InstructorTestify | S1 |
| 53 | We can set the points earned to be larger than points possible. | We need to set an upper limit for the points earned whenever it changes | InstructorTestify | S1 |
| 54 | After we set points earned to be larger than points possible, the ‘Show Summary’ will no longer pop up even if we click. | We need to set an upper limit for the points earned whenever it changes and check for collision with ‘Show Summary’ | InstructorTestify | S1 |
| 55 | When click the exit the program did not ask for ‘Save current file?’ in Edit Test | Add pop up for asking save current content or not. | GraderTestity | S2 |
| 56 | After clicking the auto grade for multiple choice its not updating the score. | If there exist errors it should show the error to user but not only at the console. | GraderTestity | S1 |
| 57 | Student name can be a number or special character | Add name validator in action performance of “Eixt Test” button | StudentRegister | S3 |
| 58 | The page number is not correct on the student version page 3 | Remove special case of questionIndex+=2 in NextActionPerformed() and questionIndex-=2 in PreviousActionPerformed() | StudentTestify | S2 |
| 59 | The next button is not effective on page 3 of the test | Remove special case of questionIndex+=2 in NextActionPerformed() | StudentTestify | S1 |
| 60 | The previous button is not effective on the page 3 of the test | Remove special case of questionIndex-=2 in PreviousActionPerformed() | StudentTestify | S1 |
| 61 | The compile button is not effective | No instruction of input type. We took this as a bug because of not input file name as what’s supposed to be | (Design Error) | S1 |
| 62 | The “exit test” button on the first page of the program should be “open test” | Change the text “exit test” to “open test” | StudentTestify | S2 |
| 63 | It won’t notify user if the user has chose a wrong file | Add a related error message in openActionPerformed() | StudentTestify | S2 |
| 64 | It automatically prompt the user to the second question instead the first one | Set the questionIndex variable to “0” as initial value | StudentTestify | S1 |
| 65 | It will not show the third question even if the user finished the first two questions | Remove special case of questionIndex+=2 in NextActionPerformed() | StudentTestify | S1 |
| 66 | Once user reaches the last question, the next button become submit, and remains no change even previous is clicked | Change if (questionIndex == questions.size() - 2) to if (questionIndex == questions.size() - 1) | StudentTestify | S1 |
| 67 | User is not able to exit the program when the file is submitted | Implement exitActionPerformed() | StudentTestify | S2 |
| 68 | Once test is submitted, the “open test” button should be “exit test” | Change the text “open test” to “exit test” | StudentTestify | S3 |
| 69 | The submit button on the last page does nothing | Disable submit button on submit success | StudentTestify | S3 |
| 70 | User can change the question on question one | In setQuestionData() method change the setEditable option to false | StudentTestify | S1 |
| 71 | User can press “previous” only once until a “next” is being pressed | Need to perform setQuestionData() | StudentTestify | S1 |
| 72 | The page number on the last page is not correct | Change if (questionIndex == questions.size() - 2) to if (questionIndex == questions.size() - 1) | StudentTestify | S3 |
| 73 | User can only exit the program by press the X button on the window | Add a exit button and associated action perform method on the program main layout | StudentTestify | S3 |
| 74 | The “exit test” button only works by press more than once | remove if(openBool == false) as openBool is no need | StudentTestify | S2 |
| 75 | The buttons on the multiple choice is not correct | Change questions.get(questionIndex).setAnswer(MCAnswer1.getText()); to questions.get(questionIndex).setAnswer(MCAnswer2.getText()); in MCAnswer2ActionPerformed() | StudentTestify | S3 |
| 76 | The window size is not re-sizeable, and the default size could be out of screen resolution | Change jFrame1 to resizeable | StudentTestify | S3 |
| 77 | If there is only one question in the test, nothing will show after chosen test file, and submit does nothing | Set the questionIndex variable to “0” as initial value | StudentTestify | S1 |
| 78 | If a wrong file type is chosen, the error message shows “Please enter Both a First and Last Name!” instead of “Wrong file chosen” | Add a related error message in openActionPerformed() | StudentTestify | S2 |
| 79 | Upon startup, the previous and next button is not disabled | Disable not needed buttons in initComponents() | Student Testify | S3 |
| 80 | The student answer file name is based on the student name only, even different test it will save under the same file name and if exist it overrides it without warning | Check if file already exist, prompt overwrite option for user in saveTestObject() | StudentTestify | S2 |
| 81 | If compile question failed to compile, the next button does not work | On ioexception, saveAnswer() failed to perform | StudentTestify | S1 |

White Box Defects

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| --- | --- | --- | --- | --- |
| Defect  No. | Defect Description | How to correct  the defect | Module in which the  defect is found | Severity |
| 1 | When click the previous/next in student version it throws Null pointer exception | Disable the next/previous button by setValid(false) | StudentTestiy | S1 |
| 2 | On the main UI there is text field named ‘JLabel’ that a user can see | whichLangLabel.setText("jLabel3"); should be set something empty or a default language “jLabel3” is confusing | GraderTestify | S2 |
| 3 | In edit test, before giving any operation text field for ‘Comments’ is able for taking input. | call setEditable(false)on the textfield | GraderTestify | S1 |
| 4 | Text field is not cleared after giving operation in the main menu. | call textfield.setText(""); whenever the fluch is needed | GraderTestify | S3 |
| 5 | when try to open an invalid format file it throws java.io.StreamCorruptedException | We first set format check via fileChooser.addChoosableFileFilter(new JAVAFileFilter("format")); and add exception handler | GraderTestify | S2 |
| 6 | There are a lot libs that’s are not used but imported | Delete the libs which are not used | All modules | S3 |
| 7 | There are some variables that has created but not used | Delete those variables | All modules | S3 |
| 8 | For defining multiple question, there will be multiple ‘a’, multiple ‘b’ showing up. | Instance for multiple question should be freshed after each creation but not create list of choices again, delete old instances and show the group of new multiple questions instances | InstructorTestify | S2 |
| 9 | Function of ‘Previous’ and ‘Next’ is reversed. | We should swap nextButton’s action performed function content with the prevButton’s action performed function content | InstructorTestify | S2 |
| 10 | It did not ask to save, after I click exit. | Pop up asking whether to save current content before exit, should add an additional JOption pane asking quit or save, upon click save the according save code should be run | InstructorTestify | S1 |
| 11 | The ‘save’ performs what the ‘save as’ should do | “SAVE” should just save the current content a JFile chooser should only appear when its a new archive that needed to be saved  we need a boolean to judge whether its a new archive otherwise JFile choose serves for “SAVE AS” | InstructorTestify | S2 |
| 12 | When delete one question, it did not denotes to current question | the delete sentinal should only  point to the wanted obj, we create a temp for other use | InstructorTestify | S1 |
| 13 | After delete a question, the total number did not change. | Up completion we should refresh the int current for counting question num | InstructorTestify | S2 |
| 14 | After delete a question, the choice bar still allows us to choose those already deleted. | we can first remove previous one and then add new one into the layout and finally gui.repaint(); | InstructorTestify | S2 |
| 15 | After open key or open exam the next is not working | In the actionPerformed Readjust the navigation for next button slice for content is not correct | InstructorTestify | S2 |
| 16 | jCheckBox3ActionPerformed is not implemented and the naming of the method is also confusing | change the method name and implement the corresponding content | TestProperties | S1 |
| 17 | There is a JLabel ‘Compiles?’ in initial UI of edit test. | set the JLabels title to something else that not confusing | GraderTestify | S3 |
| 18 | The label of ‘Key answer’ and ‘Student answer’ did not match well | Its a formating issue we need the tile to be on the right textfield by using java string format | GraderTestify | S3 |
| 19 | The closing of the  properties window is not monitored, so that it cannot inform the user to save unsaved information when closing the window | Implement the monitoring of the closing of the properties window | TestProperties | S2 |
| 20 | None of the elements inside TestPropreties is bounded with the action perform events. | Bound the elements with action perform and implement the action listeners | TestProperties | S1 |
| 21 | The ‘open student exam’ only worked after several try. | We should  modify openStudentMenuItemActionPerformed to make every case work and the JOptionPane designed in it did not serve as a warning msg we should readjust the order of judging the valid length of test | GraderTestify | S1 |
| 22 | When opening new content, the previous did not update. | The action performed code for previous page should be refreshed whenever a new page is there | GraderTestify | S2 |
| 23 | There is no save method for the properties. The users will not be able to save the properties | Implement the save method for the properties | TestProperties | S1 |
| 24 | The total points of possible is calculating improperly thus negative value exist. | The ptsPossible should be enforced to be non-negative | InstructorTestify | S3 |
| 25 | The total percent is also showing negative value. | This is the consequence of negative total percentage. The ptsPossible should be enforced to be non-negative | InstructorTestify |  |
| 26 | The test code was not deleted | Delete the whole main method inside Test.java | Test | S3 |
| 27 | After we try to re-open a invalid file the screen stuck at original question. | We need to delete content from the layout and then gui.repaint() | InstructorTestify | S1 |
| 28 | After we open an invalid file there is no warning or error handling. | We should change the JOption pane to be pop up before judging the valid length of test but right after judging the file format | InstructorTestify | S2 |
| 29 | The next button is not effective on page 3 of the test | Remove special case of index+=2 in NextActionPerformed() | StudentTestify | S2 |