

CS408

Black Box Test Plan (Phase 3)

Team 5

Test Cases

- A. Start 001, Start Popup Window, Severity 001
- B. Start the instructor client.
- C. A popup window with “Create Test”, “Edit Test” and “Grade Test” Buttons appears.

- A. Start 002, Check on the Right Upper corner of Popup Window, Severity 003
- B. Click on the check button on the right upper corner of popup window.
- C. The application ends.

- A. Start 004, Create Test, Severity 001
- B. Click on the “Create test” button popup window.
- C. The application will change to the window that enables the creation of the test.

- A. Start 005, Edit Test, Severity 001
- B. Click on the “Edit Test” button popup window.
- C. The application will jump to the window that will allow the user to edit an existing exam.

- A. Start 006, Grade Test, Severity 001
- B. Click on the “Grade Test” button popup window.
- C. The application jump to the window that will allow the user to grade an exam.

- A. Create Function 001, Create Test Menu Button - Test, Severity 001
- B. Click menu button - Test, after in Create Test mode.
- C. menu will drop down with more options such as save, save as, new, open, properties, exit.

- A. Create Function 002, Create Test Menu Button - Questions, Severity 001
- B. Click menu button - Questions, after in Create Test mode.
- C. menu will drop down with more options such as new, delete.

- A. Create Function 003, Create Test Menu Button Hotkey, Severity 003
- B. When at opened menu button stage, use keyboard as input to execute functions.
- C. Functions such as Open, New, Save will respond upon inputting from keyboard

- A. Create Function 004, Create Test - Save, Severity 002
- B. Save the current test.
- C. A file of the current test will be saved in the default directory.

- A. Create Function 005, Create Test - Save As, Severity 002

- B. Save the current test with Save As button.
- C. A file of the current test will be saved in the designated directory according to the user.

- A. Create Function 006, Create Test - New, Severity 002
- B. Click New in the menu buttons to create a new test.
- C. A new test with empty info will be created.

- A. Create Function 007, Create Test - Open, Severity 002
- B. Click the Open in the menu buttons to open an existing test.
- C. The existing test will be opened with the saved questions.

- A. Create Function 008, Create Test - Properties, Severity 002
- B. Click the Properties in the menu buttons to edit the properties of the test.
- C. A window will pop up and allow user to modify the properties of the test.

- A. Create Function 009, Create Test - Exit, Severity 002
- B. Click the Exit in the menu buttons to exit.
- C. Program close.

- A. Create Function 010, Create Test - New Questions - Short Answer, Severity 002
- B. Click the New Questions Short Answer in the menu buttons.
- C. A new question of short answer will be created.

- A. Create Function 011, Create Test - New Questions - Multiple Choice, Severity 002
- B. Click the New Questions Multiple Choice in the menu buttons.
- C. PA new question of multiple choice will be created.

- A. Create Function 012, Create Test - New Questions - Programming, Severity 002
- B. Click the New Questions Programming in the menu buttons.
- C. A new question of programming will be created.

- A. Create Function 013, Create Test - Delete Question, Severity 002
- B. Click the Delete in the menu buttons to exit.
- C. Current question is deleted.

- A. Create Function 014, Next Question button, Severity 002
- B. Click the next button.
- C. Jump to next question if it is existed.

- A. Create Function 015, Previous Question button, Severity 002
- B. Click the previous button.
- C. Jump to previous question if it is exited.

- A. Create Function 016, Add choice for Multiple Choice Question, Severity 002
- B. When creating a multiple choice question, add a choice.
- C. A choice will be added to the possible answers of the question.

- A. Create Function 017, Delete Selected for Multiple Choice Question, Severity 002
- B. Click Delete Selected at the choices for multiple choice question.
- C. The selected choice of option is deleted.

- A. Create Function 018, Set the Possible Point, Severity 002
- B. Set the possible points for a question.
- C. The possible points is set for the very question.

- A. Create Function 019, Modify Test Properties, Severity 002
- B. Change the properties of the test.
- C. The properties is changed when reopen the test.

- A. Create Function 020, Edit Prompt, Severity 002
- B. Edit the prompt for the question.
- C. The question's prompt is edited.

- A. Create Function 021, Edit Answer, Severity 002
- B. Edit the Answer for the question.
- C. The question's Answer is edited.

- A. Create Function 022, Edit Language, Severity 002
- B. Edit the language option for the programming question.
- C. The question's language option is saved.

- A. Create Function 023, Edit File, Severity 002
- B. Edit the file for the programming question.
- C. The file for the question is saved.

- A. Edit Choose 001, Choose available existing exam window, Severity 001
- B. After click on the "Edit test" button on the Start page, choose an available existing exam to edit and click "Open"

- C. The edit page should be open with the existing exam information

- A. Edit Choose 002, Choose bad existing exam window, Severity 001
- B. After click on the “Edit test” button on the Start page, choose an bad or non-existing exam to edit and click “Open”
- C. Some error message should be shown on pop up window

- A. Edit function 001, Next button, Severity 003
- B. On edit test page, Click “Next” button
- C. The next problem should be shown on the page and the information should be changed accordingly

- A. Edit function 002, Previous button, Severity 003
- B. On edit test page, Click “Previous” button
- C. The previous problem should be shown on the page and the information should be changed accordingly. In addition, if the question is the first question, no change should be made

- A. Edit function 003, Test Dropdown menu (new), Severity 002
- B. Click “new” option from the “test” dropdown menu.
- C. The edit page should be open with the new blank exam ready to be filled out

- A. Edit function 004, Test Dropdown menu (open) , Severity 002
- B. Click “open” option from the “test” dropdown menu.
- C. A choose file pop up window should appear and allow user to load different existing exam.

- A. Edit function 005, Test Dropdown menu (save) , Severity 002
- B. Click “save” option from the “test” dropdown menu.
- C. A copy of the exam should be saved at the preferred location of user’s choice

- A. Edit function 006, Test Dropdown menu (save as) , Severity 002
- B. Click “save as” option from the “test” dropdown menu.
- C. A copy of the exam should be saved at the preferred location of user’s choice

- A. Edit function 007, Test Dropdown menu (exit) , Severity 002
- B. Click “exit” option from the “test” dropdown menu.
- C. the program should exit.

- A. Edit function 008, Question Dropdown menu (new_short answer) , Severity 002
- B. Click “short answer” option from the “Question-->new” dropdown menu.
- C. A new blank short answer question is created and should be able to edit by the user. The problem

number should be changed accordingly. Also all functions regarding multiple choice and programming should be disabled

- A. Edit function 009, Question Dropdown menu (new_multiple choice) , Severity 002
- B. Click “multiple choice” option from the “Question-->new” dropdown menu.
- C. A new blank multiple choice question is created and should be able to edit by the user. The problem number should be changed accordingly. Also all functions regarding short answers or programming should be disabled

- A. Edit function 010, Question Dropdown menu (new_programming) , Severity 002
- B. Click “programming” option from the “Question-->new” dropdown menu.
- C. A new blank programming question with selected type is created and should be able to edit by the user. The problem number should be changed accordingly. Also all functions regarding short answers and multiple choice should be disabled.

- A. Edit function 011, Question Dropdown menu (delete) , Severity 002
- B. Click “delete” option from the “Question” dropdown menu.
- C. Current question is deleted and the problem number should be changed accordingly

- A. Edit function 012, problem number dropdown menu, Severity 002
- B. Choose an available problem number from the problem number dropdown menu
- C. The edit page should jump to the selected problem

- A. Edit function 013, Multiple choice add , Severity 002
- B. Click “Add” button when editing a multiple choice question.
- C. A new choice should be made with specific answer editable by user.

- A. Edit function 014, Multiple choice delete selected , Severity 002
- B. Click “Delete selected” button when editing a multiple choice question.
- C. The selected choice should be deleted from the multiple choice pool.

- A. Edit function 015, Prompt display and edit , Severity 002
- B. Type words in the prompt display window.
- C. The window should allow user to edit it’s content with input.

- A. Edit function 016, Answer display and edit , Severity 002
- B. Type words in the answer display window.
- C. The window should allow user to edit it’s content with input.

- A. Edit function 017, Choices display and edit , Severity 002
 - B. Choose options in the choice display window.
 - C. The window should allow user to edit it's content with input.
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- A. Edit function 018, File display and edit , Severity 002
 - B. Type words in the file display window.
 - C. The window should allow user to edit it's content with file path input.
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- A. Edit function 019, point possible display and edit , Severity 002
 - B. Type words in the point possible display window.
 - C. The window should allow user to edit it's content with numeric input.
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- A. Grade Start 001, Grade Button, Severity 003
 - B. Click on the Grade Button.
 - C. Popup window appears and asks the user to choose a file or enter a file name.
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- A. Grade Start 002, Good Selection 001, Severity 002
 - B. Select a valid exam file and click "OK"
 - C. Exam opened to be graded.
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- A. Grade Start 003, Bad Selection 001, Severity 002
 - B. Select an invalid file and click "OK".
 - C. Program shows that the file is an invalid file and let the user to choose again.
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- A. Grade Start 004, Cancel Selection, Severity 003
 - B. User clicks on the Cancel button.
 - C. Popup window disappears.
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- A. Auto-grade Multiple Choice 001, Auto-grade Button, Severity 001
 - B. User clicks on the Auto-grade Multiple Choice Button.
 - C. Multiple choice questions are graded and Points Earned, Points Possible are updated.
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- A. Open Key 001, Open Key Button, Severity 003
 - B. User clicks on the Open Key Button.
 - C. Popup window appears and asks the user to choose a file or enter a file name.
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- A. Open Key 002, Good Open Key, Severity 001
 - B. User enter a valid file name or choose a valid Key file and click OK.
 - C. Key Answer is showed in the Key Answer section.

- A. Open Key 003, Bad Open Key, Severity 002
 - B. User enter an invalid file name or choose an invalid file and click OK.
 - C. Program shows that the file is invalid and let the user to choose again.
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- A. Open Key 004, Cancel Open Key, Severity 002
 - B. User clicks on the cancel button.
 - C. Popup window disappears.
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- A. Open Student Exam 001, Open Student Exam Button, Severity 003
 - B. User clicks on the Open Student Exam Button.
 - C. Popup window appears and asks the user to choose a file or enter a filename.
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- A. Open Student Exam 002, Good Open Student Exam, Severity 001
 - B. User enter a valid file name or choose a valid Key file and click OK.
 - C. Student Answer is showed in the Student Answer section.
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- A. Open Student Exam 003, Bad Open Student Exam, Severity 002
 - B. User enter an invalid file name or choose an invalid file and click OK.
 - C. Program shows that the file is invalid and let the user to choose again.
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- A. Open Student Exam 004, Cancel Open Student Exam, Severity 002
 - B. User clicks on the cancel button.
 - C. Popup window disappears.
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- A. Save Grade 001, Save Button 001, Severity 002
 - B. Grade has never been saved and user click on the save button.
 - C. Popup window appears and let the user to choose a path.
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- A. Save Grade 002, Save and OK, Severity 002
 - B. User has chosen a path and click OK.
 - C. File is saved in the according address.
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- A. Save Grade 003, Save and cancel, Severity 003
 - B. User clicks on the cancel button.
 - C. Popup window disappears.
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- A. Save Grade 004, Save Button 002, Severity 002
 - B. Grade has been saved before and click button is clicked once more.

C. Save file is updated.

A. Save As 001, Save As Button 001, Severity 002

B. Grade has never been saved and user click on the save as button.

C. Popup window appears and let the user to choose a path.

A. Save As 002, Save As and OK, Severity 002

B. User has chosen a path and click OK.

C. File is saved in the according address.

A. Save As Grade 003, Save As and cancel, Severity 003

B. User clicks on the cancel button.

C. Popup window disappears.

A. Exit 001, Exit Button, Severity 002

B. User clicks on the Exit Button.

C. The program ends.

A. Points Earned 001, Click on the Points Earned Text Box, Severity 003

B. User clicks on the Points Earned Text Box.

C. Program lets the user to edit points earned.

A. Points Possible 001, Click on the Points Possible Text Box, Severity 003

B. User clicks on the Points Possible Text Box.

C. Program lets the user to edit points possible.

A. Next Answer 001, Next Button, Severity 002

B. User clicks on the Next Button.

C. Next answer is showed.

A. Show Summary 001, Show Summary Button, Severity 002

B. User clicks on the Show Summary Button.

C. Summary is shown.

A. student login 001, user have not enrolled, Severity 001

B. input an non-enrolled user name.

C. cannot get into the system and show the error.

A. student login 002, wrong first name, Severity 002

- B. input a wrong first name.
- C. cannot get into the system and show the error.

- A. student login 003, wrong last name, Severity 002
- B. input a wrong last name.
- C. cannot get into the system and show the error.

- A. student login 004, valid user name, Severity 001
- B. input a valid and enrolled user name.
- C. show operating succeed and get into the system.

- A. open exam file 001, open nothing, Severity 001
- B. choose nothing and click the open button.
- C. failed to operate and show the error.

- A. open exam file 002, open an empty file, Severity 003
- B. choose an empty file and click the open button.
- C. show the relevant error and failed to show anything.

- A. open exam file 003, open multiple invalid file, Severity 002
- B. choose two irrelevant files and click the open button.
- C. failed to operate and show the error.

- A. open exam file 004, open multiple file include valid and invalid, Severity 002
- B. choose two file, one valid file and one invalid file, and click the open button.
- C. failed to operate and show the error.

- A. open exam file 005, open valid exam file, Severity 001
- B. choose one valid file provided by the instructor and click the open button.
- C. show operating succeed and print the exam on the screen.

- A. open exam file 006, open a broken exam file, Severity 001
- B. choose one broken exam file and click the open button.
- C. failed to operate and show the error.

- A. view exam 001, show the exam file, Severity 001
- B. open one valid exam file.
- C. show the all the question include multiple choice, short answer and programming questions.

- A. view exam 002, move scroll bar, Severity 002
- B. move the scroll up and down.
- C. show the behind questions when moving down and show the front question when moving up.

- A. answer exam 001, click the multiple choice, Severity 001
- B. click the multiple choice.
- C. show black point in the front of the choice user chose.

- A. answer exam 002, cancel multiple choice, Severity 001
- B. click the multiple choice which has chosen.
- C. black point disappear in the front of the choice user chose.

- A. answer exam 003, click the multiple choice, Severity 002
- B. click the another choice after choosing one.
- C. show black point in the front of the new choice and the original one disappear.

- A. answer exam 004, input short answer, Severity 002
- B. edit the short answer.
- C. show the sentences after typing.

- A. answer exam 005, delete short answer, Severity 002
- B. delete the short answer.
- C. the answer sentences disappear after clicking the backspace.

- A. answer exam 006, choose programming language, Severity 002
- B. choose programming language.
- C. show the programming language and show the relevant point.

- A. answer exam 007, change programming language, Severity 002
- B. change to another programming language.
- C. show the new programming language and show the relevant point.

- A. Save file 001, show save dialog, Severity 001
- B. Click “save” from menu.
- C. The save dialog window has shown up.

- A. Save file 002, save file with invalid file name, Severity 002
- B. An invalid file name entered, then click save button.
- C. Show error message and push users to re-enter file name, no file is saved.

- A. Save file 003, save file with valid file name, Severity 001
 - B. An valid file name entered, then click save button.
 - C. Successfully save file and close the save dialog.
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- A. Save file 004, save file with existing file name, Severity 001
 - B. The same filename as an existing name is entered, then click save button.
 - C. An alarm is shown to ask if users are sure to save with this filename.
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- A. Save file 005, click “Yes” on same name alarm dialog, Severity 001
 - B. Click “Yes” button on the same name alarm dialog shown on save file 004.
 - C. The alarm dialog and save file dialog are all closed and file saved successfully.
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- A. Save file 006, click “Cancel” on same name alarm dialog, Severity 002
 - B. Click “Cancel” button on the same name alarm dialog shown on save file 004.
 - C. No file is saved and only the same name alarm dialog is close.
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- A. Save file 007, click “Cancel” on save file dialog, Severity 002
 - B. Click “Cancel” button on the save file dialog.
 - C. No file is saved and the save file dialog is closed.
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- A. Next question 001, click “Next” button, Severity 001
 - B. Click “Next” button.
 - C. The next question is shown.
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- A. Previous question 001, click “Previous” button, Severity 001
 - B. Click “Previous” button.
 - C. The previous question is shown.
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- A. Open tests from the file system 001, Open before test begins, Severity 001
 - B. A student user wants to open a to-be-taken test file before the beginning of the test.
 - C. the student won’t be able to open the test file until it reaches the starting time of test set by instructor.
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- A. Open tests from the file system 002, open an already taken test, Severity 002
 - B. A student user wants to open any test file which was taken before.
 - C. He or she can his or her own the test file at any time given that the instructor hasn’t opened the same file.
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- A. Open tests from the file system 003, reopen a test file, Severity 001

- B. A student user wants to reopen the test file currently being taken after it was accidentally closed.
 - C. He or she is able to reopen it given that it hasn't reached the end of the test.
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- A. Save tests to the file system 001, save the test file during the test, Severity 001
 - B. A student user wants to save his or her current test during the test.
 - C. He or she is able to save it at any point of time during the test.
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- A. Save tests to the file system 002, save the test file after test ends, Severity 001
 - B. If a student user wants to save the test to file system after the test ends.
 - C. He or she is not able to save his or her answer after the test ends.
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- A. Save tests to the file system 003, save test file when it's opened by instructor, Severity 002
 - B. If a student wants to save the test to file system after instructor has opened his or her test file.
 - C. He or she is able to save the test file.
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- A. Open previously saved tests 001, open saved test from student client, Severity 002
 - B. An instructor wants to open a saved test from a student client.
 - C. He or she is able to open any previously saved tests of any students' provided that he or she enters correct administrative information.
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- A. Open previously saved tests 002, open saved test from instructor client, Severity 001
 - B. An instructor wants to open a saved test from an instructor client.
 - C. He or she is able to open any previously saved tests of any students' provided that he or she enters correct administrative information.
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- A. Open previously saved tests 003, open a test when it's being opened, Severity 003
 - B. An instructor wants to open a test which is being opened by a student.
 - C. The instructor is able to open it, even if it's being opened by the student at the same time.
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- A. Save a test currently have opened to the file system 001, saved a file when it's been opened, Severity 002
 - B. An instructor wants to modified and save a test file when it has already been opened by the student during the test.
 - C. the instructor won't be able to save the change.
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- A. Save a test currently have opened to the file system 002, save a test file not currently taken, Severity 001
 - B. An instructor wants to modified and save a test file which was not currently taken by any student.
 - C. He or she is able to save any changes to that test file.

- A. Open saved file of student's test 001, student uses instructor client, Severity 002
 - B. If a student tries to use an instructor's client to open test files of others'
 - C. He or she is not able to access.
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- A. Open saved file of student's test 002, open saved file of others', Severity 001
 - B. If a student wants to open test file of another student.
 - C. He or she won't be able to open it.
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- A. View students' tests 001, show student's answers, Severity 001
 - B. A student wants to view answer from another student's test.
 - C. He or she won't be able to access the test with answer of other's
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- A. View students' tests 002, show correct answers, Severity 001
 - B. A student tries to view answers to a question during the test.
 - C. The answer to the question will not show.
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- A. View students' tests 003, compare to correct answers, Severity 002
 - B. A student tries to compare his or her answer to answer key from an ungraded test.
 - C. The answer keys to the questions will show given that the instructor have posted them.
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- A. Open instructors' tests 001, Open ungraded tests, Severity 001
 - B. A student tries to open an ungraded test from student client.
 - C. The test file can be opened and viewd but cannot be edited or saved.
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- A. Open instructors' tests 002, Open graded tests, Severity 002
 - B. A student tries to open a graded test from student client.
 - C. The test file can be opened and viewed but cannot be edited or saved.
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- A. Open instructors' tests 003, Open a new test, Severity 001
 - B. A student tries to open a test that hasn't be taken yet.
 - C. The file cannot be opened.
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- A. security 001, Administrative cache, Severity 001
 - B. If an instructor has accessed the software from student client.
 - C. There won't be cache that saves administrative information entered by the instructor.
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- A. security 002, username and password complexity, Severity 001
 - B. Either an instructor user or a student user wants to register,

C. He or she has to pick username and password complex enough.

A. reliability 001, instructor accidentally clicked “exit” button, severity 001

B. When instructor is creating, editing or grading exams, he or she clicks the “exit” button without saving the contents.

C. The unsaved contents will be saved automatically upon exits.

A. reliability 002, student accidentally clicked “exit” button, severity 001

B. When a student is taking the exam, he or she clicks the “exit” button without saving the answers.

C. The unsaved answers will be saved automatically upon exits.

A. reliability 003, power outage during using the software, severity 001

B. If there is a power outage when instructors or students are using the software.

C. Data should be retrievable later on.

A. Usability 001, massive user trial, Severity 001

B. Have a lot of students try the software before using it for a real test without giving them instructions.

C. The students should use it very conveniently.