

Experiment Title: 1.2

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Subject Name: PBLJ

Subject Code: 20CSP-321

1. Aim/Overview of the practical:

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

2. Algorithm/Flowchart:

- Create 3 classes in 3 different files i.e Video.java, VideoStore.java and Video_Launcher.java
- Make the data members and method function in Video.java
- Inherit the Video(base class) to VideoStore (derived class) and make a array of the obj Video.
- Make specific methods and data members of VideoStore.
- Create a object of VideoStore class and then create a Menu Driven Program for Video_Launcher.
- Take User input using switch statements.
- End if user wants to quite else continue the menu driven program.

4. Steps for experiment/practical/Code:

```
import java.util.Scanner;  
//20BCS5859  
//Sourav Singh  
class Video {    public String  
title;    public boolean  
checked=true;  
    int avgrating;  
    public boolean checked()  
    {  
        return checked;
```

```
}  
public void rent() {  
    checked=false;  
}  
public void returned()  
{  
    System.out.println("Enter the video name you want to return");  
checked=true;  
    System.out.println("Video is returned ");  
}  
public int getRating()  
{  
    if(avgrating>0)  
    {  
        return avgrating;  
    }else{  
        System.out.println(" Rating is not available");  
return 0;  
    }  
  
}  
  
}  
  
}  
  
class VideoStore extends Video{  
Video v[]=new Video[10];    static  
int i=0;  
    void addVideo(String title)  
    {  
        v[i]=new Video();  
this.title=title;  
v[i].title=title;        i++;  
        System.out.println("Video 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");
}

}
}
}

void returnVideo(String title){
    if(i==0)
    {
        System.out.println("You have no video to return");
    }
    for(int k=0;k<i;k++)
    {
        if(v[k].title.equalsIgnoreCase(title)){
v[k].checked=true;
        }
    }
}

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);

    }
}
```

```
}

}

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+ " "+"Rating " +v[k].avgrating+"
Availability"+v[k].checked());
        }
    }
}

}

public class VideoStoreLauncher {

    public static void main(String[] args) {

        VideoStore vs=new VideoStore();
        vs.addVideo("The Matrix");    vs.addVideo("God
FatherII");    vs.addVideo("Star Wars Episode
IV:New Hope");
        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");
        }
break;    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");
title=s.next();        vs.addVideo(title);
vs.listInventory();
    }
    break;
    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"));
    }
}
```

6. Result/Output/Writing Summary:

