IA-Criteria A

**Problem Description:**

Recently, my mother is facing a problem that sometimes she forgets the food she bought in the refrigerator. This is probably because of her aging, since she used to be an excellent housekeeper who do not make any mistakes. However, this weird thing happens more and more often recently. It is ok if the thing she forgot is a piece of bread or a bowl of rice, but when it comes to vegetables and meats, the problem will occur. Not only is it a waste of money, but it also becomes a source of pollution (smelly gases and germs). Also, she always worries about what to cook for dinner with what is remained in the refrigerator. It is apparently that my mother requires something to remind her of the food in refrigerator and their expiration date (the final date when the food is still edible). It shall provide her with ideas of what can be made with the remainders in the refrigerator as well. Thus, she hopes that she can get some help from me and then solve this problem.

**CLIENT: My Mother**

**ADVISOR: Our CS Teacher, Wu Di**

**(Word Count: 188)**

**Solution Rationale:**

After having a conversation with my mom, both of us agreed that this problem can be solved by an program which is designed to remind her of all categories of foods and their information(expiration dates) and provide recommendations of dinner taking the data above into consideration. She specifically asked that the program should give her a warning respectively two days and one day before one type of food is going bad. Also, if one type of food goes bad, the program should be able to remind her to drop it.

So, the program, of course, needs an GUI. It contains the food uploaded every time by my client (a database will be used to manage these data). The ability to add and remove a type of food is involved as well. Added to this, the program gives warning days before and after a type of food goes bad as well. At last, the program provides the client with recommendations of meals according to the edibles inside the refrigerator.

I will be using JAVA for this program for the following reasons:

* “Program once, run forever.”
* I have just learnt JAVA, so I am familiar with it.
* JAVA has an independent platform.
* There are a lot of resources on the internet.

**(Word Count: 212)**

**Success Criterion:**

* A well-made GUI for the Client.
* A database to manage all data uploaded by the client.
* The client is able to upload new objects (types of food) to the program.
* A check list of all objects (types of food) in the refrigerator.
* The client is able to upload pictures and expiration dates to each object (type of food).
* A error-checking system which reminds the client when he or she sets two expiration dates for the same object (food).
* All data uploaded by the client can be altered by the client.
* Warnings will be given since two days before an object (a type of food) goes bad.
* Warnings will be given everyday after an object (type of food) goes bad.
* Recommendations for meals will be given according to the edibles in the refrigerator.