

Brush-up Project: Grocery List

(in groups of 2 students)

Write a class named `GroceryList` that represents a list of items to buy from the supermarket, and another class named `GroceryItem` that represents a particular item in a given quantity (example: four boxes of cookies). A `Product` class represents the product info.

The `GroceryList` class should use a list to store the grocery item orders. Question: What type of list should you choose? The `GroceryList` class should have an `add` method that will add a given grocery item to the list and a `getTotalCost` method that will return the total sum cost of all grocery items in the list.

The `Product` class should have a product name and a price per unit, a constructor with parameters for these properties plus relevant get and set methods.

A `GroceryItem` class should contain a `Product` and a quantity, plus a `getCost` method returning the total cost of the item in its given quantity.

Make a test class with a `main` method that instantiates the `GroceryList`, fills it with `GroceryItemOrder` objects, and prints it. Question: How should it be printed to the console? What class has that responsibility? Do you need `toString` methods in the classes?

Changes/extra:

- A) Change the implementation of the list in `GroceryList` (from `ArrayList` to array or vice versa)
- B) Read a product catalogue from a text file.

