

CIS 3368 – 17509 - Homework 1, Fall 2021

Command Line based Shopping List

This homework requires you to have a remote MySQL database setup.

1. Please create a separate table for this assignment named `shoppinglist`. In this table you need at least the following columns:
`id`, `itemdescription`, `quantity`, `dateadded`. You may add additional columns as you like. Fill your table with at least 15 records. We recommend you use MySQL Workbench for creating the table and inserting data into the table. Use appropriate data types.
(<https://www.mysql.com/products/workbench/>). But you can use any tool that you are comfortable with.
2. The main objective of this project is to manage items in a shopping list. It's important that you set up the commands users can use to enter the item details on the command line. Implement a menu of options for a user to modify the item details. Each option is represented by a single character. The program initially outputs the menu, and outputs the menu after a user chooses an option and finished the corresponding process. The program ends when the user chooses the option **Quit**. The menu should look like this:

```
MENU
a - Add item
d - Remove item
u - Update item details
r1 - Output all items in alphabetical order
r2 - Output all items by sorted by quantity (ascending)
q - Quit
```

3. Implement all the features as listed in the menu using a database table to store the item records. Utilize the `python-mysql-connector` module. Create a Python class to hold the item data and make use of that class in your code when interacting with the DB table.

Other Requirements

- Make sure the username and password for the database you setup are credentials you're willing to share. Do not use personal passwords for this homework, which you might be using anywhere else. Make sure the database password is of significant length.
- Make sure your project compiles and runs.

If the project doesn't run, you will forfeit points.

Using GitHub Classroom to setup the remote repo for this assignment

To set up the remote GitHub repository for your submission correctly, please follow the link below to accept the assignment via GitHub classroom.

<https://classroom.github.com/a/-flsp59z>

You will then have an empty repository in GitHub.

What to Turn in

Commit your source code (**properly commented**) to your private repository in the GitHub classroom. **Do not zip the files together.** Your GitHub repository should show **multiple meaningful commits** illustrating how you worked through the problem.

Submit the link to your GitHub repository containing your homework via Blackboard.

Basic Grading rubric for this homework

Item	Points
DB Table setup	20
Code for Command Line Menu and Business Logic	15
Comments explaining Command Line Menu and Business Logic	15
Code for interaction with DB	20
Comments explaining DB interaction code	20
Submitted via GitHub Classroom/Link provided in BB	5
Multiple meaningful commits showing progress	5
Total	100
<i>Deduction 50% if code doesn't compile</i>	<i>(up to -50)</i>