

Overview and User Guide:

The system starts with a welcome message and the user is prompted to login or sign up to access store content. To sign up, the user must enter their name, email address, a password, the city they live in, and their gender (F/M). The user also has the option to exit the application should they be so inclined. Once successfully logged in with a valid account, the user has a number of basic functionality options they can walk through: list products, search for sales, post a sale, and search for users. It starts off by listing products, from which the user is able to select the pid of one of the products from the presented options. From there, the user can either write a review, list all reviews of the chosen product, or list all active sales associated to the chosen product.

ValueErrors and invalid input are rigorously handled by the application to ensure that the user does not enter any incorrect input that cannot be processed under the given conditions.

Software Design:

We have a primary interface where the user can access a number of functionalities (as described earlier, listing products, searching for sales, posting sales, and searching for users). These are broken up into separate functions, aside from a file `Two3.py` which communicates between questions 2+3 and the remainder of the project. We ensured to use comments to improve the clarity of our functions and anywhere else deemed necessary due to complexity and functionality that is not intuitively obvious. The files flow smoothly and in a natural progression of tasks.

Testing Strategy:

We tested our code on the commandline by passing the argument: `python3 assignment3.py test.db` where `test.db` was our testing database. We initially had everybody compile their code locally, and run it on respective databases to ensure the little pieces of codes were working, before merging all of it into two source code files. The main file is `assignment3.py` which handles the main flow of the program, and another file called `Two3.py` communicates with this file in order to effectively handle questions 2 and 3(1-2 follow up), while providing a base for 1c, where question 3 is used extensively.

Group Work:

We used GitHub as a means of communicating, and merging our code, while updating several versions of it.

We divided up the work as follows -

Sutanshu was responsible for designing the interface, and the basic layout of the software, in addition to handling functionality one (includes 3).

Vyome was responsible for handling functionalities 2 and 3. Functionality 3 was split and used in both functionality 1, and 2.

Ryan was responsible for handling functionalities 4 and 5. Some functionality is missing here, 5b was unable to be implemented, a temp sale ID is used instead of generating a new one, and 5a is not quite working because of an inability to correctly pass the parameter into the LIKE part of the query.