**COMPUTER SCIENCE PROJECT**

**Efforts By-**

**Aryan Ballani &**

**Devesh Maheshwari**

CERTIFICATE

This is to hereby certify that original and genuine programming work has been carried out to understand python language better.

The programs have been completely, solely and sincerely done by ARYAN BALLANI and Devesh Maheshwari of Class XII-D of DELHI PUBLIC SCHOOL, MATHURA ROAD .

Mrs. Monica sahni

ACKNOWLEDGEMENT

It would be my utmost pleasure to express my sincere thanks to my computer teacher, Mrs. Monica sahni for providing a helping hand in this project.

Their valuable guidance, support and supervision throughout the project helped in attaining this project its present form. I would also like to thank my parents as they encouraged me to put forward this project.

DESCRIPTION

We have made a book store management system using python and SQL. It provides an easy and convenient means for storing various details about books that one may have in a store in the form of a table in an SQL database. It stores information about the different types of transactions that take place on a given book and also helps to keep inventory of each book type in an efficient manner. It can perform five operations :

1. Addition of items
2. Display the entire inventory
3. Give details about specific items from the database
4. Keep track of sale of books
5. Keep track of books that have been issued on rent

SOURCE CODE

import mysql.connector

db=mysql.connector.connect(host="localhost",user="root",password="Devesh123")

mycur=db.cursor()

try:

mycur.execute("create database books")

print("Database is created....")

except:

print("The database is existing...")

mycur.execute("use books")

try:

mycur.execute("create table ibooks(SNO int primary key, NAME char(100), PRICE decimal(8,2), QTY int, DATE\_OF\_TRANS date,TRANSACTION char(1))")

print("IBOOKS table is created")

except:

print("IBOOKS table exists")

def AddItem():

no = input("Ino : ")

name = input("Name : ")

price=input("Price : ")

dot=input("Date [yyyy-mm-dd] : ")

qty = input("Quantity : ")

trans = 'P'

sql = "insert into ibooks values("+ no +",'" + name + "',"+ price+","+ qty + ",'" +dot+ \

"',"+"'"+ trans +"')"

mycur.execute(sql)

db.commit()

def ViewItem():

sql="select \* from ibooks"

mycur.execute(sql)

r=mycur.fetchall()

cnt=mycur.rowcount

print("Total number of rows :",cnt)

for i in r:

print(i)

def SearchItem():

ino = input("Ino:")

sql = "select \* from ibooks where sno = " + ino

mycur.execute(sql)

r=mycur.fetchone()

if r == None:

print("Item Not found")

else:

print("Found...")

print("Sno ", r[0])

print("Item Name ", r[1])

print("Price ",r[2])

print("Quantity ", r[3])

print("Last Transaction Date ", r[4])

if (r[5] == 'P'):

Status = "Purchase"

else:

Status = "Sale"

print("Last Transaction ",Status)

def BuyItem():

ino =input("Ino:")

sql = "select count(\*) from ibooks where sno = " +ino

mycur.execute(sql)

r=mycur.fetchone()

if r == None:

print("Item is not present")

else:

dot = input("Enter new date:")

qtybuy = input("Enter the quantity:")

trans="B"

sql = "select qty from ibooks where sno ="+ino

mycur.execute(sql)

r=mycur.fetchone()[0]

if int(qtybuy)<int(r):

sql = "update ibooks set qty = qty -" + qtybuy + " ,date\_of\_trans = '" + dot + \

"', transaction = '" + trans + "' where sno = " + ino

mycur.execute(sql)

db.commit()

sql = "select qty from ibooks where sno = "+ ino

mycur.execute(sql)

r=mycur.fetchone()[0]

print("Quantity updated in inventory :", r, " for Item No. ", ino)

elif int(qtybuy)==int(r):

sql = "delete from ibooks where sno = " + ino

mycur.execute(sql)

db.commit

print("Item removed from inventory")

else:

print("this item is not available in sufficient quantity")

def IssueItem():

ino = input("Ino:")

sql = "select count(\*) from ibooks where sno = " + ino

mycur.execute(sql)

r = mycur.fetchone()

if r == None:

print("Item ", ino, " is not present")

else:

qty = input("Quantity needed :")

sql = "select qty from ibooks where sno ="+ino

mycur.execute(sql)

r=mycur.fetchone()[0]

if int(qty) <= int(r):

dot = input("Enter new date :")

trans = 'I'

sql = "update ibooks set qty = qty -" + qty + ", date\_of\_trans = '" + dot + "'," +\

"transaction = '" + trans + "' where sno = " + ino

mycur.execute(sql)

db.commit()

sql = "select qty from ibooks where sno = "+ ino

mycur.execute(sql)

r=mycur.fetchone()[0]

print("Quantity updated in inventory :", r, " for Item No. ", ino)

else:

print("this item is not available in sufficient quantity")

print("Book Management System")

while True:

ch=input(" A.Add Item\n V. View Item \n S. Search Item \n B. BuyItem \n I. IssueItem \n Q.

Quit\n")

if ch in "Aa":

AddItem()

elif ch in "Vv":

ViewItem()

elif ch in "Ss":

SearchItem()

elif ch in "Bb":

BuyItem()

elif ch in "Ii":

IssueItem()

else:

break

db.close()

OUTPUT

Python 3.8.4 (v3.8.4:dfa645a65e, Jul 13 2020, 10:45:06)

[Clang 6.0 (clang-600.0.57)] on darwin

Type "help", "copyright", "credits" or "license()" for more information.

>>>

== RESTART: /Users/deveshmaheshwari/Downloads/books\_project\_CompSci\_class12.py =

Database is created....

IBOOKS table is created

Book Management System

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

A

Ino : 1

Name : The Book Thief

Price : 300

Date [yyyy-mm-dd] : 2002-06-22

Quantity : 5

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

A

Ino : 2

Name : Da Vinci Code

Price : 250

Date [yyyy-mm-dd] : 2002-12-26

Quantity : 3

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

A

Ino : 3

Name : Three Musketeers

Price : 375

Date [yyyy-mm-dd] : 2004-02-23

Quantity : 4

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

A

Ino : 4

Name : Asterix and Obelix

Price : 550

Date [yyyy-mm-dd] : 2011-10-13

Quantity : 7

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

V

Total number of rows : 4

(1, 'The Book Thief', Decimal('300.00'), 5, datetime.date(2002, 6, 22), 'P')

(2, 'Da Vinci Code', Decimal('250.00'), 3, datetime.date(2002, 12, 26), 'P')

(3, 'Three Musketeers', Decimal('375.00'), 4, datetime.date(2004, 2, 23), 'P')

(4, 'Asterix and Obelix', Decimal('550.00'), 7, datetime.date(2011, 10, 13), 'P')

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

S

Ino:4

Found...

Sno 4

Item Name Asterix and Obelix

Price 550.00

Quantity 7

Last Transaction Date 2011-10-13

Last Transaction Purchase

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

B

Ino:2

Enter new date:2014-04-05

Enter the quantity:3

Item removed from inventory

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

I

Ino:3

Quantity needed :2

Enter new date :2015-11-29

Quantity updated in inventory : 2 for Item No. 3

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

V

Total number of rows : 3

(1, 'The Book Thief', Decimal('300.00'), 5, datetime.date(2002, 6, 22), 'P')

(3, 'Three Musketeers', Decimal('375.00'), 2, datetime.date(2015, 11, 29), 'I')

(4, 'Asterix and Obelix', Decimal('550.00'), 7, datetime.date(2011, 10, 13), 'P')

A.Add Item

V. View Item

S. Search Item

B. BuyItem

I. IssueItem

Q. Quit

Q

>>>