Fashion Store Database

Python- MySQL Connectivity Project

NAME: **Priyansh Gupta**
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PROJECT OBJECTIVE

THIS PROJECT AIMED TO MAKE, PERFORM AND MODIFY THE CONTENTS OF A "**FASHION STORE**".

IN THIS PROJECT MY SQL DATABASE CREATION AND TABLE CREATIONS ARE DONE BY USING PYTHON CODE. IN THIS PROJECT THE BACK END IS MY SQL AND FRONT END IS PYTHON.

THIS PROJECT WITH PERFORM THE FOLLOWING FUNCTIONS:

1. CREATION OF THE FASHION INFORMATION TABLE.
2. MODIFY THE TABLE.
3. ADD NEW FASHION INFORMATION.
4. REMOVE ANY FASHION INFORMATION.
5. MODIFY ANY FASHION INFORMATION.
6. DISPLAY ALL THE FASHION.

ABOUT PYTHON

Python is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation via the outside rule .

Python is dynamically typed and garbage-corrected. it supports multiple programming paradigms, Including structured (particularly procedural), object-oriented and functional programming. It is often described as a "Batteries included" Language due to its comprehensive standard library.

Guido Van Rossum Working on Python in the late 1980s as a successor to the abc programming language and first released it in 1991 as Python 0.9.0. Python 2.0 was released in 2000. Python 3.0 release in 2008, was a major revision but completely backward-compatible with earlier Versions. Python 2.7.18 released in 2020 was the last release of Python 2.

Python consistently ranks as one of the most popular programming languages.

ABOUT MySQL

MySQL is an open-source relational database management system (RDBMS). Its name is a combination of "My", the name of co-founder Micheal Windenius's daughter My, and "SQL", the acronym for Structured Query Language. A relational database organizes data into one or more data tables in which data may be related to each other, these relations help structure the data. SQL is a language programmers use to create, modify and extract data from the relational database, as well as control user access to the database. In addition to relational databases and SQL, an RDBMS like MySQL works with an operating system to implement a relational database in a computer's storage system, manage users, allows for network access and facilitates testing database integrity and creation of backups.

MODULES

Import mysql.connector

PIP COMMANDS

Pip install my sql - connector - python

DBMS: MySQL

Host: local host

User: root

Pass: Devansh

Database: Fashion

Table Structure: (images below)

<u>Product Table:</u>

```
mysql> create table product(product_id char(4) Primary Key,
    -> Pname varchar(20) not null,
    -> brand varchar(20),
    -> product_for varchar(6),
    -> season varchar(10),
    -> rate int(5) not null);
Query OK, 0 rows affected, 1 warning (0.03 sec)

mysql> desc product;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| product_id  | char(4)     | NO   | PRI | NULL    |       |
| Pname       | varchar(20) | NO   |     | NULL    |       |
| brand       | varchar(20) | YES  |     | NULL    |       |
| product_for | varchar(6)  | YES  |     | NULL    |       |
| season      | varchar(10) | YES  |     | NULL    |       |
| rate        | int         | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
6 rows in set (0.01 sec)
```

<u>Purchase Table:</u>

```
mysql> create table purchase(purchase_id varchar(20) not null,
    -> item_id char(4) references product(product_id),
    -> no_of_items int(3) not null,
    -> amount int not null);
Query OK, 0 rows affected, 1 warning (0.04 sec)

mysql> desc purchase;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| purchase_id | varchar(20) | NO   |     | NULL    |       |
| item_id     | char(4)     | YES  |     | NULL    |       |
| no_of_items | int         | NO   |     | NULL    |       |
| amount      | int         | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
4 rows in set (0.01 sec)
```

Stock Table:

```
mysql> create table stock(item_id char(4) references product(product_id),
    -> Instock int(3)  not null,
    -> status varchar(10) not null);
Query OK, 0 rows affected, 1 warning (0.02 sec)

mysql> desc stock;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| item_id  | char(4)     | YES  |     | NULL    |       |
| Instock  | int         | NO   |     | NULL    |       |
| status   | varchar(10) | NO   |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

Sales Table:

```
mysql> create table sales(sale_id char(6) Primary Key,
    -> item_id char(4) references product(product_id),
    -> no_of_item_sold int(3) not null,
    -> sale_rate int(5) not null,
    -> amount int not null);
Query OK, 0 rows affected, 2 warnings (0.02 sec)

mysql> desc sales;
+-----------------+---------+------+-----+---------+-------+
| Field           | Type    | Null | Key | Default | Extra |
+-----------------+---------+------+-----+---------+-------+
| sale_id         | char(6) | NO   | PRI | NULL    |       |
| item_id         | char(4) | YES  |     | NULL    |       |
| no_of_item_sold | int     | NO   |     | NULL    |       |
| sale_rate       | int     | NO   |     | NULL    |       |
| amount          | int     | NO   |     | NULL    |       |
+-----------------+---------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

PYTHON CODE:

```python
import mysql.connector

mydb=mysql.connector.connect(host='localhost',
                             user='root',
                             passwd='dav',
                             database='fashion')
mycursor=mydb.cursor()

def AddProduct():
    L=[]
    stk=[]
    pid=input("Enter the Product ID: ")
    L.append(pid)
    IName=input("Enter the Product Name:")
    L.append(IName)
    brnd=input("Enter the Product Brand Name: ")
    L.append(brnd)
    fr=input("Enter Male/Female/Kids: ")
    L.append(fr)
    sn=input("Enter Winter/Summer: ")
    L.append(sn)
    rate=int(input("Enter the Rates for Product :"))
    L.append(rate)
    product=(L)
    sql="Insert into product(product_id, PName, brand,
        Product_for, season, rate) values(%s, %s, %s,
        %s,%s,%s)"
```

```python
    mycursor.execute(sql,product)
    mydb.commit()
    print('One Product inserted')
    instk=int(input('Enter number of items available :'))
    h='NO'
    mycursor.execute("Insert into stock(item_id, Instock,
    status) values('{}', {}, '{}')".format(pid, instk, h))
    mydb.commit()


def ViewProduct():
    sql='select * from Product'
    mycursor.execute(sql)
    res= mycursor.fetchall()
    for x in res:
        print(x)


def EditProduct():
    pid=input('Enter product ID to be edited:')
    sql='select * from product where product_id=%s'
    ed=(pid,)
    mycursor.execute(sql,ed)
    res=mycursor.fetchall()
    for x in res:
        print(x)
    print("")
    s=input('Enter what you want to edit(product_for/season/
        rate) :')

    if s=='rate':
      #fld=input("Enter the field which you want to edit:")
      val=int(input("Enter the rate value you want to
        set:"))
       mycursor.execute("Update product set rate ={} where
       product_id='{}'".format(val,pid))
        mydb.commit()
```

```python
        print("Editing Done")
        print("After correction the record is: ")
        sql="select * from product"
        #ed=(pid,)
        mycursor.execute(sql)
        res=mycursor.fetchall()
        for x in res:
            print(x)


    elif s=='season':
        seas=input('Enter new season you want to set(W/ S/
            Both) :')
        mycursor.execute("Update product set season= '{}'
            where product_id= '{}'".format(seas,pid))
        mydb.commit()
        print("Editing Done")
        print("After correction the record is: ")
        sql="select * from product"
        mycursor.execute(sql)
        res=mycursor.fetchall()
        for x in res:
            print(x)
    elif s=='product_for':
        seas=input('Enter new product for you want to set(M/
            F/ K/ All) :')
        mycursor.execute("Update product set product_for =
            '{}' where
        product_id= '{}'".format(seas ,pid))
        mydb.commit()
        print("Editing Done")
        print("After correction the record is: ")
        sql="select * from product"
        mycursor.execute(sql)
        res=mycursor.fetchall()
        for x in res:
```

```python
        print(x)


def DelProduct():
    pid=input('Enter the Product id to be addded:')

    mycursor.execute("delete from product where
        product_id='{}'".
    format(pid))
    mydb.commit()
    print('One Item Deleted')
    sql='select * from Product'
    mycursor.execute(sql)
    res= mycursor.fetchall()
    for x in res:
        print(x)
    mycursor.execute("delete from stock where
        item_id='{}'".format(pid))
    mydb.commit()


def PurchaseProduct():
    h=0
    L=[]
    pid=input("Enter the Purchase ID: ")
    L.append(pid)
    prid=input("Enter the Product ID:")
    L.append(prid)
    sql='select * from product where product_id=%s'
    ed=(prid,)
    mycursor.execute(sql,ed)
    res=mycursor.fetchall()
    h=res[0][5]
    for x in res:
        print(x)
    brnd=int(input("Enter the No of items : "))
```

```python
        L.append(brnd)
        rate= h*brnd
        L.append(rate)
        product=(L)
        mycursor.execute("Insert into purchase(purchase_id,
            item_id, no_of_items, amount) values('{}', '{}', {},
            {})".format(pid, prid, brnd,
    int(rate)))
        mydb.commit()
        print('Item Purchased')
        sql='select * from Purchase'
        mycursor.execute(sql)
        res= mycursor.fetchall()
        for x in res:
            print(x)
        sql='select * from stock where item_id=%s'
        ed=(prid,)
        mycursor.execute(sql,ed)
        res=mycursor.fetchall()
        m=res[0][1]
        up=m-brnd
        mycursor.execute("Update stock set Instock={} where
            item_id='{}'".format(up, prid))
        mydb.commit()


def ViewPurchase():
    sql="select Pname from product"
    mycursor.execute(sql)
    res=mycursor.fetchall()
    for x in res:
        print(x)
    item=input('Enter Product Name:')
    mycursor.execute("select product.product_id,
        product.Pname, product.brand, purchase.no_of_items,
```

```python
                purchase.amount from product,
                purchase where product.product_id= purchase.item_id
                and product.PName='{}'".format(item))
        res=mycursor.fetchall()
        for x in res:
            print(x)


def ViewStock():
    sql='select Pname from Product'
    mycursor.execute(sql)
    res= mycursor.fetchall()
    for x in res:
        print(x)
    item=input('Enter product name:')
    sql='select product.product_id, product.Pname,
            stock.Instock from stock, product where
            product.product_id=stock.item_id and
            product.Pname=%s'
    itm=(item,)
    mycursor.execute(sql,itm)
    res=mycursor.fetchall()
    for x in res:
        print(x)


def SaleProduct():
    L=[]
    sid=input("Enter the Sale ID: ")
    prid=input("Enter the Product ID:")
    sql='select * from product where product_id=%s'
    ed=(prid,)
    mycursor.execute(sql,ed)
    res=mycursor.fetchall()
    for x in res:
        print(x)
    brnd=int(input("Enter the No of items sold : "))
```

```python
    rate=int(input("Enter the new selling price per item
        after sale :"))
    amnt= rate * brnd
    mycursor.execute("Insert into sales(sale_id, item_id,
        no_of_item_sold, sale_rate, amount) values('{}',
        '{}', {}, {}, {})".
    format(sid, prid, brnd, rate, amnt))
    mydb.commit()
    print('Item Sold')
    sql='select * from Sales'
    mycursor.execute(sql)
    res= mycursor.fetchall()
    for x in res:
        print(x)
    sql='select * from stock where item_id=%s'
    ed=(prid,)
    mycursor.execute(sql,ed)
    res=mycursor.fetchall()
    m=res[0][1]
    up=m-brnd
    mycursor.execute("Update stock set Instock={} where
        item_id='{}'".format(up, prid))
    mydb.commit()


def ViewSales():
    sql='select Pname from Product'
    mycursor.execute(sql)
    res= mycursor.fetchall()
    for x in res:
        print(x)
    item=input('Enter Product Name:')
    mycursor.execute("select product.product_id,
        product.PName, product.brand, sales.no_of_item_sold,
        sales.amount from sales, product where
```

```python
                product.product_id=sales.item_id and
                product.PName='{}'".format(item))
        res=mycursor.fetchall()
        for x in res:
            print(x)w


def MenuSet(): #Function For The Fashion Store System
    while True:


        print()
        print()
        print('Enter 1: To Add Product')
        print('Enter 2: To View Product')
        print('Enter 3: To Edit Product')
        print('Enter 4: To Delete Product')
        print('Enter 5: To Purchase Product')
        print('Enter 6: To View Purchases')
        print('Enter 7: To Sale the item')
        print('Enter 8: To View Sales Details')
        print('Enter 9: To View Stock')
        print('Enter 10: Break')
        print()
        print()


        userinput=int(input('Please select an aboven
            option:')) #Will Take Input From User
        if(userinput == 1):
            AddProduct()


        elif (userinput == 2):
            ViewPRoduct()


        elif(userinput == 3):
            EditProduct()
```

```python
        elif (userinput==4):
            DelProduct()


        elif (userinput==5):
            PurchaseProduct()


        elif (userinput==6):
            ViewPurchase()



        elif (userinput==7):
            SaleProduct()


        elif (userinput==8):
            ViewSales()


        elif (userinput==9):
            ViewStock()


        elif userinput==10:
            break


        else:
            print("Enter correct choice...")
MenuSet()
```

OUTPUT

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:1

Enter the Product ID: SAM

Enter the Product Name:Shoes

Enter the Product Brand Name: Nike

Enter Male/Female/Kids: M

Enter Winter/Summer: Both

Enter the Rates for Product :7000

One Product inserted

Enter number of items available :25

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:1

Enter the Product ID: BHAR

Enter the Product Name:Jeans

Enter the Product Brand Name: Denim Jeans

Enter Male/Female/Kids: M/K

Enter Winter/Summer: W

Enter the Rates for Product :1200

One Product inserted

Enter number of items available :10

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:1

Enter the Product ID: OJAS

Enter the Product Name:Watch

Enter the Product Brand Name: Noise

Enter Male/Female/Kids: M/K

Enter Winter/Summer: Both

Enter the Rates for Product :4000

One Product inserted

Enter number of items available :14

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:2

('BHAR', 'Jeans', 'Denim Jeans', 'M/K', 'W', 1200)

('OJAS', 'Watch', 'Noise', 'M/K', 'Both', 4000)

('SAM', 'Shoes', 'Nike', 'M', 'Both', 7000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:3

Enter product ID to be edited:SAM

('SAM', 'Shoes', 'Nike', 'M', 'Both', 7000)

Enter what you want to edit(product_for/ season/ rate) :rate

Enter the rate value you want to set: 6000

Editing Done

After correction the record is:

('BHAR', 'Jeans', 'Denim Jeans', 'M/K', 'W', 1200)

('OJAS', 'Watch', 'Noise', 'M/K', 'Both', 4000)

('SAM', 'Shoes', 'Nike', 'M', 'Both', 6000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:4

Enter the Product id to be deleted:BHAR

One Item Deleted

('OJAS', 'Watch', 'Noise', 'M/K', 'Both', 4000)

('SAM', 'Shoes', 'Nike', 'M', 'Both', 6000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:5

Enter the Purchase ID: VAN

Enter the Product ID:SAM

('SAM', 'Shoes', 'Nike', 'M', 'Both', 6000)

Enter the No of items : 2

Item Purchased

('VAN', 'SAM', 2, 12000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:6

('Watch',)

('Shoes',)

Enter Product Name:Watch

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:6

('Watch',)

('Shoes',)

Enter Product Name:Shoes

('SAM', 'Shoes', 'Nike', 2, 12000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:7

Enter the Sale ID: RID

Enter the Product ID:SAM

('SAM', 'Shoes', 'Nike', 'M', 'Both', 6000)

Enter the No of items sold : 5

Enter the new selling price per item after sale :5000

Item Sold

('RID', 'SAM', 5, 5000, 25000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:8

('Watch',)

('Shoes',)

Enter Product Name:Shoes

('SAM', 'Shoes', 'Nike', 5, 25000)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:9

('Watch',)

('Shoes',)

Enter product name:Shoes

('SAM', 'Shoes', 18)

Enter 1: To Add Product

Enter 2: To View Product

Enter 3: To Edit Product

Enter 4: To Delete Product

Enter 5: To Purchase Product

Enter 6: To View Purchases

Enter 7: To Sale the item

Enter 8: To View Sales Details

Enter 9: To View Stock

Enter 10: Break

Please select an above option:10