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Course: INFO W18

Project Proposal: Flower Shop

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Introduction

- This is a program that mimics a full working flower shop.

Features

Inventory system:

- Maintains the name of all the flowers. (e.g. rose, carnation, lily)
- Maintains a description of every flower. This description can be displayed on request. (e.g. The **rose** is a type of flowering shrub. Its name comes from the Latin word *Rosa*. The flowers of the rose grow in many different colors, from the well-known red rose or yellow roses and sometimes white or purple roses. Roses belong to the family of plants called Rosaceae.)
- Maintains the current quantity of flowers in the store.

- Maintains the unit price of each flower.

Cash register:

- Carries out transaction
  Generates a bill for all the customers. Multiplies the quantity of flowers to their respective unit prices. Add all
  the individual prices of the flower and calculates a total. Updates inventory after the transaction is done.

General management:

- Orders the flowers in bulk from suppliers
- Date system:
  Displays the date. Flower get expired along with the date (e.g. roses get expired after five days). Received flowers from suppliers usually takes 2 days.

Class design

Inventory class

- Has a list attribute indexed by flowers. It is a list containing smaller lists. Each smaller lists corresponds to one flower and it has attributes like name, description, expiration date, the occasions that the flowers are good for, unit price and quantity of the flowers in the inventory.
- The __init__ method will populate the inventory with certain default flowers.
- Update_inventory method. This method will update the inventory every time after a transaction is done.

Transaction Class

- List of lists indexed by orders.Each individual list corresponds to one order. One order has attributes like order Id, flower name, flower quantity and total order price.
- Total_price method. Accepts one order as input argument and computes the total price.
- Updateinven method. After a transaction is process this should call update inventory method to update the inventory.

- UpdateOrder method. This checks against the inventory if the order can be fulfilled as requested. It informs the user and creates a updated order by dropping items that cannot be fulfilled.

Time_step Class:

- Updatemethod. That increases the date by one day after every 5 orders.
- Show method. Displays the date at the top.
- ExpireFlowers method. Some of flowers get expired after a fixed number of days.
- PlaceOrder method. Places a order for fresh flowers from the supplier when the quantity goes below minimum inventory level.
- RecieveOrder method. Will receive order from the uplier and update the inventory.