Subject : Programming for Scientific Computing(python)

Course Code : 2CS404

Innovative Assignment

Requirements:

- ❖ Softwares:
    - o Python 3.7 or above
    - o Oracle 11g
    - o Tkinter
    - o Python IDE (Spyder Recommended) – using IDE it will be easy to execute the program.
- ❖ Other Installations: (Packages /modules)
    - o pip install Pillow
    - o If you have both Pythons installed and want to install this for Python3: python3 -m pip install Pillow
    - o pip install cx_Oracle
    - o if any error occurs install the module which is required for the database installed in your system.

- • Database Table:
    - o Make Sure tables are created before the executing the program.
    - o Use the following query for the table creation:

        - ▪ Table for Stock Data
          create table madd454(itemid varchar2(10),itemname varchar2(20),brand varchar2(10),quantity varchar2(10),priceperquantity varchar2(20));

        - ▪ Table for Customer Data
          create table madd4541(name varchar2(30),itemname varchar2(30),contactno varchar2(16) ,dat varchar2(15),quantity varchar2(10),bill varchar2(15));

    - o In line number 7 in main.py file database is connected to python program
      con=cx_Oracle.connect("username/password@localhost")
      write the username and password of oracle database in the above line of code.
      Same changes required in customer1.py (line number 13) and stock_data.py (line number 7)
- ❖ Note:
    - o Inside the code make sure that path of the photos used are set properly.
    - o Photos are included in the zip file (don't modify the name of any file).

Usage Details :

- • On Running the main.py the program will start.

- The login page appears ,and administrator has to login to the software from the login page .
- By default , Username: "admin" and password: "123".It can be changed from the code.
- To run the program always run the "main.py" file.
- After login ,the welcome page appears on which there are two options: Stock Data and Customer Data.
- Press the button of whatever data you want to manage.
  - ❖ Inside Stock Data
    1. Add Item: it has the feature to add details of itemid , itemname ,brand , Quantity and price per quantity. Add the data as you wish which will be stored in the database.
    2. Search item: By entering the item-id , the all the Data/Record of that item will be displayed .
    3. Available item : In this section, all the data and record of the available Stock will be displayed .
    4. Main Menu: On clicking on this button ,it will bring back to the Welcome page.
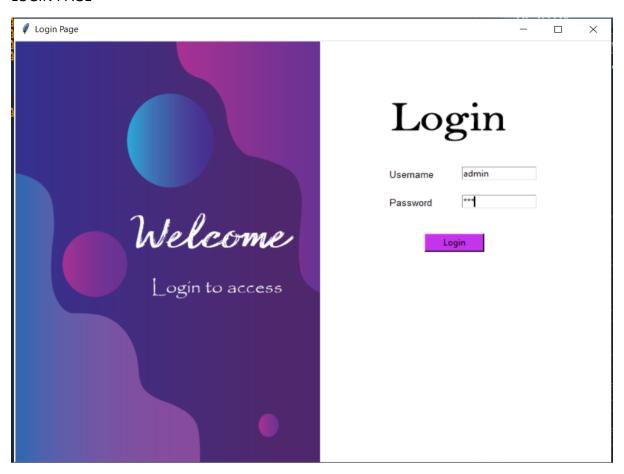 - ❖ Customer Data
    1. Add record: Inside this , there is feature to add Name of customer , The item /product that was purchased by customer , Contact Number , the date of purchase and the Quantity of product purchased.(Also adding the data of quantity of product purchased will deduct the same amount of quantity from the available stock data)
    2. Display : It will display all the records of the customer and related data about the purchase made by the customer.
    3. Search : By entering the name of the customer , all the records related to that name will be displayed.
    4. Main Menu: On clicking on this button ,it will bring back to the Welcome page.
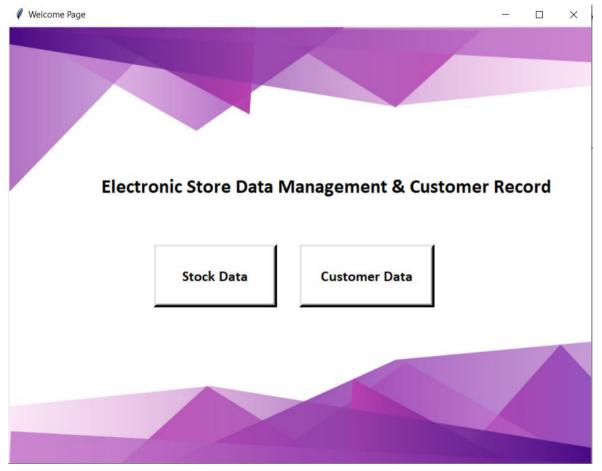
Features:

- Admin login to access the GUI program.
- Add stock data like : item-ID , Name of item ,Brand , Quantity and Price per quantity.
- Display record/data of the available stock.
- Search record/data by entering the id.
- Add Customer's records like Name,Details of product purchase, Quantity purchased, Contact info, etc.
- The quantity of product which are purchased are deducted from available stock.
- Display record/data of the customer.
- Search record/data of customer by entering the name.
- Can navigate back to the welcome page from any other page.
- If the data of product is added again then it will be added to the previous stock.

OUTPUT/SCREENSHOT:

LOGIN PAGE

WELCOME PAGE:

STOCK DATA:

Stockdata

Add Item	
Search Item	
Available Item	
<< Main Menu	

ItemId : 105

ItemName : OnePlus - 10

Brand: One Plus

Quantity: 50

Price per Quantity: 32000

Add   Reset

Stockdata

Add Item	
Search Item	
Available Item	
<< Main Menu	

Item-Id : 105

Enter   Reset

```
Id      |Name            |Brand   |Quantity       |Priceperquantity
105     |OnePlus - 10    |One Plus|50             |32000
```

```
Id     |Name            |Brand    |Quantity      |Priceperquantity
100    |hp pavillion    |hp       |790           |65000
105    |OnePlus - 10    |One Plus|50            |32000
102    |Canon EOS - 200D|Canon    |30            |40000
```

Customer Data:

Name   Phone Merchant

Item Name   OnePlus - 10

Contact no 9876543210

Date   07-07-2020

Quantity   20

Add

Window 1 (Customer Data - Display):

Sidebar buttons: Add Record | Display | Search | << Main Menu

```
Name |Itemname        |Number         |Date        |Quantity|Bill
dhruv|hp pavillion    |1234567890     |20-02-2020 |10       |650000
deep |OnePlus - 10    |9998887777     |25-12-2020 |10       |320000
Krushang|Canon EOS - 200D|8877995544  |01-01-2021 |8        |320000
Phone Merchant|OnePlus - 10   |9876543210  |07-07-2020 |20       |64000
```

Window 2 (Customer Data - Search):

Sidebar buttons: Add Record | Display | Search | << Main Menu

Search by Name :   dhruv

search   reset

```
Name |Itemname        |Number         |Date        |Quantity|Bill
dhruv|hp pavillion    |1234567890     |20-02-2020 |10       |650000
```
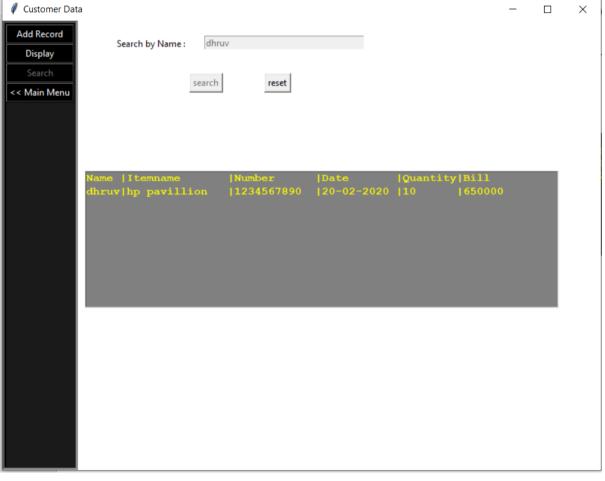
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