UNIVERSITY INSTITUTE OF ENGINEERING

Department of Computer Science & Engineering

Subject Name:

Subject Code: 20CSP 321

Submitted to:

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Submitted by:

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Section:20BCS_WM-702

Group: A

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Experiment 2

Student Name: Rajiv Paul   **UID:**20BCS1812

Branch:CSE   **Section/Group:**702A

Semester: 5th   **Date of Performance:** 26/8/2022

Subject Name:PBLJ Lab   **Subject Code:** 20CSP 321

1. **Aim:**

To design and implement a simple inventory control system for a small video rental store.

2. **Requirements:**

Software:

     IntelliJ IDEA, JDK,MacOs,Netbeans

Hardware:

     Macbook(Laptop)

     Ram:4GB(Minimum)

     Processor: M1

3. **Code:**

```java
package com.PBLJ;

import java.util.*;

class Video {
    public boolean checked = true;
    int avgrating;
    public String title;
    public boolean checked() {
        return checked;
    }
    public void rent() {
        checked = false;
    }
}
class VideoStore extends Video {
    Video[] v = new Video[10];
    static int i = 0;
```

```java
    void addVideo(String title) {
        v[i] = new Video();
        v[i].title = title;
        i++;
        System.out.println("Video "+title+" Added Successfully");
    }
    void checkOut(String title) {
        for (int k = 0; k < i; k++) {
        if (v[k].title.equalsIgnoreCase(title)) {
            if (v[k].checked()) {
                v[k].rent();
            System.out.println("Video is rented");
        } else {
            System.out.println("Sorry Video not available");
        }
        }
    }
    }

    public void receiveRating() {
        if (i == 0) {
            System.out.println("No Video inInventory");




        } else {
            for (int k = 0; k < i; k++) {
                System.out.println("Enter the rating for movie " +v[k].title);
                Scanner ob = new Scanner(System.in);
                v[k].avgrating = ob.nextInt();
            }
        }
    }
    public void listInventory() {
        if (i == 0) {
            System.out.println("No Video in Inventory");
        } else {
            for (int k = 0; k < i; k++) {
                System.out.println(k + 1 + ". " + v[k].title + " " +
                        "\n Rating: " + v[k].avgrating + "\n Availability: " +
v[k].checked());
            }
        }
    }
}
 class VideoStoreLauncher {
```

```java
public static void main(String[] args) {
    VideoStore vs = new VideoStore();
    int ch, uCh, aCh;
    String title, choice;
    do {
        System.out.println("=========Menu=========");
        System.out.println("1. Login as User");
        System.out.println("2. Login as Admin");
        System.out.println("Enter Your Choice");
        Scanner s = new Scanner(System.in);
        ch = s.nextInt();
        do {
            switch (ch) {
                case 1 -> {
                    System.out.println("1. List Inventory");
                    System.out.println("2. Rent Video");
                    System.out.println("3. Enter the rating of Video");
                    System.out.println("4. Return Video");
                    uCh = s.nextInt();
                    if (uCh == 1) {
                        vs.listInventory();




                    } else if (uCh == 2) {
                        vs.listInventory();
                        System.out.println("Enter the video Name you want");
                        title = s.next();
                        vs.checkOut(title);
                    } else if (uCh == 3) {
                        vs.receiveRating();
                    } else if (uCh == 4) {
                        vs.rent();
                    } else {
                        System.out.println("No such Option is available");
                    }
                }
                case 2 -> {
                    System.out.println("1. List Inventory");
                    System.out.println("2. Add Video");
                    aCh = s.nextInt();
                    if (aCh == 1) {
                        vs.listInventory();
                    }
                    if (aCh == 2) {
                        System.out.println("Enter the name of Video");
```

```java
                    title = s.next();
                    vs.addVideo(title);
                }
            }
            default -> System.out.println("Sorry Wrong Choice");
        }
        System.out.println("Do you want to repeat yes/no");
        choice = s.next();
    }
    while (choice.equalsIgnoreCase("yes"));
    System.out.println("Want to Return to main Menu yes/no");
    choice = s.next();
    }
    while (choice.equalsIgnoreCase("yes"));
  }
}
```

4. Output:

```
=========Menu=========

1. Login as User

2. Login as Admin

Enter Your Choice

2

1. List Inventory

2. Add Video

2

Enter the name of Video

The_Matrix

Video The_Matrix Added Successfully

Do you want to repeat yes/no

yes

1. List Inventory

2. Add Video

2

Enter the name of Video

KGF

Video KGF Added Successfully

Do you want to repeat yes/no

yes

1. List Inventory

2. Add Video

2

Enter the name of Video

GodFather

Video GodFather Added Successfully
```

```
=========Menu=========
1. Login as User
2. Login as Admin
Enter Your Choice
1
1. List Inventory
2. Rent Video
3. Enter the rating of Video
4. Return Video
1
1. The_Matrix
 Rating: 0
 Availability: true
2. KGF
 Rating: 0
 Availability: true
3. GodFather
 Rating: 0
 Availability: true
Do you want to repeat yes/no
```

```
yes
1. List Inventory
2. Rent Video
3. Enter the rating of Video
4. Return Video
3
Enter the rating for movie The_Matrix
4
Enter the rating for movie KGF
5
Enter the rating for movie GodFather
3
```

```
1. List Inventory
2. Rent Video
3. Enter the rating of Video
4. Return Video
1
1. The_Matrix
 Rating: 4
 Availability: true
2. KGF
 Rating: 5
 Availability: true
3. GodFather
 Rating: 3
 Availability: true
```

Learning outcomes (What I have learnt):

1. Learnt about classes and its methods.

2. Learnt how to use classes and its methods.

3. Learnt about return and without return functions concept.

4. Leant how to implement different types of function in Java

5. Learnt about the difference between simple and parameterised functions.