

Computer Science Project

ACKNOWLEDGEMENT

I would like to express my sincere and special gratitude to our Principal Ma'am, Mrs. Muriel Fernandes of our esteemed Ryan International School, Sanpada for always encouraging us to excel in all that we do. I would like to thank my Computer Science teacher Mrs Gargly Dam for her continuous guidance and encouragement and immense motivation which helped me at all stages of this project. Lastly, I would like to thank my family and friends for helping me in the completion of the project.

Certificate

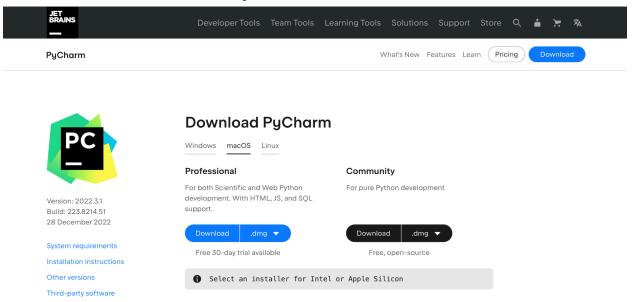
This is to certify that Krishna Bagade, a student of class XII-B, Ryan International School, Sanpada has successfully completed the coursework of Computer Science, that is "Python Project File" under the guidance of Mrs Gargly Dam during 2022-23 in partial fulfillment of practical examination of Central Board of Secondary Education.

Krishna Bagade XII B

Acknowledgment	
Certificate	1
Introduction	3
Installation and Environment Settings	5
Download and Install PyCharm IDE	5
Download and Install MySql Workbench	5
Create Project on Pycharm IDE	7
Install Plugins for Project	8
Create Database Server	11
Source Code for Menu Display	13
Source Code for SQL Queries	16
Output Log of Admin Action	20
Creating Menu	20
Reading Menu as Admin	22
Updating Menu as Admin	23
Deleting Menu as Admin	25
Creating Order as Admin	26
Viewing all orders as Admin	27
Updating orders as Admin	28
Deleting orders as Admin	29
Output Log of User Action	30
Reading Menu	30
Placing Order as a User	31
Viewing Bill as a User	32

Installation and Environment Settings

Download and Install PyCharm IDE



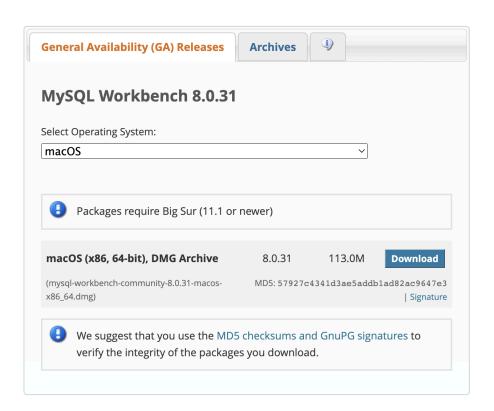
- Step 1: Select your Operating system
- Step 2: Download free open source Community version for python Development
- Step 3: Once your file downloads, open and follow the installation guidelines
- Step 4: Open Pycharm, add New Project "CoffeeShopPronto"

Download and Install MySql Workbench

- Step 1: Go to Community Dev tools to download MySQL Workbench
- Step 2: Select Operating System to use, download the package, follow the guidelines for installations.

MySQL Community Downloads

MySQL Workbench

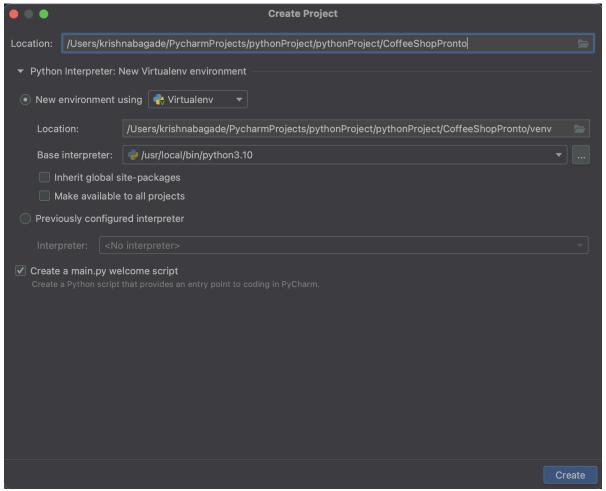


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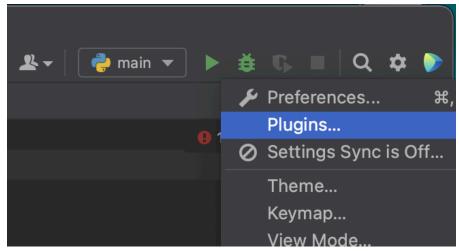
Create Project on Pycharm IDE

- Step 1: Open PyCharm IDE, select File Tab-> New Project
- Step 2: Enter details in pop-up to store file in desired location
- Step 3: Select Create Button, to create new project with Main.py as default

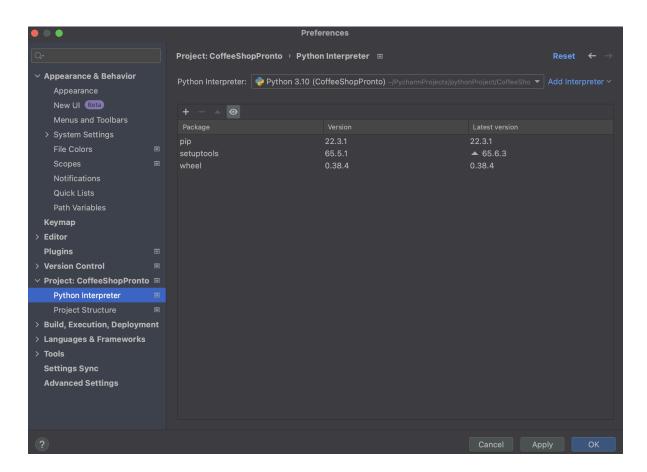


Install Plugins for Project

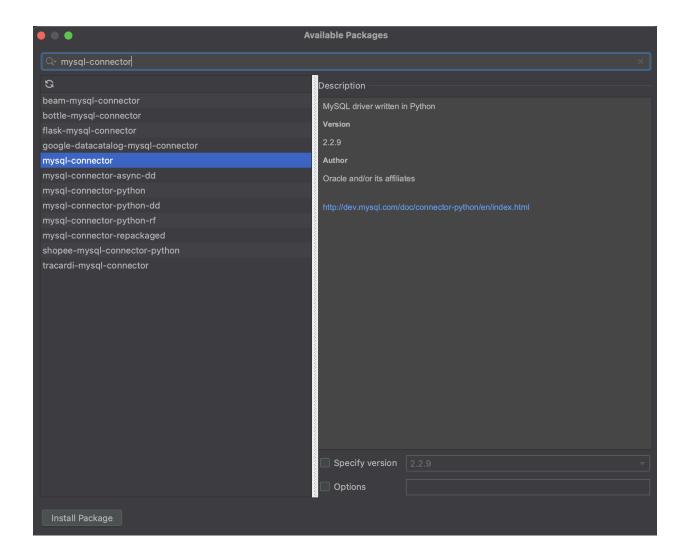
Step 1: Look for PLugin option in top right corner as shown in image below



Step 2: Add Python Interpreter 3.10, apply changes

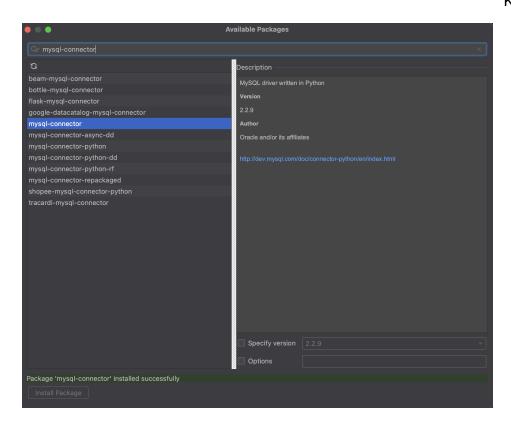


Step 4: Add mysql-connector to connect to database server



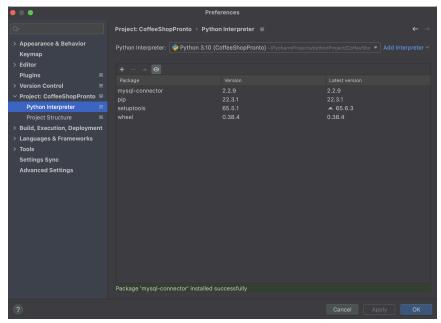
Step 5: Install mysql-connector package button

Step 6: You should see the package has been installed successfully in green banner



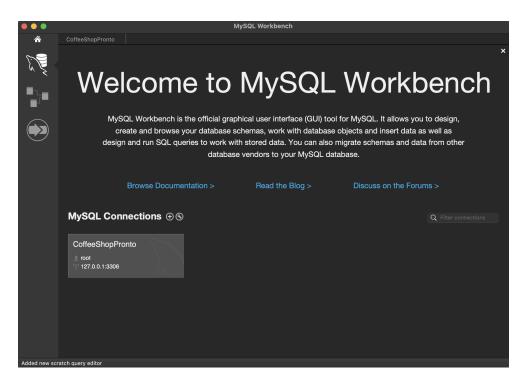
Step 7: You should be able to view package installation green banner on completion

Step 8: You should be able to view Python interpreter as well as mysql-connector in Project Structure

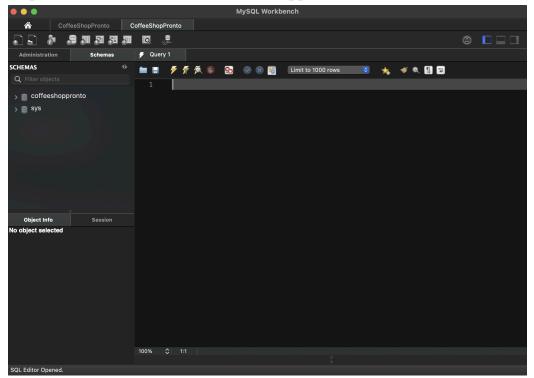


Create Database Server

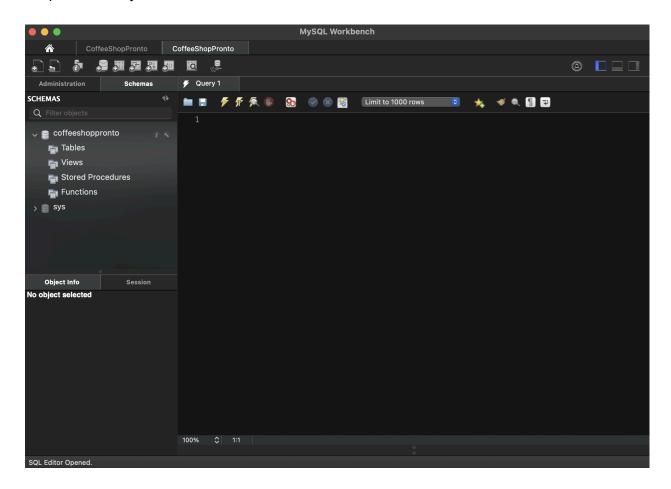
Step 1: Create MYSQL Connection -> CoffeeShopPronto



Step 2: Create Database -> 'coffeeshoppronto'



Step 3: Currently, there are no tables in the database



Step 4: We will create table using Python code, in the next section

Source Code for Menu Display

We need to give different permissions based on the type of the user.

We have two different user types:

- 1] Admin
- 2] Customers

If we login as Admin we need to provide a password, before we can make any create/read/update/delete options in the database.

If we login as a Customer, we can place an order and view the total bill only.

```
def menu admin(user):
               helper.additem(mycon, (itemname, itemsize, itemcost))
               helper.readitem(mycon)
               helper.readitem(mycon)
                   itemid=input("Enter ItemId: ")
```

```
helper.addorder(mycon,orderchain)
            helper.readorder(mycon,user)
mycon = slqr.connect(host="localhost", user="admin", passwd="kingler79",
        orderNo=helper.readorder(mycon,user)
        lastestOrder=orderNo+1
            itemid=input("Enter ItemId: ")
        totalcost=helper.billgenerate(mycon,billno)
```

```
mycon.close()
def check user(user='guest'):
```

Source Code for SQL Queries

We have customizable SQL queries, which takes user inputs to perform operations on Database

```
DATABASE="coffeeshoppronto"

def additem(mycon,itemValues):
    if mycon.is_connected():
        print("Successfully connected to mysql")
        cursor = mycon.cursor()
        query = "INSERT INTO "+DATABASE+".`menu` (`ItemName`, `ItemSize`,`Cost`)

VALUES"+str(itemValues)+";"
    cursor.execute(query)
    mycon.commit()

def readitem(mycon):
    if mycon.is_connected():
        print("Successfully connected to mysql")
        cursor = mycon.cursor()
        display = "Describe " + DATABASE + ".`menu`;"
```

```
val = cursor.fetchall()
       data = cursor.fetchall()
def deleteitem(mycon):
def updateitem(mycon):
       for orderid, itemid, quant in orderchain:
          cursor.execute(query)
def readorder(mycon, user):
```

```
cursor.execute(display)
           val = cursor.fetchall()
       cursor.execute(showdata)
def deleteorder(mycon):
       cursor = mycon.cursor()
       readorder (mycon)
def updateorder(mycon):
       readorder(mycon)
       itemid=input("Enter item id of record to be updated ")
       cursor.execute(query)
def billgenerate(mycon, orderid):
```

```
if mycon.is_connected():
    cursor=mycon.cursor()
    query = "Select * from "+DATABASE+".`orderinfo` left join
"+DATABASE+".`menu` on
"+DATABASE+".`orderinfo`.`ItemId`="+DATABASE+".`menu`.`ItemId`;"
    cursor.execute(query)
    itemcost = cursor.fetchall()
    totalcost=0
    for val in itemcost:
        if val[0]==orderid:
            totalcost += val[2]*val[6]

mycon.commit()
return round(totalcost,2)
```

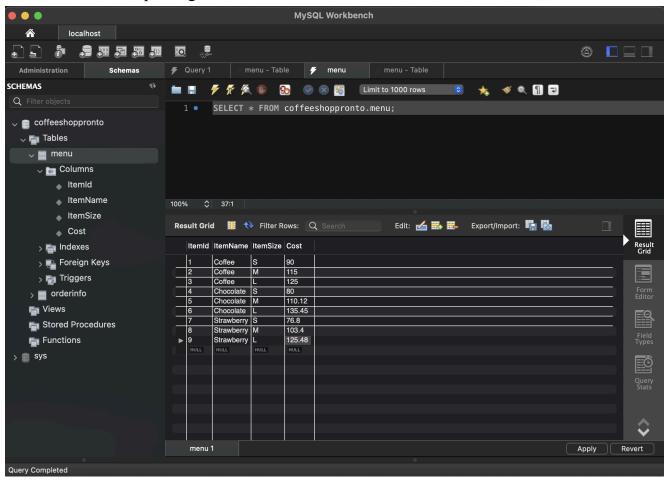
Output Log of Admin Action

Creating Menu

Create Menu Items with the following guided Menu for the Coffee Shop

```
### Coffee Shop Pronto ###
Enter username:admin
Enter password for admin: fin
Logining as admin
Which Table do you want to use?
 1.Menu
 2.Order
 3. Exit
 Admin Selection : 1
Which operation do you want to perform?:
 1.Create
 2.Read
 3.Update
 4.Delete
 5.Exit
Admin Selection 1
Enter Item Name: Coffee
Enter Item Size (S/M/L): S
Enter Item Cost: 90
Successfully connected to mysql
Done successfully !!
```

Similarly, we have executed and expanded Menu to have different beverages of different sizes and pricing as shown below.



Reading Menu as Admin

Read Menu Items with the following guided Menu for the Coffee Shop

```
Which Table do you want to use?
1.Menu
2.Order
Exit
Admin Selection : 1
Which operation do you want to perform?:
1.Create
2.Read
3.Update
4.Delete
5.Exit
Admin Selection 2
Successfully connected to mysql
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 115.0)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(10, 'Tea', 'M', 113.4)
(11, 'Tea', 'L', 135.64)
Done successfully !!
```

Updating Menu as Admin

Update Menu Items with the following guided Menu for the Coffee Shop

```
Which Table do you want to use?
1.Menu
2.Order
3. Exit
Admin Selection: 1
Which operation do you want to perform?:
1.Create
2.Read
3.Update
4.Delete
5.Exit
Admin Selection 3
Successfully connected to mysql
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 115.0)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(10, 'Tea', 'M', 113.4)
(11, 'Tea', 'L', 135.64)
Enter Item id of record to be updated2
Enter Item Colname of record to be updated Cost
Enter New Value to be updated127.85
Done successfully !!
```

You can see the updated Cost in the image shown below

```
Which Table do you want to use?
1.Menu
2.Order
Exit
Admin Selection : 1
Which operation do you want to perform?:
1.Create
2.Read
3.Update
4.Delete
5.Exit
Admin Selection 2
Successfully connected to mysql
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 127.85)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(10, 'Tea', 'M', 113.4)
(11, 'Tea', 'L', 135.64)
Done successfully !!
```

Deleting Menu as Admin

Delete Menu Items with the following guided Menu for the Coffee Shop

```
Which operation do you want to perform?:
 1.Create
 2.Read
 3.Update
 4.Delete
 5.Exit
Admin Selection 4
Successfully connected to mysql
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 127.85)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(11, 'Tea', 'L', 135.64)
Enter Item id of record to be deleted11
Done successfully !!
```

Creating Order as Admin

```
### Coffee Shop Pronto ###
Enter username:admin
Enter password for admin: fin
Logining as admin
Which Table do you want to use?
1.Menu
2.Order
Exit
Admin Selection : 2
Which operation do you want to perform?:
3.Update
4.Delete
5.Exit
Admin Selection: 1
Successfully connected to mysql
ItemId| ItemName| ItemSize| Cost|
(4, 'Chocolate', 'S', 80.0)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
Successfully connected to mysql
OrderId| ItemId| Quantity|
```

Viewing all orders as Admin

```
Which Table do you want to use?
 1.Menu
 2.Order
 3. Exit
 Admin Selection: 2
Which operation do you want to perform?:
 1.Create
 2.Read
 3.Update
 4.Delete
 5.Exit
 Admin Selection: 2
Successfully connected to mysql
OrderId| ItemId| Quantity|
(1, 2, 3)
(1, 8, 1)
Done successfully !!
```

Updating orders as Admin

```
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 127.85)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(10, 'Tea', 'M', 113.4)
Successfully connected to mysql
OrderId | ItemId | Quantity |
(1, 2, 3)
(1, 8, 1)
Enter order id of record to be updated 1
Enter item id of record to be updated 8
Enter Item Colname of record to be updated Quantity
Enter New Value to be updated 4
Done successfully !!
```

Deleting orders as Admin

```
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 127.85)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(10, 'Tea', 'M', 113.4)
Successfully connected to mysql
OrderId| ItemId| Quantity|
(1, 2, 3)
(1, 8, 4)
(2, 7, 3)
Enter order id to be deleted 2
Done successfully !!
Which Table do you want to use?
1.Menu
2.Order
Exit
Admin Selection: 7
Invalid option
Done successfully !!
```

Output Log of User Action

Reading Menu

Read Menu Items with the following guided Menu for the Coffee Shop

```
Enter username: Guest
Logining in as customer
1.Read the Menu
2.Place the Order
3. View Bill
 4. Exit
Customer Selection : 1
Successfully connected to mysql
ItemId| ItemName| ItemSize| Cost|
(1, 'Coffee', 'S', 90.0)
(2, 'Coffee', 'M', 127.85)
(3, 'Coffee', 'L', 125.0)
(4, 'Chocolate', 'S', 80.0)
(5, 'Chocolate', 'M', 110.12)
(6, 'Chocolate', 'L', 135.45)
(7, 'Strawberry', 'S', 76.8)
(8, 'Strawberry', 'M', 103.4)
(9, 'Strawberry', 'L', 125.48)
(10, 'Tea', 'M', 113.4)
Done successfully !!
```

Placing Order as a User

Place order using Menu Items with the following guided Menu for the Coffee Shop

```
🗬 main 🤇
  Enter username: Guest
  Logining in as customer
  1.Read the Menu
  2.Place the Order
  3. View Bill
  4. Exit
 Customer Selection : 2
  Successfully connected to mysql
  ItemId| ItemName| ItemSize| Cost|
  (1, 'Coffee', 'S', 90.0)
  (2, 'Coffee', 'M', 127.85)
  (3, 'Coffee', 'L', 125.0)
  (4, 'Chocolate', 'S', 80.0)
  (5, 'Chocolate', 'M', 110.12)
  (6, 'Chocolate', 'L', 135.45)
  (7, 'Strawberry', 'S', 76.8)
  (8, 'Strawberry', 'M', 103.4)
  (9, 'Strawberry', 'L', 125.48)
  (10, 'Tea', 'M', 113.4)
 Successfully connected to mysql
 Enter ItemId: 7
 Enter number of items: 3
 Do you want to add more items to your order:Y/NN
 Successfully connected to mysql
 Your OrderId is 2
  Done successfully !!
```

Viewing Bill as a User

Getting Total cost based on Orderld shared with the program