

Project 2

Home Inventory Database Application

Objectives

- Build upon the Home Inventory application you created in Project 1
- Demonstrate your understanding of fundamental relational database concepts
- Design a suitable database table structure to hold application data
- Initialize the database via SQL scripts
- Persist application data to an SQL database
- Read application data from an SQL database
- Search the database for user-requested data

Basic Requirements

- Adopt and expand upon work completed in Project 1
- Use pipenv to manage project library dependencies and to execute project in a virtual environment
- Modify the build.sh bash script as required to automate complex commands
- Use database scripts to automatically drop and recreate the database
- Use the Python SQL connector to interact with a MySQL database via Python code

Project Specification

Write a Python console application that allows you to enter, search, display, and save home inventory data. Provide a text-based menu that allows a user to:

- Start a new inventory
- Read inventory from file
- Save inventory to file
- Save inventory to database
- Add items to active inventory
- Search inventory
- Display inventory

Hints

You must have MySQL installed and the MySQL client configured to execute SQL commands from the command line.

MAMP [<https://mamp.info>] gives you all you need regarding MySQL and a graphical user interface called phpMyAdmin to interact with the database.

Study the sql_test_project [https://github.com/pulpfreepress/it-566-computer-scripting/tree/main/python/sql_test_project] to see how to use scripts to quickly drop and recreate the database. You will need to modify the database scripts to achieve a suitable table structure for the home inventory database.