CSCE 4350
Calvin, Jackson, Haris, Michael, Eduardo, & Jeffrey

Group 3 Project description:

A public library is a place for the public to rent, read, or use the resources available in digital or physical format. A public library can also host small events for the public and provide rental services as well. Library resources, and collections include newspapers, books, magazines, films, VHS tapes, CDs, DVDs, video games and consoles, etc. The main focus for this database and its associated client is to present an organized front to a customer, who may check out various resources within our databases, as well as provide a channel through which staff can maintain the database, manage available resources, and check up on reservations and rentals from customers.

The library database allows for the storage of the various items in the library's catalog, as well as admin, provider, and customer information. These operations are strong enough to withstand recursive operations even while the database is maintained and cleaned over an extended period of time.

Our objective for this project is to keep track of the information about each resource in the library, their cost, status, and total number of each available. The user will be able to quickly and easily find the resources they desire to check out, store them in a checkout cart, and manage their accounts all from the terminal application. All necessary library functionality has been added and can be used through this terminal.

System requirements:
- mySQL
- Python 3.10.4

Steps to run:
1. Unzip the file system "Final_Group_3.zip

Users can:
1.) Check availability of items in the library
2.) Make changes to account items

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Anonymous user interfacing

```
Connected to MySQL Server version 8.0
You're connected to database: newschema
Please input your First Name, if you have no account, leave blank

Anonymous User
Would you like to:
1.CHECK AVAILABILITY
2.CREATE ACCOUNT
Exit. Exit the program
2
Please input the following information when prompted.
First Name:
Jackson
Last Name:
Johanek
Date Of Birth, formatted YYYY-MM-DD:
2001-03-27
Email address, including domain, i.e. @gmail.com, @yahoo.com:
jack.johanek@gmail.com
Your Physical Home Address
1601 Riney Rd, Apt 205, Denton, TX, 76207
Your Phone Number formatted as all digits:
7577464572
A password for your account:
agoodpassword
Your Patron ID is:8453 Please keep this information safe.
Added new account
Would you like to:
1.CHECK AVAILABILITY
2.CREATE ACCOUNT
Exit. Exit the program
Exit
Exiting..
```

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Registered user interfacing

```
Connected to MySQL Server version 8.0
You're connected to database: newschema
Please input your First Name, if you have no account, leave blank
Jackson
Please input your account ID
858
Would you like to:
1.CHECK AVAILABILITY
2.CHECK ACCOUNT
Exit. Exit the program
1
What type of Content would you like to see availability for:
1.Books
2.Magazines
3.DVDs
4.CDs
5.VHS Tapes
6.Reference Material
7.Instrument
8.Console
9.Study Room
Done.Finished with checking availability
4
Availability Requested: CD
~~PROGRAM PRINTS ALL AVAILABLE CONTENT UNDER SELECTION: IN THIS DEMO IT IS REDUCED TO THIS MESSAGE FOR SIZE~~
Title: How I Knew Her
Author: Nataly Dawn
Genre: Singer-Songwriter
IsOut: 1
RentalPeriod: 3
CDID: 3724

Would you like to:
1.CHECK AVAILABILITY
2.CHECK ACCOUNT
Exit. Exit the program
Exit
Exiting..
```

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Administrative user interfacing

```
Connected to MySQL Server version 8.0
You're connected to database: newschema
Please input your First Name, if you have no account, leave blank
Jackson
Please input your account ID
035
Would you like to:
1.CHECK IN ITEM
2.CHECK OUT ITEM
3.CHECK AVAILABILITY
4.CHECK ACCOUNT
5.EDIT DATABASE
6.DELETE ACCOUNT
Exit: Exit the program
1
Input Patron Username:
Jake
Input Patron Password:
053
What type of Content is being turned in:
1.Books
2.Magazines
3.DVDs
4.CDs
5.VHS Tapes
6.Reference Material
7.Instrument
8.Console
9.Study Room
Done.Finished with checking out
1
Provide Content ID:
583
Checking In/Out Item:  583
Item checked in
What type of Content is being turned in:
1.Books
2.Magazines
3.DVDs
4.CDs
5.VHS Tapes
6.Reference Material
7.Instrument
8.Console
9.Study Room
Done.Finished with checking out
Done
Would you like to:
1.CHECK IN ITEM
2.CHECK OUT ITEM
3.CHECK AVAILABILITY
4.CHECK ACCOUNT
5.EDIT DATABASE
6.DELETE ACCOUNT
Exit: Exit the program
Exit
```

In conclusion, this project shows how to create simple data manipulation language and data definition language with how to execute them.