Public Class User

Create int id, string username, string password, and Item[] library properties

Create constructors and initialize these properties

Add item to the library method finds the next null spot in the array and adds the item passed in with a parameter at that spot

Equals method compares memory location and parameters to determine whether or not the objects are equal

Create getters and setters for properties

hasItem method takes item parameter and goes through the library to see if the item is present

Public Class StoreClass

Static User property

Main method initializes lookup object and prompts the user for their credentials

mainMenu method shows the main menu and gives the user a set of options to choose from

bookMenu method shows the book menu and gives the user a set of options to choose from. They also have to pay for it if they don’t have it.

downloadBook method takes a book id and adds it to a user’s library

multimediamenu method displays the options for movie and music items

playMultimedia method downloads the multimedia and adds it to a user’s library if they don’t have it and then plays it. They also have to pay for it if they don’t have it.

Purchase item method confirms that the user wants to purchase an item

Prompt for int method takes an int input from the user

Prompt for double method takes a double input from the user

Prompt for credentials method takes a username and password and confirms that it matches a user in the database

Public class music extends multimedia

Private string filetype and album attributes

Generate constructor that takes all relevant information needed to instantiate a music object as well as call the super constructor of multimedia

Override get price method with a method that returns the price after tax method

Override price after tax method with a method that returns the object’s price plus 25% of it’s price

Override to string method that returns all attributes as a nicely formatted string

Public class multimedia extends item

Protected Boolean isPLay

Protected double runtime

Generate constructor that takes all relevant information needed to instantiate a multimedia object as well as call the super constructor of item

Play method will return whether you can play the multimedia

Override the price after tax method with a method that returns the price of the item plus 25% of the item’s price

Override to string method that returns all attributes as a nicely formatted string

Public class movie extends multimedia implements ipromotion

Private strings audioLanguage and category

Generate constructor that takes all relevant information needed to instantiate a movie object as well as call the super constructor of multimedia

Override get price method with method that returns sale promotion method

Override sales promotion method with method that returns the price of the item minus half the price of the item

Override to string method that returns all attributes as a nicely formatted string

Public class book extends item implements ipromotion

Define pages, writername, isbn, and languages attributes

Generate constructor that takes all relevant information needed to instantiate a book object as well as call the super constructor of item

Override get price method with method that returns sale promotion method

Override sales promotion method with method that returns the price of the item minus 80% of the price of the item

Override to string method that returns all attributes as a nicely formatted string

Override price after tax method to only add 20% of the items price

Public interface ipromotion

Public double method sales promotion

Public abstract class item

Define properties id, title, publisher, description, isFree, and price

Generate constructor that takes all relevant information needed to instantiate an item object

Define abstract methods price after tax and tostring

Define getters and setters for all the properties

Public class lookup

Define user and item array properties

Create a constructor that will create the users and load the items

Check log in auth method will take a username and password and then return the user if the username and password match one in the “database”

Define getters and setters for the user list

Define getters and setters for the store item list

Create users method will create 2 users and add them to the array of users on the lookup object

Load items method will create 5 items and add them to the items array of the lookup object

Print movie list method will go through the list of items and check if the class of the object is a movie and print the object

Print music list method will go through the list of items and check if the class of the object is a music and print the object

Print book list method will go through the list of items and check if the class of the object is a book and print the object

Get item by id method will go through the list of items and check to see if any of the objects match the id given by the parameter