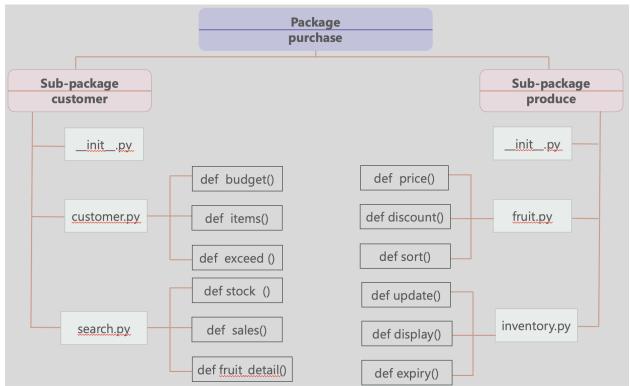
Fruits Purchase System

Group 10 Xiaoxiao Fu & Ujjwal Upadhyay

1. Description of the package

Our project will use a package 'fruit_purchase' which has two sub-packages named as **customer** and **produce**. The main modules in these sub-packages are **customer.py**, which manages customers' purchasing needs, **search.py** is used for customers to search for fruits' storage and price, **fruits.py** is base class used to record the prices of various fruits purchased by customers and whether replenishment is required, **inventory.py** are used for record the fruits' inventory.

The frame of the package shows below:



2. Description of the functions

(1) Functions in customer.py

The budget function is used to record the customer's budget.

The items function is used for customers to input the fruit's names and quantities they need to buy.

The exceed function is used to judge whether the fruit purchased by the customer exceeds the budget. If the total price exceeds the budget, ask the customer whether to continue to buy. If customers choose yes, then output the total price. If customers choose no, return to the items function.

(2) Functions in search.py

The stock function is used to provide customers with the service of checking the fruits' inventory and selling price.

The sales function is used to query which types of fruits are available, and return the name of the discounted fruit, discount rate, discounted price, and quantities.

The s_stock function is used to check the price, quantity and discount rate of the specified fruits entered by the customer.

(3) Functions in fruits.py

The price function is used to aggregate the total price of each category of products purchased by customers.

The discount function is used to show the discount rate, price and quantity.

The sort function is used to return the ordered items based on the ascending price.

(4) Functions in inventory.py

The update function is used to return the updated items list to the next customer coming to purchase.

The display function is used to return the overall stock available in the inventory.

The expiry function is used to return the shell life of the item.