Project Development Paper

CSC 414 Software Design

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November 17, 2020

1. Scope
   1. Identification

*menu-stubbing-project v2.0* shall be an extension of the menu program. It shall convert the menu into a point of sale system which can be used by a customer to execute the payment for goods or services as well as pay sales taxes.

* 1. System overview

Coded on a Windows 10 laptop.

Coded in the C++ language using Microsoft Visual Studio 2017.

A menu that provides a prompt and receives input to count and calculate data such as items bought as well as total cost with and without sales tax.

* 1. Document Overview

This document is intended to be a summary of the entire project, a hub of information through which any knowledge sought about it can be found. This includes any important links or references. Also includes photos or videos or links to such if needed.

1. Referenced documents

All necessary reference documents or links are listed here.

3.0 Requirements

This program is meant to achieve the following goals:

* Get input from the user to select an item from the menu
* Proceed to get further input on how many of that item the user wants
* Continue to allow the user to either add more items of a different type or edit how many items of a previously entered type they want
* Once finished, the user may enter the exit input to get their total plus sales tax as well as see how many of each item they purchased.
* Provide an error message as well as a chance to re-enter should the user provide invalid input.

4.0 Design

I converted the if/else statements into a switch statement. I also used an array to hold the variables for the amounts of each menu item selected. Also, I utilized two functions instead of putting everything in the main function. One function was for printing out the menu, while the other was essentially for the rest of the process, from receiving the input from the user to displaying the final results. I even included the addition of a sales tax to the final calculation.

1. Testing and Test Results

Testing proved to be slightly difficult only because I had not coded in C++ in a fair amount of time. It took a bit of trial and error to get back into the swing of it but it managed to compile with no issues. Here are some screenshots of my results.

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1. Appendix

Link to project in GitHub: <https://github.com/WinterCrusader/psychic-sidekick/tree/main/CSC414FinalProject>

Link to this paper in GitHub: <https://github.com/WinterCrusader/psychic-sidekick/blob/main/Project%20Development%20Paper.docx>

Link to the review in GitHub: <https://github.com/WinterCrusader/psychic-sidekick/blob/main/CSC414FinalProject/Project%20Development%20Design%20Review.pptx>