Assignment 1 – Individual Project

Assignment description

This assignment is the first in a series that will, in the end, let you create an application that keeps track of inventory for a grocery store. For now we will work on a simple class. You will use assignment descriptions and any other documents to guide your development of the application.

For this assignment you will create a program featuring basic encapsulation. Create a class called FoodItem that contains five attributes, listed below. Each attribute will have to be private, with the appropriate setter and getter. In Assignment 2 you will implement validation rules.

The attributes are the following:
- Name (Characters)
- Brand (Characters)
- UPC Code (12-digit integer)
- Production Date (Characters – for now)
- Unit Weight (Real number)

The main function should create an instance of the object you have created, then ask the user for inputs, and store the information in the object. The main function will then output all the information contained in the object. Use the code created for lectures as a guide.

Documentation: comment each relevant part of your code, and follow Javadoc guidelines where appropriate.

Notes

If you wish to challenge yourself, you can make sure that the program "fails gracefully" if someone enters the wrong information or data type.

To collect data to be stored in numeric types, I suggest that you use the following:
        int x = Integer.parseInt(userInput.nextLine());

The example above will work properly only for integers. To accept other types you will have to change the code slightly, to match the data type.

The name of the class containing your *main* function should be *Assignment1*. The name of the package containing your project should be *assignment1*.

Turn in

Turn in any .java files you have created for this assignment. Please make sure that you only turn in the files with the ".java" extension, and not the ".java~" or ".class" ones.