Black Box Defects

Defect #	Defect Description	Correction	Module where the defect is found	Severity (S1, S2 or S3)
1	In Instructor client, when click "Create Test", an "Open File" window is prompted instead of "Save File" window. Only by cancelling the promted window can user enter "Create Test" interface, which is very confusing.	Swapped the actions of "Create Test" and "Edit Test" in corresponding actionListener	Menu	2
2	In Instructor client, clicking "Edit Test" button will go into "Grade Test" mode	Swapped the actions of "Edit Test" and "Grade Test" in corresponding actionListener	Menu	2
3	In Instructor client, opening a saved test, user will find last question is lost	In reconstructComboBox change i < test.length() -1 to i < test.length()	Create Test	2
4	In Instructor client, edit test function does not prompt user to open a test, so that user has to load a test manually from menu	This defect actually doesn't exist. Resolved by fixing defect #1	Create Test	3
5	In Instructor client - "Create Test" - "Multiple Choice Questions", creating a new choice will add 2 same choices into choice list	Removed replicated function call for add choice	Create Test	2
6	In Instructor client - "Create Test" - "Multiple Choice Questions", deleted choice will appear, twice as described in Defect #2, when a new choice is added	Remove deleted choice from "question" as well as from "listModel"	Create Test	2
7	In Instructor client - "Create Test" - "Multiple Choice Questions", sometimes when adding a new choice the textfield of "Answer" will be emptied	Save content of "answerTextArea" in "saveQuestion()"	Create Test	2
8	In Instructor client - "Create Test", content in the textfield of "Answer" is not saved when user switch to other questions	Save content of "answerTextArea" in "saveQuestion()"	Create Test	2
9	In Instructor client - "Create Test", changing "Point possible" for one question will change that of all questions in current exam	Reload "pointsPossible" for when question is switched	Create Test	2
10	In Instructor client - "Create Test", "Point possible" for every question will be lost when current exam is saved, closed, and then re-opened	Reload "pointsPossible" for when question is switched	Create Test	2
11	In Instructor client - "Create Test", "previous" and "next" buttons are reversed in effect	In prevQButtonActionPerformed change if(!(test.length() == 0) && current < test.length()) to if(!(test.length() == 0) && current >1); change current++ to current--; In nextQButtonActionPerformed change question = test.getQuestion(current - 1); questionComboBox.setSelectedIndex(current - 1); to question = test.getQuestion(current + 1); questionComboBox.setSelectedIndex(current + 1)	Create Test	2

12	In Instructor client - "Create Test" - "Short Answer Questions", consecutively creating two question without clicking next or previous button will cause the content of first question to be lost	Call "saveQuestion" in actionListener of new question button	Create Test	2
13	In Instructor client - "Create Test" - "Programming Questions", consecutively creating two question without clicking next or previous button will cause the content of first question to be lost	Call "saveQuestion" in actionListener of new question button	Create Test	2
14	In Instructor client - "Create Test", content in the textfield of "Answer" is not saved when user save current test and then re-open it	Save content of "answerTextArea" in "saveQuestion()"	Create Test	2
15	In Instructor client - "Create Test" - "Properties", when entering everything in expected format, user needs to click "Apply" twice to close the "Properties" window	Delete duplicated creation of property window instance	Create Test	3
16	In Instructor client - "Create Test" - "Properties", user cannot use "cancel" buttons to close the window	Close "Properties" window in cancel button's actionListener	Create Test	2
17	In Instructor client - "Create Test" - "Save" and "Save as" is opposite, "Save" acts as "Save as", and "Save as" acts as "Save"	Swapped the actions of "Save" and "Save As" in corresponding actionListener	Create Test	2
18	In Instructor client - "Create Test", if consecutively create new questions without clicking next or previous button, required fields of each question can be left empty	Add if(((ArrayList) test.getQuestions()).size() > 0){ saveQuestion(); }statement in newSAActionPerformed(), newMCActionPerformed(), newProgActionPerformed()	Create Test	3
19	In Instructor client - "Create Test", user can save a test even if required fields are empty	Add if else statement if empty then prompt the user anddo nothing	Create Test	3
20	In Instructor client - "Create Test", "Point possible" can take neative values	if(Integer.parseInt(ptsPossStr)< 0 || Integer.parseInt(ptsPossStr) >100){ error("Please enter a valid point."); }	Create Test	3
21	In Instructor client - "Create Test", user need to click exit 2 times to exit properties window	Delete duplicated creation of property window instance	Create Test	3
22	In Instructor client - "Create Test", when user enter a very large number in "point possible" field all other questions change to the one question user changed	if(Integer.parseInt(ptsPossStr)< 0 || Integer.parseInt(ptsPossStr) >100){ error("Please enter a valid point."); }	Create Test	2
23	In Instructor client - "Create Test", when user enter a very large number in "point possible" field and save there will not be any prompt to let ueser re-enter and the change will not be saved.	if(Integer.parseInt(ptsPossStr)< 0 || Integer.parseInt(ptsPossStr) >100){ error("Please enter a valid point."); }	Create Test	3
24	In Instructor client - "Create Test", when user open a file of wrong format, there will not be prompt to let user knwon is invalid, but the file won't be opened	Catch IOException and throw a message to let user know about the format problem	Create Test	3
25	In Instructor client - "Edit Test", when a test is opened, all textfields for "Answer" are empty	Save content of "answerTextArea" in "saveQuestion()"	Edit Test	2
26	In Instructor client - "Edit Test" - "Properties" - "Start Time", when enter an invalid time the program will crash without prompt	Add try cath block in it to prompt user to renter	Edit Test	3
27	In Instructor client - "Edit Test" - "Properties" - "End		Edit Test	

	Time", when enter an invalid time the program will crash without prompt	Add try cath block in it to prompt user to renter		
28	In Instructor client - "Edit Test" - "Properties" - when click on apply button the start time and end time will be saved even if the end time is less than start time	Add if statement to check validity	Edit Test	
29	In Instructor client - "Edit Test", deleting a question will not decrease number of questions, but only replace deleted question with its preceding question	Delete last item from "questionComboBox" when a question is deleted	Edit Test	3
30	In Instructor client - "Edit Test", when user changes a time, cancel button in properties window will then not work	Implement cancle function	Edit Test	2
31	In Instructor client - "Edit Test", user need to click exit 2 times to exit properties window	Delete duplicated creation of property window instance	Edit Test	3
32	In Instructor client - "Edit Test", when user enter a very large number in "point possible" field all other questions change to the one question user changed	Add try catch block to avoid it.	Edit Test	2
33	In Instructor client - "Edit Test", when user enter a very large number in "point possible" field and save, there will not be any prompt to let ueser re-enter and the change will not be saved.	Add try cath block to catch invalid number	Edit Test	3
34	In Instructor client - "Edit Test", when user open a file of wrong format, there will not be prompt to let user knwon is invalid, but the file won't be opened	Catch IOException and throw a message to let user know about the format problem	Edit Test	3
35	In Instructor client - "Edit Test", "Save As" function does not work	Swapped the actions of "Save" and "Save As" in corresponding actionListener	Edit Test	2
36	In Instructor client - "Grade Test", if no test key is given, clicking auto-grade will cause the whole system crash	Catch the exception, and add a popup alert to notify user to load key first.	Grade Test	2
37	In Instructor client - "Grade Test", if user open student answer first, then open test key, user will not be able to grade	Catch the exception, and add a popup alert to notify user to load key first.	Grade Test	3
38	In Instructor client - "Grade Test", student key and test answer will always be the same file, there is no need to create two tabs	Design problem, no correction.	Grade Test	3
39	In Instructor client - "Grade Test", user cannot see the key answer	Fixed by fixing student client module	Grade Test	1
40	In Instructor client - "Grade Test", user cannot see the student answer	Fixed by fixing student client module	Grade Test	1
41	In Instructor client - "Grade Test", user cannot make comments	Enabled comment textarea.	Grade Test	2
42	In Instructor client - "Grade Test", auto-grade does not work	Fixed by moving the loadQuetion code block beyond the grade part	Grade Test	2
43	In Instructor client - "Grade Test", the score can't be saved correctly, only one question score will be saved	Fixed by correcting the next and prev button, also modify action when clicking questionComboBox	Grade Test	1
44	In Instructor client - "Grade Test", total points is wrong, it becomes negative, which should be positive	Fixed the calculation of the points	Grade Test	1
45	In Instructor client - "Grade Test", Language label shows incorrectly	Tweaked the defualt text for language label	Grade Test	2

46	In Instructor client - "Grade Test", the layout of "student answer" is not correct, it should be above the student answer text field	No need to fix	Grade Test	3
47	In Instructor client - "Grade Test", score percentage is wrong	Fixed the calculation of the points	Grade Test	1
48	In Instructor client - "Grade Test", "save" option acts as "save as"	Swapped these two button functions	Grade Test	2
49	In Instructor client - "Grade Test", "previous" and "next" is opposite	Swapped these two button functions	Grade Test	2
50	In Instructor client - "Grade Test", "save as" option acts as "save"	Swapped these two button functions	Grade Test	2
51	In Instructor client - "Grade Test", "exit" doesn't work.	Added exit function for that button	Grade Test	2
52	In Instructor client - "Grade Test", selecting a wrong file will cause the system to crash	Catch exceptions to avoid crash	Grade Test	1
53	In Instructor client - "Grade Test", the layout for everything is not good after maximum the window	No need to fix	Grade Test	3
54	In the student client, after typing first and last name, hit 'next', the program crashes.	check if the 'questions' arraylist is null before access the elements and display 'select a test first' text in NextActionPerformed()	Take Test	1
55	In the student client, the 'Exit test' is a wrong label text which should be 'open exam'	change into 'select test'	Take Test	2
56	In the student UI, hit 'previous' in left bottom corner, the program got no response	check if the 'questions' arraylist is null before access the elements and display 'select a test first' text in PreviousActionPerformed()	Take Test	2
57	In the student UI, hit 'next' in right bottom corner, the program got no response	check if the 'questions' arraylist is null before access the elements and display 'select a test first' text in NextActionPerformed()	Take Test	2
58	In the student UI, type first and last name then hit 'previous' in left bottom corner, the program got no response	check if the 'questions' arraylist is null before access the elements and display 'select a test first' text in PreviousActionPerformed()	Take Test	2
59	In the student UI, type first and last name then hit 'next' in right bottom corner, the program got no response	check if the 'questions' arraylist is null before access the elements and display 'select a test first' text in NextActionPerformed()	Take Test	2
60	In student client, after submitting the exam, click 'open test' button. There is no response.	Change the button to "Exit Test" and close the program	Take Test	3
61	In student client, you have to click 'exit test' twice to select an exam	Work with clicking once	Take Test	1
62	In student client, after opening the exam, the first question can not be shown correctly.	Change 'questionIndex' initial value to be 0	Take Test	1
63	In student client, the exam questions are not displayed in correct order.	Change corresponding methods for displaying the questions	Take Test	1
64	In student client, some questions do not have the correct answer input text area for short answer questions, instead it might display the multiple choice UI.	Change method setQuestionData	Take Test	1
65	In student client, the 'previous' and 'next' button is	Change corresponding methods for	Take Test	1

	supposed to let user select different questions for the exam. We found that these two buttons can't function correctly to show each questions.	displaying the questions		
66	In student client, the point is always displayed as 25, regardless of the actual points assigned	Update corresponding points info when loading question data.	Take Test	2
67	In student client, the answer field is not displayed correctly	Change method setQuestionData	Take Test	1

White Box Defects

Defect #	Defect Description	Correction	Module where the defect is found	Severity (S1, S2 or S3)
1	In student client, it didn't disable 'previous' button after opening the test	add Previous.setEnabled(false);	In StudentTestify	S3
2	Inside 'NextActionPerformed' and 'PreviousActionPerformed' functions, wrong questionIndex increment and decrement order which makes the 'previous' and 'next' button not display questions in order	rewrite the two functions to show correct order	In StudentTestify	S1
3	In student client, when saving answer for short answer question, the question prompt is also stored in the answer	Remove the extra question info stored in the answer	In StudentTestify	S1
4	Alert message dialog has content as title, and title as content	Swapped the positions of content and title for dialog message.	In GraderTestify	S3
5	In Instructor client - "Edit", opening an invalid file will result in uncatched NullPointerException	Add condition in if statement to only check length of "test" if it is not null	In InstructorTestify	S3
6	In student client, for multiple choice question, the answer is not actually saved	Save the answer for multiple choice question	In StudentTestify	S1