CMPUT 291 Mini-Project 1

Design Document

By Michael Harbidge, Nicholas Wielgus and Parham Golestaneh

Part A: Overview and User's Guide

Our Mini-Project 1 can be launched by typing "./project" in the linux shell, with one potential argument that can be given, which specifies the database to open, in the form of a string, if no database is given, it will launch with the default "test.db". Once the program is launched the user will be on the Login screen, and given 3 options. Option 1 allows the user to sign in with an existing account in the database, using the user's email and password. Option 2 allows the user to register an account, giving a unique email, along with password, city, gender, and name. Option 3 allows the user to quit without signing in. Once signed in, the user is given 6 options, 5 of which match the description given in the assignment specifications. The last option allows the user to sign out and quit the program. When one of the first 5 options are selected, more prompts explain what the user must enter to perform the functions given.

Part B: Software Design

Our project is coded in C and compiled using a makefile and the GCC Linux compiler. It is divided into 7 separate C files, with headers for each. Each file contains one function of the program, including the Main function which calls all other functions and handles the command line input at the top level, the login screen which handles logging in or registering a user, and the 5 functions of the program. The database used can be specified when launching the program, and the default if no input is given, "test.db" was used when testing all of the functions.

Part C: Testing Strategies

Each component of our project was tested separately as it was being made, with the developer of each segment testing that file with inputs that would result in success, along with inputs that would cause errors with the program. Nearing the completion of the project, all components of the project were combined together with the main function, and tested together to ensure they do not cause problems with the other components.

Part D: Group Work Breakdown

Each file was given to a single person to work on, with that person completing or nearly completing the entire function on their own, although often asking for help or advice from others. Once the program was put together, we all went through the program together, fixing bugs as we encountered them or making changes to fit the specification of the project. The breakdown of who worked on each file can be found below:

Main.c: Nicholas Login.c: Michael

ListProducts.c: Parham

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PostSale.c: Nicholas SearchSales.c: Michael 1-2FollowUp.c: Parham SearchUsers.c: Nicholas