### **CSE212**

#### SOFTWARE DEVELOPMENT METHODOLOGIES

#### **SPRING 2024**

## LABWORK 2 - SECTION 1 & 2

Below, you can find the description of your labwork for today. You can also find the expected output of this code in the Application Walkthrough section.

You are going to improve your Rental System on top of your previous week's labwork

Customer class is required to have a <u>static</u> member called <u>customerCount</u> indicating the number of customers created so far. Also, you should modify the access modifier of instance variables to <u>private</u>. It will also have a <u>displayCustomerInfo()</u> method to display the information about the customer. (<u>Hint</u>: To change the value of a private instance variable you need to use <u>setter</u> and <u>getter</u> methods.)

This week, you will create a *DVD* class to hold the dvd information which will have *id, rentDate, title, artist, genre, length.* Also, you will create a *Date* class which holds the information of date in terms of *day, month* and *year*.

| Customer   | DVD   | Date                                |
|--|---|-------------------------------------|
| customerCount: Int id: int name: String surname: String email: String age: int postCode: int | id: int rentDate: Date title: String artist: String genre: String length: int | day: int<br>month: int<br>year: int |
| displayCustomerInfo( ): Void   |   |                                     |

You are going to create a simple system that display information about the customers and loop as follows;

- 1. Display Customer #1
- 2. Display Customer #2
- 3. Display Customer #3
- 4. Display Number of Customers
- 0. Exit

The user is required to enter information (*id, name, surname, email, age, postCode*) about three customers beforehand. Then the application should display a menu where the user selects 1, 2, 3, 4 or 0.

When the user selects  $1^{st}$  option, the program will display the information about the first customer. If the  $2^{nd}$  option is selected, it will display the information about the second customer. If the  $3^{rd}$  option is selected, it will display the third customer's information. If the  $4^{th}$ 

option is selected, it will display the count of customers. Lastly, when the 0<sup>th</sup> option is entered, the application will quit the loop and the program will terminate.

# **Application Walkthrough**

```
Customer #1
Enter id
Enter name
John
Enter surname
Smith
Enter age
Enter postal code
34724
Enter email
johnsmith@gmail.com
Customer #2
Enter id
Enter name
Megan
Enter surname
Brown
Enter age
30
Enter postal code
31411
Enter email
megan_brown@gmail.com
Customer #3
Enter id
Enter name
Eric
Enter surname
Bailey
Enter age
35
Enter postal code
32312
Enter email
ericbailey85@hotmail.com

    Display Customer #1

2. Display Customer #2
3. Display Customer #3
4. Display Number of Customers
0. Exit
1
id:1
name:John
surname:Smith
age:20
postal code:34724
```

```
email:johnsmith@gmail.com

    Display Customer #1

2. Display Customer #2
3. Display Customer #3
4. Display Number of Customers
0. Exit
2
id:2
name:Megan
surname:Brown
age:30
postal code:31411
email:megan_brown@gmail.com

    Display Customer #1

2. Display Customer #2
3. Display Customer #3
4. Display Number of Customers
0. Exit
3
id:3
name:Eric
surname:Bailey
age:35
postal code:32312
email:ericbailey85@hotmail.com
1. Display Customer #1
2. Display Customer #2
3. Display Customer #3
4. Display Number of Customers
0. Exit
Number of Customers:4
1. Display Customer #1
2. Display Customer #2
3. Display Customer #3
4. Display Number of Customers
0. Exit
```

0