Homework Assignment - Part 2 CS 350/SE 310: Software Design/Software Architecture I Fall 2015

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

Main driver

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) Create a new Survey
- 2) Create a new Test
- 3) Display Survey
- 4) Display a Test
- 5) Save a Survey
- 6) Save a Test
- 7) Quit

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

i.e. Menu 2

- 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:

- True/False
- Multiple Choice
- short answer
- essay answer
- rank the choices
- matching
- Handles improper input
- Single answer per question
- Multiple answers per each question

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 you 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 including. For example, the application should only allow a correct choice to be entered.

Displaying a Survey/Test

When 3 or 4 is selected from Menu 2, the survey should be displayed to the screen. This requires that each question have a method to display itself.

- True/False
- Multiple Choice
- short answer
- essay answer
- rank the choices
- matching
- single answers per question
- Multiple answers per question

i.e. A Survey

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. A Test

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...

Storing a Survey/Test:

When 5 or 6 is selected from Menu 1, 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
- Multiple Choice
- short answer
- essay answer
- rank the choices
- matching
- single answers per question
- Multiple answers per question