

Project 1

Home Inventory Application

Objectives

- Create and execute a Python program
- Use git and GitHub to establish and maintain source code version control
- Use Python data structures to include:
 - Lists
 - Dictionaries
- Use an established project structure to organize your source code
- Apply industry best practices in formatting your source code
- Apply fundamental object-oriented programming concepts to implement your program
- Receive and process user data input
- Persist application data to files using JSON
- Read application data stored in JSON files

Basic Requirements

- Adopt and expand upon provided project template
- 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 3rd party libraries to help validate and format your source 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
- Add items to active inventory
- Search inventory
- Display inventory

Hints

Think in terms of objects your application will need and their interactions. For example, one class might be called `InventoryItem` and be responsible for representing the data associated with one inventory item. Explore the use of the `@dataclass` decorator: <https://docs.python.org/3/library/dataclasses.html>