**Venus DVD Rental System**

Venus DVDs is a DVD rental store for a small community.

UPC, which stands for Universal Product Code, is an official designation for a product, whether it be a book, a CD, or a DVD. It is a unique number identifying that product worldwide

Venus DVDs application must implement.

**Validate User—There are 2 types of user for this system.**

* Admin User
* Normal User

USER\_TYPE

**USER\_ID PASSWORD TYPE\_OF\_USER**

Admin abmin admin

User user NormalUser

If User is valid user then they can perform different operation on different table.

**Ex: Admin user can**

* Add new DVD in a table for new movie. For this admin first check whether that movie is there in a table or not
* If it is their then admin user will just update the no of copies for that DVD.
* But If DVD is not their then , that DVD has to be added with generated Unique Product Code .
* Then Admin user can perform update , search ,delete operation on DVD.
* DVD has to be searched according to different criteria like search by title, search by release date, search by director, search by actor.

**Normal User-** Validated normal user can first search whether Required DVD is available or not.

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If it is available then user can issue the DVd.

While Issuing DVD User has to deposit some money.

Total price and Return Date and Issue Code is calculated and shown for that user, and that same information is stored **in TEMP\_USER\_INFO**  table.

**TEMP\_USER\_INFO**

**USER\_CODE USER\_NAME deposite return\_date UPC Title**

U1001 Vaishali 100 12-12-2013 1001 3-Idiotes

U1002 Vaishali 100 12-12-2013 1002 Don

**add DVD**—Requires a DVD object as an input parameter. Will add the DVD to the system if it is not available with generated UPC. otherwise, will throw an exception.

If DVD is available with given title U can update the no of copies of DVD for given UPC.

**getDVD**—Given a UPC value for a DVD, this method should return the corresponding DVD object. A null object is returned if the UPC is not found in the database.

**modifyDVD**— Requires a DVD object with a UPC that exists in the database. Will overwrite an existing DVD with new DVD values. If the database does not contain a DVD with the supplied UPC code, then false is returned and the database is not updated.

**getDVDs**—Should return a collection of all the DVDs in the database.

And should be shown in a tabular format on console.

And If there are no DVDs in the database, then an empty collection should be returned showing the message that DVD are not available.

**findDVD**—

* DVD will be search based on title, year of publishing ,composer, actors, subactors,directors.

**releaseDVD**—Will increment the count of available DVDs. This operation is equivalent to a rental return. The operation should return true, which indicates whether the DVD identified by the UPC exists in the database and has copies out for rental. Otherwise, the

operation returns false.

**reserveDVD***—*Will decrement the DVD count indicating that someonehas rented one of the available copies. Requires a UPC as an input parameter. If the UPC of the DVD to reserve does not exist, false is returned; false is also returned if no more copies of the DVD

are available for rental.

**removeDVD**—Will remove the DVD with the matching UPC and return true. If the UPC is not found in the database, then no DVD is removed and the method returns false.

**Note:**

* There will be 2 types of user on System.
  + - Normal User
    - Admin User
    - Admin User can ,ADD, DELETE, Search based on different criteria, and Update DVD Table
* Normal user can Search ,Place Order and Return DVD.
* After Placing Order Total Price should be calculated. And shown to the user with Return Date .
* Return date is 48 Hrs from Issuing Date
* While Returning DVD If it is Out Of-Date amount should be deducted from deposite.
* Provide menu for performing different operation on DVD table.
* All Connection related logic should be written in DBUtil Class.
* All database related operation should be defined **in DVDDao** in terface. Method Implementation should be provided in **DVDDaoImpl** class.
* **DVD** Class will have DVD information ,and it will implement **Serializable** interface.
* While Adding DVD in database table , add it simultaneously in the file called DVDInfo.txt file .DVD information will be added in the form of object.
* While providing the search operation on DVD ,provide different finder method based on the search criteria.
* When DVD is removed from table ,simultaneously it should be removed from file.

**DVD class has**

**upc**:The UPC value of the DVD.

**title**:The title of the DVD.

**composer**: The name of the movie's composer.

**director**: The name of the movie's director.

**leadActor**: The name of the movie's leading actor.

**supportingActor**: The name of the movie's supporting actor.

**year**: The date the of the movie's release (yyyy-mm-dd).

**copies** :The number of copies in stock.

Price: Unit Price Of DVD

UserDetails

**Uid**

**Name**

**Deposite**

**Return date**

You must also consider design issues related to transaction management