

Stream : **JAVA** Tech Module : **2** Project : **2**

A Video Rental Inventory System

The goal of this project is to design and implement a simple inventory control system for a small video rental store. Define least two classes: a class **Video** to model a video and a class **VideoStore** to model the actual store.

Assume that an object of class Video has the following attributes:

1. A title; 2. a flag to say whether it is checked out or not; and 3. An average user rating.

Add instance variables for each of these attributes to the Video class.

In addition, you will need to add methods corresponding to the following:

1. being checked out;
2. being returned; and
3. receiving a rating.

The VideoStore class will contain at least an instance variable that references an array of videos (say of length 10). The VideoStore will contain the following methods:

1. addVideo(String): add a new video (by title) to the inventory; 2. checkOut(String): check out a video (by title); 3. returnVideo(String): return a video to the store; 4. receiveRating(String, int) : take a user's rating for a video; and 5. listInventory(): list the whole inventory of videos in the store.

Finally, create a VideoStoreLauncher class with a main() method which will test the functionality of your other two classes. It should allow the following.

1. Add 3 videos: "The Matrix", "Godfather II", "Star Wars Episode IV: A New Hope". 2. Give several ratings to each video. 3. Rent each video out once and return it.

List the inventory after "Godfather II" has been rented out.