



LibAdmin Code

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Group 13

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Main Module

```
#Main Module

import Student as s
import Admin as a
import sqlite3

conn = sqlite3.connect("mydatabase.db") # or use :memory: to put it in RAM

cursor = conn.cursor()

def main():
    print('WELLCOME TO BLOOMINGTON LIBRARY')
    print('=====')
    print("")
    print('1 - LOGIN')
    print('2 - REGISTER')
    print('3 - ADMIN')
    print('0 - EXIT')
    print()

    opt = input("Please enter your option : ")

    #login
    if opt == '1':
        name = ""
        num = input("Please Enter your Student Number : ")
        if a.Login(num)==True:
            cursor.execute("SELECT name FROM record WHERE s_nuber = ?",(num,))
            data = cursor.fetchall()
            for row in data:
                name = row[0]
            s.SMenu(name)
        else:
            print()
            print('PLEASE REGISTER FIRST!!!')
            print()
            main()

    #register
    elif opt == '2':
        print()
```

```
name = input("Please Enter Your Name : ")
s_name = input("Please Enter Your Surname : ")
num = input("Please Enter your Student number : ")
a.AddUser(name,s_name,num)
print('You can now Login')
print()
main()
```

```
#admin
elif opt == '3':
    name = input("Please enter your Admin username : ")
    print()
    if name == 'Craig' or name == 'craig':
        a.AMenu()
    else:
        print('Please Login as a Student ')
        print()
        main()
```

```
elif opt == '0': #exit
    Bye()
else:
    main()
```

```
def Bye():
    print('-----')
    print("THANK YOU FOR VISITING US!!")
    print('-----')
```

```
main()
```

Students Module

```
#Students Module
import sqlite3
conn = sqlite3.connect("mydatabase.db") # or use :memory: to put it in RAM

cursor = conn.cursor()

def SMenu(sname):
    print('Hello ',sname,', Welcome to SE Library')
    print('1 - View Books by Catagory')
    print('2 - Lend a Book')
    print('3 - Return a Book')
    print('4 - View All Books')
    print('5 - View Book Names')
    print('6 - View Book Catagories')
    print('Print any other key to exit ')
    print()

    ##ADD MENU
    opt = input("Enter your Option : ")

    BMenu(opt, sname)

def BMenu(opt,sname):
    if opt == '1':
        print()
        cat = input("Please Enter Book Catagory : ")
        ViewByCat(cat)
        BMenu()

    elif opt == '2':
        print()
        bname = input("Please Enter Book Book Name : ")
        Lend(bname, sname)
        BMenu()

    elif opt == '3':
        print()
        name = input("Please Enter Book Name : ")
        Return(name)
        BMenu()

    elif opt == '4':
```

```

ViewAll()
BMenu()

elif opt == '5':
    ViewNames()
    BMenu()

elif opt == '6':
    ViewCat()
    BMenu()
#m.Main()

def Lend(name, person):
    if Find(name)==True:
        #cursor.execute("SELECT * INTO report FROM books WHERE b_name = ?",(name,))
        #conn.commit()
        cursor.execute("""UPDATE books SET avilability = 'no' WHERE b_name =
?""",(name,))
        conn.commit()
        cursor.execute("""UPDATE books SET b_code = ? WHERE b_name =
?""",(person,name,))
        conn.commit()
        print('You can collect your book from the shelf')
    else:
        print('Book not found')

def Find(name):
    cursor.execute("SELECT b_name FROM books WHERE b_name = ?", (name,))
    data = cursor.fetchall()
    if len(data)==0:
        return False
    else:
        return True

def Return(name):
    cursor.execute("""UPDATE books SET avilability = 'yes' WHERE b_name = ?""",(name,))
    conn.commit()
    cursor.execute("""UPDATE books SET b_code = " WHERE b_name = ?""",(name,))
    conn.commit()
    print('Book succesfully retuened')

def ViewByCat(cat):
    cursor.execute("SELECT * FROM books WHERE catagory = ?", (cat,))
    print('BOOK NAME'+'\t'+ ' | AUTHOR'+'\t'+ ' | CATAGORY'+'\t'+ ' | AVAILABILITY')
    print('-----')

```

```
data = cursor.fetchall()
for row in data:
    print(row[0]+'\\t'+row[1]+'\\t'+row[2]+'\\t'+row[4])

def ViewAll():
    cursor.execute("SELECT * FROM books")
    lst = cursor.fetchall()
    print(('BOOK NAME'+ '\\t'+ ' | AUTHOR'+ '\\t'+ ' | CATAGORY'+ '\\t'+ ' | AVAILABILITY'))
    print('-----')
    for row in lst:
        print(row[0]+'\\t'+ row[1]+'\\t'+ row[2]+'\\t'+ row[4])

def ViewNames():
    cursor.execute("SELECT b_name FROM books")
    data = cursor.fetchall()
    for row in data:
        print(row[0])

def ViewCat():
    cursor.execute("SELECT catagory FROM books")
    data = cursor.fetchall()
    for row in data:
        print(row[0])
```

Admin Module

```
#Admin Module
import Student as s
import sqlite3
conn = sqlite3.connect("mydatabase.db") # or use :memory: to put it in RAM

cursor = conn.cursor()

def AMenu():
    print('Hello Administrator, Welcome to SE Library')
    print('1 - View Books by Category')
    print('2 - View Borrowed Books')
    print('3 - View Available Books')
    print('4 - View All Books')
    print('5 - View Book Names')
    print('6 - View Book Categories')
    print('7 - View Registered Students')
    print('8 - Add Book')
    print('9 - Add User')
    print('10 - Delete Book')
    print('11 - Delete User')
    print('Print any other key to exit ')
    print()

    opt = input("Enter your Option : ")

    BMenu(opt)

def BMenu(opt):
    if opt == '1':
        print()
        name = input("Please Enter Book Category : ")
        s.ViewByCat(cat)
        BMenu()

    elif opt == '2':
        ViewBorrowed()
        BMenu()

    elif opt == '3':
        ViewAvailable()
        BMenu()

    elif opt == '4':
        s.ViewAll()
        BMenu()

    elif opt == '5':
```

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        s.ViewNames()
        BMenu()

    elif opt == '6':
        s.ViewCat()
        BMenu()

    elif opt == '7':
        ViewRegStudents()
        BMenu()

    elif opt == '8':
        print()
        name = input("Please Enter Book Name : ")
        author = input("Please Enter Author : ")
        catagory = input("Please Enter Catagory : ")
        AddBook(name, author, catagory)
        BMenu()

    elif opt == '9':
        print()
        name = input("Please Enter Your Name : ")
        s_name = input("Please Enter Your Surname : ")
        num = input("Please Enter your Student number : ")
        AddUser(name,s_name,num)
        BMenu()

    elif opt == '10':
        print()
        name = input("Please Enter Book Name : ")
        DeleteBook(name)
        BMenu()

    elif opt == '11':
        print()
        name = input("Please Enter Name of the User to delete : ")
        DeleteUser(name)
        BMenu()

#m.main()

def ViewBorrowed():
    cursor.execute("SELECT * FROM books WHERE avilability = 'no'")
    print('BOOK NAME'+'\t'+'| AUTHOR'+'\t'+'| CATAGORY'+'\t'+'| LENDER')

```



```

print('-----')
data = cursor.fetchall()
for row in data:
    print(row[0]+'\\t'+row[1]+'\\t'+row[2]+'\\t'+row[3])

def ViewAvailable():
    cursor.execute("SELECT * FROM books WHERE avilability = 'yes'")
    print(('BOOK NAME'+ '\\t'+ ' | AUTHOR'+ '\\t'+ ' | CATAGORY'))
    print('-----')
    data = cursor.fetchall()
    for row in data:
        print(row[0]+'\\t'+row[1]+'\\t'+row[2])

def ViewRegStudents():
    cursor.execute("SELECT * FROM record")
    data = cursor.fetchall()
    print('NAME'+ '\\t'+ ' | Surname'+ '\\t'+ ' | Student Number')
    print('-----')
    for row in data:
        print(row[0]+'\\t'+row[1]+'\\t'+row[2])

def AddUser(name,surname,s_number):
    cursor.execute("INSERT INTO record VALUES (?,?,"+s_number+")", (name,surname,s_number))
    conn.commit()
    print("User "+name+" "+surname+" added Succesfully")

def Login(s_number):
    cursor.execute("SELECT s_nuber FROM record WHERE s_nuber = ?", (s_number,))
    data = cursor.fetchall()
    if len(data)==0:
        return False
        print('not found')
    else:
        return True

def AddBook(name, author, catagory):
    cursor.execute("INSERT INTO books VALUES (?,?,?,?)", (name,author,catagory,"yes"))
    conn.commit()
    print()
    print("Book "+name+" added succesfully" )

def DeleteBook(name):
    cursor.execute("DELETE FROM books WHERE name = ?", (name,))
    cursor.commit()

```

```

print()
print("Book ",name," Deleted Succesfully")

def DeleteUser(name):
    cursor.execute("DELETE FROM record WHERE name = ?",(name,))
    cursor.commit()
    print()
    print("User ",name," Deleted Succesfully")#Admin Module
import Student as s
import sqlite3
conn = sqlite3.connect("mydatabase.db") # or use :memory: to put it in RAM

cursor = conn.cursor()

def AMenu():
    print('Hello Aministrator, Welcome to SE Library')
    print('1 - View Books by Catagory')
    print('2 - View Borrowed Books')
    print('3 - View Avialable Books')
    print('4 - View All Books')
    print('5 - View Book Names')
    print('6 - View Book Catagories')
    print('7 - View Registered Students')
    print('8 - Add Book')
    print('9 - Add User')
    print('10 - Delete Book')
    print('11 - Delete User')
    print('Print any other key to exit ')
    print()

    opt = input("Enter your Option : ")

    BMenu(opt)

def BMenu(opt):
    if opt == '1':
        print()
        name = input("Please Enter Book Catagory : ")
        s.ViewByCat(cat)
        BMenu()

    elif opt == '2':
        ViewBorrowed()
        BMenu()

    elif opt == '3':
        ViewAvailable()

```

```
BMenu()

elif opt == '4':
    s.ViewAll()
    BMenu()

elif opt == '5':
    s.ViewNames()
    BMenu()

elif opt == '6':
    s.ViewCat()
    BMenu()

elif opt == '7':
    ViewRegStudents()
    BMenu()

elif opt == '8':
    print()
    name = input("Please Enter Book Name : ")
    author = input("Please Enter Author : ")
    catagory = input("Please Enter Catagory : ")
    AddBook(name, author, catagory)
    BMenu()

elif opt == '9':
    print()
    name = input("Please Enter Your Name : ")
    s_name = input("Please Enter Your Surname : ")
    num = input("Please Enter your Student number : ")
    AddUser(name,s_name,num)
    BMenu()

elif opt == '10':
    print()
    name = input("Please Enter Book Name : ")
    DeleteBook(name)
    BMenu()

elif opt == '11':
    print()
    name = input("Please Enter Name of the User to delete : ")
    DeleteUser(name)
    BMenu()

#m.main()
```

```

def ViewBorrowed():
    cursor.execute("SELECT * FROM books WHERE avilability = 'no'")
    print('BOOK NAME'+'\t'+ ' | AUTHOR'+'\t'+ ' | CATAGORY'+'\t'+ ' | LENDER')
    print('-----')
    data = cursor.fetchall()
    for row in data:
        print(row[0]+'\\t'+row[1]+'\\t'+row[2]+'\\t'+row[3])

def ViewAvailable():
    cursor.execute("SELECT * FROM books WHERE avilability = 'yes'")
    print(('BOOK NAME'+\\t'+ ' | AUTHOR'+\\t'+ ' | CATAGORY'))
    print('-----')
    data = cursor.fetchall()
    for row in data:
        print(row[0]+'\\t'+row[1]+'\\t'+row[2])

def ViewRegStudents():
    cursor.execute("SELECT * FROM record")
    data = cursor.fetchall()
    print('NAME'+\\t'+ ' | Surname'+\\t'+ ' | Student Number')
    print('-----')
    for row in data:
        print(row[0]+'\\t'+row[1]+'\\t'+row[2])

def AddUser(name,surname,s_number):
    cursor.execute("INSERT INTO record VALUES (?,?,"(name,surname,s_number))
    conn.commit()
    print("User "+name+" "+surname+" added Succesfully")

def Login(s_number):
    cursor.execute("SELECT s_nuber FROM record WHERE s_nuber = ?", (s_number,))
    data = cursor.fetchall()
    if len(data)==0:
        return False
        print('not found')
    else:
        return True

def AddBook(name, author, catagory):
    cursor.execute("INSERT INTO books VALUES (?,?,?,?)", (name,author,catagory,"yes'))

```

```
conn.commit()
print()
print("Book ",name," added succesful" )

def DeleteBook(name):
    cursor.execute("DELETE FROM books WHERE name = ?",(name,))
    cursor.commit()
    print()
    print("Book ",name," Deleted Succesfully")

def DeleteUser(name):
    cursor.execute("DELETE FROM record WHERE name = ?",(name,))
    cursor.commit()
    print()
    print("User ",name," Deleted Succesfully")
```