

CSE212  
SOFTWARE DEVELOPMENT METHODOLOGIES  
SPRING 2024  
LABWORK 5 - 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 will improve your Rental System on top of your previous week's labwork by incorporating Collections.

In previous labworks, you used Java-type arrays to hold *Customer* and *Content(DVD, DigitalMovie)* objects. For this labwork, you need to use *ArrayList* to hold these objects and traverse these arraylists with *Iterator* objects. You must use the *hasPrevious()* method when displaying the *Customer* and *Content(DVD, DigitalMovie)* information. As an example, rather than defining a *Customer[]* array, you must use an *ArrayList<Customer>* object.

You also need to change the necessary code when accessing these lists, so that your existing code works without any errors.

### Application Walkthrough

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD
6. Display Customer Information
7. Display Content Information
8. Display number of customers.
0. Exit

1

Enter id

1000

Enter name

John

Enter surname

Blake

Enter age

34

Enter postal code

34724

Enter email

johnblake@gmail.com

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD
6. Display Customer Information
7. Display Content Information
8. Display number of customers.

0. Exit

1

Enter id

1001

Enter name

Mary

Enter surname

Jane

Enter age

20

Enter postal code

34555

Enter email

mary\_jane@yahoo.com

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD
6. Display Customer Information
7. Display Content Information
8. Display number of customers.
0. Exit

2

Enter id

10

Enter title

The Lord of the Rings: The Fellowship of the Ring

Enter artist

Elijah Wood

Enter length

178

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD
6. Display Customer Information
7. Display Content Information
8. Display number of customers.
0. Exit

3

Enter genre

Thriller

Enter id

11

Enter title

Parasite

Enter artist

Song Kang-ho

Enter length

132

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD

6. Display Customer Information
  7. Display Content Information
  8. Display number of customers.
  0. Exit
- 4

Enter id

12

Enter title

Spenser Confidential

Enter artist

Mark Wahlberg

Enter length

111

Enter streaming service:

Netflix

1. Create a new Customer
  2. Create a new DVD
  3. Create a new DVD with genre
  4. Create a new Digital Movie
  5. Rent a DVD
  6. Display Customer Information
  7. Display Content Information
  8. Display number of customers.
  0. Exit
- 5

Enter customer id

1000

Enter DVD id

10

Enter day

7

Enter month

2

Enter year

2020

1. Create a new Customer
  2. Create a new DVD
  3. Create a new DVD with genre
  4. Create a new Digital Movie
  5. Rent a DVD
  6. Display Customer Information
  7. Display Content Information
  8. Display number of customers.
  0. Exit
- 6

Enter customer id

1000

id:1000

name:John

surname:Blake

age:34

postal code:34724

email:johnblake@gmail.com

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD

6. Display Customer Information
7. Display Content Information
8. Display number of customers.
0. Exit

7

Enter Content id

12

id:12

title:Spenser Confidential

artist:Mark Wahlberg

genre:Other

length(in minutes):111

Streaming Service:Netflix

How long would you like to rent that Digital Movie?

5

The rental cost for 5 days is \$5.0

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD
6. Display Customer Information
7. Display Content Information
8. Display number of customers.
0. Exit

7

Enter Content id

11

id:11

title:Parasite

artist:Song Kang-ho

genre:Thriller

length(in minutes):132

How long would you like to rent that DVD?

3

The rental cost for 3 days is \$3.0

1. Create a new Customer
2. Create a new DVD
3. Create a new DVD with genre
4. Create a new Digital Movie
5. Rent a DVD
6. Display Customer Information
7. Display Content Information
8. Display number of customers.
0. Exit

0