Library management system

Done by

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LIBRARY MANAGEMENT SYSTEM

INTRODUCTION

This project is a user-friendly programs that interacts with the visitors of the library.
It allows the visitors to identify themselves as visitor of library by creating as secure account for them by

1.Making visitors fill their name and contact details

2.Fill in their preferences

3.The ability to delete their account anytime as needed

After creation of their account and loggin in they are able to use to program to

⇒ Add new books
⇒ See the list of available books
⇒ Classify books by their preferred author
⇒ Classify books by their preferred genre
⇒ Borrow book with their account
⇒ Return books
⇒ Delete their library account

This project is done with python with interaction of mysql database

Source code

```python
import random as r

import mysql.connector



con=mysql.connector.connect(host="localhost",user="root",passwd="123456",database="batch1",charset="utf8")



cur=con.cursor()

def choices(cid):

    print('Your Choices : ')

    print('1. To add a Book')

    print('2. To see list of Books')

    print('3. To classify book by author')

    print('4. To classify books by its genre')

    print('5. To borrow a book')
```

```python
    print('6  To return Book')

    print('7. To delete you library account')

    print('8. To exit Library')

    mo=int(input('Enter your choice: '))

    if mo==1:

        isbn=int(input('Enter ISBN of Book:'))

        ok=input('Enter the book you want to input:')

        mot=input('Enter the author of book you want to input:')

        genre=input('Enter genre of the book you want to input:')

        price=int(input('enter price of book:'))

        cur.execute('insert into
library3(isbn,bookname,genre,author,price,issue_status)
values({},"{}","{}","{}",{},"{}")'.format(isbn,ok,mot,genre,price,'notissued'))

        con.commit()

        print('Thank you for adding',ok,'book')

        return True
```

```python
    if mo==2:

        cur.execute('select*from library3')

        nope=cur.fetchall()

        for mk in nope:

            print(mk)

        return True

if mo==3:

    mon=input('What author do you want to classify with:')

    cur.execute("select * from library3 where (genre='{}') ".format(mon))

    lok=cur.fetchall()

    if lok==False:

        print('No such genre exists')

    for ml in lok:

        print(ml)

    return True
```

```python
    if mo==4:

        don=input('What genre do want to classify the books with:')

        cur.execute("select * from library3 where (author='{}')".format(don))

        dope=cur.fetchall()

        if dope==False:

            print('No such author exists here')

        for i in dope:

            print(i)

        return True

   if mo==5:

        xy=input('Book u want:')

        cur.execute('update library3 set issue_status="issued" where
bookname="{}"'.format(xy))

        con.commit()

        cur.execute('update library3 set issuerid="{}" where
bookname="{}"'.format(cid,xy))
```

```python
        con.commit()

        print(xy,'Book issued successfully by',mlo[0])

        return True

    if mo==6:

        lmn=input('Book to return:')

        cur.execute('update library3 set issue_status="notissued" where
bookname="{}"'.format(lmn))

        cur.execute('update library3 set issuerid=NULL where
bookname="{}"'.format(lmn))

        con.commit()

        print(lmn,'Book returned successsfully')

        return True

    if mo==7:

        delacc=input('Are you sure about deleting you account(y/n)')

        if delacc=='y' or delacc=='Y':

            cur.execute('delete  from customer_details where c_id="{}"'.format(cid))
```

```python
                print('Account deleted successfully')

                con.commit()

                return False

            else:

                return True

    if mo==8:

        return False




def create_account():

    print()

    id1=[]

    name=input('Enter Your Full Name : ').title()

    contact=input('Enter Your Phone Number : ')

    username=input('Enter Username : ')
```

```python
passwd=input('Enter Password : ')

cur.execute('select c_id from customer_details')

dat=cur.fetchall()

for i in dat:

    id1.append(i[0])

while True:

    x=r.randint(10,99)

    c_id=str(x)

    if c_id in id1:

        continue

    else:

        break


str1="insert into customer_details
values('{}','{}','{}','{}','{}')".format(c_id,name,contact,username,passwd)

cur.execute(str1)
```

```python
    con.commit()

    print('+++++++++++++++++++ACCOUNT CREATED

SUCCESSFULLY+++++++++++++++++++')

    return name


def login():

    count=0

    tr=0

    cur.execute('select * from customer_details')

    dat=cur.fetchall()

    while True:

        tr+=1

        if tr<4:

            username=input('Enter Your Username : ').lower()

            for i in dat:

                count+=1
```

```python
        if username in i:

            while username in i:

                passwd=input('Enter Password : ')

                if passwd in i:

                    print('ACCESS GRANTED')

                    str1="select name,c_id from customer_details where
username='{}'".format(username)

                    cur.execute(str1)

                    data=cur.fetchall()

                    nme=data[0][0]

                    id1=data[0][1]

                    return nme , id1

                else:

                    print('PASSWORD INCORRECT')

                    print('ENTER CORRECT PASSWORD')

                    print()
```

```python
        else:

            if count==len(dat):

                print('ACCOUNT NOT FOUND')

                print('Enter Valid Username')

                print()

                count=0

    else:

        print('You Have Tried Many Times')

        print('Account Not Found')

        print('Create New Account')

        break
```

```python
print('Welcome to the library')

print('Do You Have an account in this library')

idask=input('ENTER Y for yes and N for no:')

if idask=='N' or idask=='n':

    print('Then is is required to create an account')

    print('to use our servives')

    create_account()

    mol=login()

    cdi=mol[0]

    while True:

        joke=choices(cdi)

        if joke==False:

            break

    print('Thank you for visiting the library')
```

```python
elif idask=='Y' or idask=='y':

    print('Enter the login details')

    mlo=login()



    cid=mlo[0]

    while True:

        mal=choices(cid)

        if mal==False:

            break

    print('Thank you for visiting the library')
```

1.CREATING ACCOUNT

```
==================== RESTART: /Users/jeeva/Downloads/fgart.py ====================
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:N
Then is is required to create an account
to use our servives

Enter Your Full Name : JEEVAN
Enter Your Phone Number : 345245
Enter Username : jev
Enter Password : 32543
+++++++++++++++++++++ACCOUNT CREATED SUCCESSFULLY+++++++++++++++++++++
```

2.LOGGING IN

```
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:N
Then is is required to create an account
to use our servives

Enter Your Full Name : JEEVAN
Enter Your Phone Number : 345245
Enter Username : jev
Enter Password : 32543
+++++++++++++++++++++ACCOUNT CREATED SUCCESSFULLY+++++++++++++++++++++
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: |
```

3.INCORRECT ENTRIES

```
================== RESTART: /Users/jeeva/Downloads/fgd
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jeeev
ACCOUNT NOT FOUND
Enter Valid Username

Enter Your Username : |
```

```
================== RESTART: /Users/jeeva/D
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jev
Enter Password : 4356342
PASSWORD INCORRECT
ENTER CORRECT PASSWORD

Enter Password : |
```

4.ADDING A BOOK

```
------------------- RESTART: /Users/jeeva/Downloads/fgdft.py ----------
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:N
Then is is required to create an account
to use our servives

Enter Your Full Name : JEEVAN
Enter Your Phone Number : 345245
Enter Username : jev
Enter Password : 32543
+++++++++++++++++++ACCOUNT CREATED SUCCESSFULLY++++++++++++++++++++
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 1
Enter ISBN of Book:3463457
Enter the book you want to input:Chemistry tips
Enter the author of book you want to input:JEVE STOBS
Enter genre of the book you want to input:Non_fiction
enter price of book:567
```

5.SEEING A LIST OF BOOKS

```
------------------- RESTART: /users/jeeva/Downloads/fguft.py -------------------
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 2
(4563463, 'Harry potter', 'J K Rowling', 'Fiction', 325, 'notissued', None)
(234264, 'Indian History', 'RK Narayanan', 'Non_fiction', 879, 'notissued', None)
(3246357, '101 TALES', 'Panini', 'Fiction', 678, 'notissued', None)
(34643, 'science experiments', 'Rk sharma', 'science', 876, 'notissued', None)
(256356, 'practical physics', 'rd sharma', 'science', 789, 'notissued', None)
(872342, 'economics', 'pandi', 'Non_fiction', 345, 'notissued', None)
(245345, 'automotive engineering', 'jeve stobs', 'Non_fiction', 890, 'notissued', None)
(374572345, 'harry potter 2', 'J K rowling', 'Fiction', 879, 'notissued', None)
(3452456, 'practical chemistry', 'rd sharma', 'Science', 13452, 'notissued', None)
(3463457, 'Chemistry tips', 'JEVE STOBS', 'Non_fiction', 567, 'notissued', None)
```

6.CLASSIFYING BOOKS BY AUTHOR

```
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 3
What author do you want to classify with:J K Rowling
(4563463, 'Harry potter', 'J K Rowling', 'Fiction', 325, 'notissued', None)
(374572345, 'harry potter 2', 'J K rowling', 'Fiction', 879, 'notissued', None)
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: |
```

7.CLASSIFYING THE BOOKS BY GENRE

Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6 To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 4
What genre do want to classify the books with:Non_fiction
(234264, 'Indian History', 'RK Narayanan', 'Non_fiction', 879, 'notissued', None)
(872342, 'economics', 'pandi', 'Non_fiction', 345, 'notissued', None)
(245345, 'automotive engineering', 'jeve stobs', 'Non_fiction', 890, 'notissued', None)
(3463457, 'Chemistry tips', 'JEVE STOBS', 'Non_fiction', 567, 'notissued', None)
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6 To return Book
7. To delete you library account
8. To exit Library
Enter your choice:

8.BORROWING A BOOK

Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6 To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 5
Book u want:harry potter
harry potter Book issued successfully by Jeevan
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6 To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 2
(4563463, 'Harry potter', 'J K Rowling', 'Fiction', 325, 'issued', 'Jeevan')
(234264, 'Indian History', 'RK Narayanan', 'Non_fiction', 879, 'notissued', None)
(3246357, '101 TALES', 'Panini', 'Fiction', 678, 'notissued', None)
(34643, 'science experiments', 'Rk sharma', 'science', 876, 'notissued', None)
(256356, 'practical physics', 'rd sharma', 'science', 789, 'notissued', None)
(872342, 'economics', 'pandi', 'Non_fiction', 345, 'notissued', None)
(245345, 'automotive engineering', 'jeve stobs', 'Non_fiction', 890, 'notissued', None)
(374572345, 'harry potter 2', 'J K rowling', 'Fiction', 879, 'notissued', None)
(3452456, 'practical chemistry', 'rd sharma', 'Science', 13452, 'notissued', None)
(3463457, 'Chemistry tips', 'JEVE STOBS', 'Non_fiction', 567, 'notissued', None)

```
+-----------+------------------------+--------------+--------------+-------+--------------+----------+
| isbn      | bookname               | genre        | author       | price | issue_status | issuerid |
+-----------+------------------------+--------------+--------------+-------+--------------+----------+
|   4563463 | Harry potter           | J K Rowling  | Fiction      |   325 | issued       | Jeevan   |
|    234264 | Indian History         | RK Narayanan | Non_fiction  |   879 | notissued    | NULL     |
|   3246357 | 101 TALES              | Panini       | Fiction      |   678 | notissued    | NULL     |
|     34643 | science experiments    | Rk sharma    | science      |   876 | notissued    | NULL     |
|    256356 | practical physics      | rd sharma    | science      |   789 | notissued    | NULL     |
|    872342 | economics              | pandi        | Non_fiction  |   345 | notissued    | NULL     |
|    245345 | automotive engineering | jeve stobs   | Non_fiction  |   890 | notissued    | NULL     |
| 374572345 | harry potter 2         | J K rowling  | Fiction      |   879 | notissued    | NULL     |
|   3452456 | practical chemistry    | rd sharma    | Science      | 13452 | notissued    | NULL     |
|   3463457 | Chemistry tips         | JEVE STOBS   | Non_fiction  |   567 | notissued    | NULL     |
+-----------+------------------------+--------------+--------------+-------+--------------+----------+
10 rows in set (0.00 sec)
```

9.RETURNING BOOK

```
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:y
Enter the login details
Enter Your Username : JEV
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 6
Book to return:harry potter
harry potter Book returned successsfully
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 2
(4563463, 'Harry potter', 'J K Rowling', 'Fiction', 325, 'notissued', None)
(234264, 'Indian History', 'RK Narayanan', 'Non_fiction', 879, 'notissued', None)
(3246357, '101 TALES', 'Panini', 'Fiction', 678, 'notissued', None)
(34643, 'science experiments', 'Rk sharma', 'science', 876, 'notissued', None)
(256356, 'practical physics', 'rd sharma', 'science', 789, 'notissued', None)
(872342, 'economics', 'pandi', 'Non_fiction', 345, 'notissued', None)
(245345, 'automotive engineering', 'jeve stobs', 'Non_fiction', 890, 'notissued', None)
(374572345, 'harry potter 2', 'J K rowling', 'Fiction', 879, 'notissued', None)
(3452456, 'practical chemistry', 'rd sharma', 'Science', 13452, 'notissued', None)
(3463457, 'Chemistry tips', 'JEVE STOBS', 'Non_fiction', 567, 'notissued', None)
```

isbn	bookname	genre	author	price	issue_status	issuerid
4563463	Harry potter	J K Rowling	Fiction	325	notissued	NULL
234264	Indian History	RK Narayanan	Non_fiction	879	notissued	NULL
3246357	101 TALES	Panini	Fiction	678	notissued	NULL
34643	science experiments	Rk sharma	science	876	notissued	NULL
256356	practical physics	rd sharma	science	789	notissued	NULL
872342	economics	pandi	Non_fiction	345	notissued	NULL
245345	automotive engineering	jeve stobs	Non_fiction	890	notissued	NULL
374572345	harry potter 2	J K rowling	Fiction	879	notissued	NULL
3452456	practical chemistry	rd sharma	Science	13452	notissued	NULL
3463457	Chemistry tips	JEVE STOBS	Non_fiction	567	notissued	NULL

10.DELETING LIBRARY ACCOUNT

```
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:y
Enter the login details
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 7
Are you sure about deleting you account(y/n)y
Account deleted successfully
Thank you for visiting the library
```

11.EXITING LIBRARY

```
Welcome to the library
Do You Have an account in this library
ENTER Y for yes and N for no:Y
Enter the login details
Enter Your Username : jev
Enter Password : 32543
ACCESS GRANTED
Your Choices :
1. To add a Book
2. To see list of Books
3. To classify book by author
4. To classify books by its genre
5. To borrow a book
6  To return Book
7. To delete you library account
8. To exit Library
Enter your choice: 8
Thank you for visiting the library
```