对下述光明鲜牛奶信息系统的需求描述进行建模，设计UML图，并用UML绘图工具绘制UML类图。

提交内容包括：

1. jpg或其它图片格式的. UML类图
2. 相关分析过程的excel或word文档

The Bright Fresh Milk System

*Bright Fresh Milk* is a store that sells pure milk from countries around the globe. It also sells milk drinks, yogurt and jelly. The *Bright Fresh Milk System* maintains a product catalog, processes orders, and tracks the store's sales. The catalog maintains the following information about the store's products:

* Pure milk
  + Code
  + Description
  + Price
  + Production date
  + Shelf life
  + Country of origin
  + Butterfat
  + Protein
* Milk drink
  + Code
  + Description
  + Price
  + Production date
  + Shelf life
  + Flavor
  + Sugar
* Yogurt
  + Code
  + Description
  + Price
  + Production date
  + Shelf life
  + Type
  + Dilute concentration
* Jelly
  + Code
  + Description
  + Price
  + Production date
  + Shelf life
  + Flavor

*The* *Bright Fresh Milk System* maintains a current order. The system can process the current order to the store's sales and empty the current order. A current order contains a list of products, their quantities, and the total cost. The following is an example of a current order including four sale items and the total:

Table 1

|  |  |  |  |
| --- | --- | --- | --- |
| Quantity | Code | Description | Price |
| 2 | A002 | skim milk,800ml | 18 |
| 3 | C001 | chocolate flavor,270ml | 5 |
| 1 | D001 | taro flavor,250ml | 13.1 |
| 3 | B001 | solid,250ml | 8.5 |
| order total |  |  | 89.6 |

In the *Bright Fresh Milk System*, the user can:

* Display the catalog: lists the code, description, production date of each product
* Display the information of a product by its code
* Display the current order: lists quantity, code, and price of each product in the current order, and the total of the order.
* Add a product to the current order —if the specified product is already part of the order, this command will modify the quantity of that product
* Remove a product from the current order
* Adds the current order to the store's sales and empties the current order
* Display the sales including all the orders that have been sold