

Homework Assignment #1 - Part 2
CS 350: Software Design

Part 2: Creating, Displaying and Storing a Survey/Test to a File

Main driver 10%

Your program should operate from a text menu with options. For Part 2, you must have an option to create a new survey and add new question of types: true/false, multiple choice, short answer, essay rank the choices, and matching.

i.e. Menu 1

- 1) Survey
- 2) Test

i.e Survey Menu 2

- 1) Create a new Survey
- 2) Display a Survey
- 3) Load a Survey
- 4) Save a Survey
- 5) Quit

i.e. Test Menu 2

- 1) Create a new Test
- 2) Display a Test
- 3) Load a Test
- 4) Save a Test
- 5) Quit

When option 1) is selected from Menu 2, then a follow up menu is shown.

i.e. Menu 3

- 1) Add a new T/F question
- 2) Add a new multiple choice question
- 3) Add a new short answer question
- 4) Add a new essay question
- 5) Add a new ranking question
- 6) Add a new multiple choice question

Creating the Survey/Test: 27%

- True/False 3%
- Multiple Choice 3%
- Short Answer 3%
- Essay Answer 3%
- Rank the Choices 3%
- Matching 3%
- Handles improper input 3%
- Single answer per question 3%
- Multiple answers per each question 3%

When you enter a new question for a survey or test you must ask for the appropriate information depending upon the type of question.

i.e T/F is selected from Menu 2

Enter the prompt for your True/False question:
User types their prompt here.

i.e MC is selected from Menu 2

Enter the prompt or your multiple choice question:
User types their prompt here.

Enter the number of choices for your multiple choice question.
User types the number of choices.

Enter choice #1.
User types choice 1.

Enter choice #2
User types choice 2....

If you are filling out a test instead of a survey, then you would need to add an additional prompt and query the user for the correct answer.

i.e.

Enter correct choice
User types the number of the choice they want to be the correct answer

Reasonable error checking should be included. For example, the application should only allow a valid option to be entered.

Displaying a Survey/Test 16%

When 2 is selected from Menu 3, the Survey/Test should be displayed to the screen. This requires that each question have a method to display itself.

- True/False 2%
- Multiple Choice 2%
- Short Answer 2%
- Essay Answer 2%
- Rank the Choices 2%
- Matching 2%
- Single answers per question 2%
- Multiple answers per question 2%

i.e. Display a Survey is selected from Menu 3

1) This is an example of a T/F question?
T/F

2) This is an example of a multiple choice question with 3 choices?
A) Choice 1 B) Choice 2 C) Choice 3

etc...

i.e. Display a Test is selected from Menu 2

1) This is an example of a T/F question?
T/F
The correct answer is T

2) This is an example of a multiple choice question with 3 choices?
A) Choice 1 B) Choice 2 C) Choice 3
The correct choice is A) Choice 1

etc...

Loading a Survey/Test: 16%

When 3 is selected from Menu 2, the Survey/Test must be loaded from a file. You can decide on the file type. Be aware, some types are easier to verify that they work than others. ie. Serializing vs. XML. You should present a menu of possible files to load and allow the user to select 1.

i.e.

Please select a file to load:

- 1) Survey 1
- 2) Survey 2
- 3) Test 1
- 4) Survey 3

- True/False 2%
- Multiple Choice 2%
- Short Answer 2%
- Essay Answer 2
- Rank the Choices 2%
- Matching 2%
- Single answers per question 2%
- Multiple answers per question 2%

Saving a Survey/Test: 16%

When 4 is selected from Menu 2, the Survey/Test must be saved to a file. You can determine the file type. Be aware, some types are easier to verify that they work than others. ie. serializing vs. XML.

- True/False 2%
- Multiple Choice 2%
- Short Answer 2%
- Essay Answer 2%
- Rank the Choices 2%
- Matching 2%
- Single answers per question 2%
- Multiple answers per question 2%

Comments and Overall Style: 6%

PLEASE NOTE: You must include the entire project and all its files. Place these files in a Zip not Tar file. Load a single file to Drexel Learn with a ReadMe file that explains any issues, what method you used for saving a file, and where the sample files are located. Also, your sample files should have a relative address from the binary. **Do not use absolute paths** as they won't work when we are grading them. YOU MUST have file saving and loading working to submit this assignment. If you are missing a type of question or multiple answers you can turn it in and you will lose the points for those types of questions. **Make sure you create sample files with at least one of each type of question in it.**

Handling Improper Input (9%)

Your program should gracefully handle inappropriate input and NEVER crash.

The late penalty is 10 points per week it is late.