

CENG 211 Programming Fundamentals

October 11, 2016

Exercise 1 Fruits in Basket

1. Create a **"Fruit"** class. Initially, it has two features which are name and calorie value.
2. Adding a feature to the **"Basket"** class to keep fruit objects on it as an ArrayList.
3. Write a method which is called as **"addFruit"** to add fruit into the basket.
4. Write a method which is called as **"removeFruit"** to remove fruit from the basket.
5. Write a method which is called as **"calculateTotalCalorie"** to calculate the total calorie of the fruits in the basket.
6. Write a method which is called as **"getNumberOfFruits"** to get how many fruits exist in the basket.
7. Adding two more features to the fruit object which are **color** and **season**. Define these two features as an **enumeration**.
8. Write a method which is called as **"getByColor"** to list fruits in the basket with a given color.
9. Write a method which is called as **"getBySeason"** to list fruits in the basket with a given season.
10. Write a method which is called as **"printFruits"** to print the features of the fruits into the basket.

HINT:

- color <<enum>>{ GREEN, YELLOW, RED }
season <<enum>>{ WINTER, SUMMER }
- You should define setter and getter methods for all fields of the Fruit class.
- There should be three classes: "**Fruit**", "**Basket**", and "**BasketApp**" class for testing your application.