

# A5

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## 1 Class pizza

This class consists of three fields.

1. String name
2. double price
3. String topping1
4. String topping2
5. String topping3

In the constructor, you will ask for four variables: String name, String topping1, String topping2, String topping3. These fields will be set immediately using the proper setter methods. Also, **in** the constructor, another method will be called. Namely, the private void setPrice() method.

The setPrice method, will check if any of the toppings is equals to the empty string "" and set the price of the pizza depending on the count of the none empty fields according to the following rules:

- If there were no toppings the price will be set to 10\$.
- With one topping the price will be 15\$
- With two toppings the price will be 17.5\$
- With three toppings the price will be 22\$

All fields have to be private and you need to have the proper setter and getter methods for each.

## 2 Person

Each person has the following fields:

- private String name

- private double age
- private Pizza pizza

Here, you will only set the name and the age of the person using the constructor. The class should support proper setters and getters for each of the fields. However, you will need to set the values using the this expression.

This class also has a method called order(). Order is a public method that is responsible for initializing the pizza the person orders. This method works the following way.

When the order method is called, a message will be displayed on the screen asking the person to order a pizza by asking them to input the name of the pizza they want together the name of the three toppings they wish to have on their pizza. These will be stored in four variables. Then a new pizza object in the method will be created using the elements that the user inputted via the scanner. Keep in mind this all happens in the Person class.

You will learn how to do this in a more elegant way during the next lab hours. However, you keep the field in the global variables. And just do the memory allocation within the method. Like this:

In the global fields you still need to define :

```
Pizza pizza;
then
public void order(){
do a bunch of stuff
scanner input....

    pizza=new pizza.....

    do a bunch of stuff
}
```

There is another thing the order method should do too. All of the things that I described above should be repeated until the user inputs the string "yes".

So, when the order method is called, the user will be asked to input what they want to eat. Then once the object has been created, the user is asked if they are sure that this is the pizza they want, and until they do not input "yes", they will be asked to input their toppings and the pizza object will be re-initialized.

### 3 Main

Three people decide to go to a restaurant. They all sit around the same table. Initialize these people without using the scanner in the main method (manually the way you like). Then, for each of the people call the order method. Once the order method is called and terminated successfully. You have to print the pizza object that the person ordered. So, you will call person.getPizza() and

then print the object. This means you have to have a **toString** method for the pizza class that displays the name of the pizza and its toppings as one string.

**Good luck**