CIS 2348, Fall 2020

Final Project

You will design a program that manages the inventory of an electronics store. You will need to use a number of concepts that you learned in class including: use of classes, use of dictionaries and input and output of comma delimited csv files.

Input:

a) ManufacturerList.csv -- contains items listed by row. Each row contains item ID, manufacturer name, item type, and optionally a damaged indicator
b) PriceList.csv -- contains items listed by row. Each row contains item ID and the item price.
c) ServiceDatesList.csv – contains items listed by row. Each row contains item ID and service date.

Example ManufacturerList.csv, PriceList.csv and ServiceDatesList.csv are provided for reference. Your code will be expected to work with any group input files of the appropriate format. Manufacturers can and will likely be different as will the items.

Required Output:

1) Processed Inventory Reports:
    a. FullInventory.csv -- all the items listed by row with all their information . The items should be sorted alphabetically by manufacturer. Each row should contain item ID, manufacturer name, item type, price, service date, and list if it is damaged. The item attributes must appear in this order.
    b. Item type Inventory list, i.e LaptopInventory.csv -- there should be a file for each item type and the item type needs to be in the file name. Each row of the file should contain item ID, manufacturer name, price, service date, and list if it is damaged. The items should be sorted by their item ID.
    c. PastServiceDateInventory.csv – all the items that are past the service date on the day the program is actually executed. Each row should contain: item ID, manufacturer name, item type, price, service date, and list if it is damaged. The items must appear in the order of service date from oldest to most recent.
    d. DamagedInventory.csv –all items that are damaged. Each row should contain: : item ID, manufacturer name, item type, price, and service date. The items must appear in the order of most expensive to least expensive.
2) Interactive Inventory Query Capability
    a. Query the user of an item by asking for manufacturer and item type.

i. Print a message("No such item in inventory") if either the manufacturer or the item type are not in the inventory, more that one of either type is submitted or the combination is not in the inventory. Ignore any other words, so "nice Apple computer" is treated the same as "Apple computer".
ii. Print "Your item is:" with the item ID, manufacturer name, item type and price on one line. Do not provide items that are past their service date or damaged. If there is more than one item, provide the most expensive item.
iii. Also print "You may, also, consider:" and print information about the same item type from another manufacturer that closes in price to the output item. Only print this if the same item from another manufacturer is in the inventory and is not damaged nor past its service date.
iv. After output for one query, query the user again. Allow 'q' to quit.

Commit all your .py files on Github. Provide a link on BlackBoard. Name all your files with the starting pharase "FinalProject" for example FinalProjectInput.py

Comment your code extensively. Include comment block with your name and student ID at the top of every .py file.

Presentation:

You have to create a short presentation of your project: maximum 3 minutes.
Describe your approach and the structure of your code (including your choices).

1) Create a PowerPoint (maximum 4 slides)
2) Add voice over comments to each slide
3) Save as a video (MP4)
4) Upload to Microsoft STREAM (you need to login with your UH account)
5) Give access to everybody