

Summative Project 2017

The purpose of the summative is to allow you to demonstrate that you have been able to apply all of the topics covered in class over the last several months.

As with all of our work, you are expected to demonstrate appropriate conventions in C, such as use of spacing, commenting, naming etc. You will be expected to have a simple, clear interface that uses looping and error trapping effectively. You will also be expected to show application of all aspects of the course that you have been taught, including decisions, loops, functions, file operations and structures.

General Parameters

You will be creating a C project that will model, in the console, a farmer's market.

As a baseline, the following components are required to obtain these levels:

Level 2

- List items for sale
- Add new items to the list
- Delete items from the list
- 'Buy' items
 - o Users should be able to select at least one item to buy
 - o Users should enter how much money they are paying with and be given correct change
 - o Inventory should decrease accordingly
- Use file(s) to store items to disk to preserve data.

Level 3

- Present a 'Vendor' view and a 'Guest' view (a menu to choose)
- Vendors should be able to add new items for sale, but not 'buy'
- Vendors should be able to edit items (change quantity / name / price)
- Vendors should be able to delete items
- Guests should be able to 'buy' as above, but not add/edit/delete
- Guests should be able to 'buy' as above, but must be able to buy multiple items and 'purchase' them all in one transaction. Remember: quantities must be adjusted accordingly.
- Use file(s) to read data at only the start of the program, and write at the end of the program

Level 4

- Provide an initial menu such as: 1. Enter the market / 2. Login
- Provide a login prompt
 - o Automatically direct 'admin' to an Admin View that will allow the 'admin' user to edit vendor accounts (username/password) as well as change the admin password
 - o Automatically direct vendors to the 'Vendor' view as above
- Vendors should only be able to see the items they have listed (and not the items of other vendors)

Guidelines

Items

- Each item should have at least: 'name', 'price' and 'quantity'
- All items should be stored as a structure in an array (level 3+)

Users (Level 4)

- Users should have at least: 'username' and 'password'
- Should be stored as a structure in an array

Menus

- All menus should perform the selected operation and return to the menu
- All menus should gracefully provide an exit
- All menus should properly error check to ensure appropriate entry
(Do NOT worry about user entering letters when using scanf("%i"))

Marking

- The "General Parameters" above will be used to gauge the overall grade for the project
- Extra provisions will be given for
 - Exceptionally clear and well written code (functionally speaking)
 - Clear and appropriate function and variable names
 - Excellent spacing, tabbing and formatting
 - Excellent commenting that clearly explains complicated code and ALL functions
 - Develop an exceptionally good-looking interface

The developed project is due Monday June 19, 2017

Your final submission will be to Mr. Emmell's designated hand-in folder.

It should contain everything appropriate for your evaluation, including:

- All code files (.c and .h – if you choose to use .h) files
- All text files used
- A ONE PAGE PDF that outlines your user accounts, and includes an assessment of how well your program met the original requirements, including specific reference to use of functions, files and structures

**If you wish to consider any adaptations to the summative,
have those discussions with Mr. Emmell immediately!**