Fundamentals of Programming (WIS-208)

Team Project: Olympic Pride Co. Text Editor for Products

Project Description

The final project will involve creating a Java Text Editor using the NetBeans IDE. The purpose of the text editor will be to create and edit a comma delimited file (comma delimited files are commonly imported into database tables and are also known as CSV files).

Your text editor will have the following input fields: Product ID, Short Description, Long Description, Quantity, Price, Weight, Taxable, and Category ID. All the fields are required except for the Short Description, Long Description, and Category ID. If a value is not entered for any optional field in the user interface, a "blank" value should be entered into the file so that each record in the file has the same number of fields. Your finished project will be able to create a new file as well as open an existing file for review and edit.

For the sake of time and simplicity, you may open/edit your existing text file in a large text area at the bottom of the UI (user interface). With that existing text file open in the UI, your program must be able to add rows to the text file and include the ability to add a header row for your data import creation.

Your program must also be able to save the edited text file. Your file paths and names (both new files and files to be opened) are to be selected by using file choosers and option panes (that's a hint on where to start).

The following are the options that should be available to the user in the UI, most likely via buttons:

- Open File – open an existing file into the large text area for editing
- New File – create a new file for the user to add records
- Save Record – save the information entered by the user to the opened file
- Add Header Row – add a header row of column headings to the opened file (also include at top of large text area)
- Save File – save the opened file

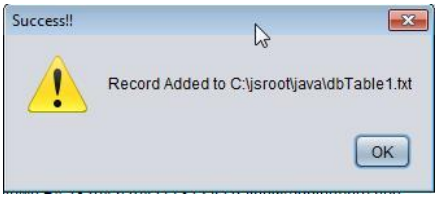
To develop the text editor you will use JAVA IO and Swing. You may source java code from tutorials online, but you must comment your code with the URL of the coding that you found within a tutorial (academic honesty). More comments is better in this regard.

Fundamentals of Programming (WIS-208)
Team Project: Olympic Pride Co. Text Editor for Products

Each source file must include a comment block at the beginning. This must include the author (team name and each member's name), the date, and a brief description of that file (its purpose in the overall application). The main source file's beginning comment block must also include the program or IDE used to write the application, how to compile the application, how to run the application, and a brief description of the application.

Each team member must comment their contribution to the code within the java source files by including a comment block prior to each section of code written by a different team member. Comments will also include the purpose of the code; please be verbose in your commenting. Remember, you may source code snippets from online tutorials but you must credit that source within the comments for that particular piece of coding.

The key to a well written UI is in the simplicity of the controls and the user feedback. For example, when a record is added or a file is saved, your program must alert the user.



Your application must also alert the user to any errors your program encounters (exceptions). For more info, see http://docs.oracle.com/javase/tutorial/essential/exceptions/definition.html

Your application must utilize classes. There must be at least one class in the application, but your team may decide to utilize more than one.

Weekly deliverables

- Week 2
    1. Project plan delivery with detailed task, assignments, and estimate
    2. Form design
- Week 3
    1. Class diagram
    2. Sequence diagram
- Week 4
    1. Detailed test plan

Fundamentals of Programming (WIS-208)

Team Project: Olympic Pride Co. Text Editor for Products

Final Deliverable

- Presentation of your completed text editor, including design decisions, tasks assignments, source control, testing, a demo and some code walk-through
- Narrative of the process involved with completing the project. Tell the story of the journey from start to finished product. This must include, at a minimum:
    - The division of labor for the coding
    - Methods used for source control and revision tracking
    - User manual for the application
    - Test plan
    - General overview of the steps taken to complete this project
    - Form design
    - Class diagram
    - Sequence diagram
- All source code
- A readme file in the main directory of the source code that contains the main information (same as main source file's beginning comment block) and a description of the application (you may re-use content from your narrative document).

Submission

You will submit your final project via BlackBoard. Your team will submit the following:

- Zip archive of your project files, which will include the readme file
- PowerPoint presentation
- The narrative as explained above

Grading

This team effort will be graded according to the following rubric (approximations):

Source code, including readme file	50%
Written narrative	25%
Presentation	15%
Appropriate balance of work among team members	10%
Total	100%