import tkinter

from tkinter import \*

from tkinter import ttk

from tkinter import font

from tkinter import messagebox

import mysql.connector

import os

from dotenv import load\_dotenv

load\_dotenv()

#Connecting to the database and creating table

db=mysql.connector.connect(user=os.getenv("DB\_USERNAME"),passwd=os.getenv("DB\_PASSWORD"),host=os.getenv("DB\_HOST"),database=os.getenv("DB\_NAME"))

my\_cursor=db.cursor()

#getting the cursor object

my\_cursor.execute("CREATE DATABASE IF NOT EXISTS Shop") #creating the database named library

db=mysql.connector.connect(user=os.getenv("DB\_USERNAME"),passwd=os.getenv("DB\_PASSWORD"),host=os.getenv("DB\_HOST"),database=os.getenv("DB\_NAME"))

my\_cursor=db.cursor()

#query to create a table products

query="CREATE TABLE IF NOT EXISTS products (date VARCHAR(10),prodName VARCHAR(20), prodPrice VARCHAR(50))"

my\_cursor.execute(query)

#executing the query

db=mysql.connector.connect(user=os.getenv("DB\_USERNAME"),passwd=os.getenv("DB\_PASSWORD"),host=os.getenv("DB\_HOST"),database=os.getenv("DB\_NAME"))

my\_cursor=db.cursor()

#query to create a table sale

query="CREATE TABLE IF NOT EXISTS sale (custName VARCHAR(20), date VARCHAR(10), prodName VARCHAR(30),qty INTEGER, price INTEGER )"

my\_cursor.execute(query) #executing the query

# Function to add the product to the database

def prodtoTable():

#Getting the user inputs of product details from the user

pname= prodName.get()

price = prodPrice.get()

dt = date.get()

#Connecting to the database

db=mysql.connector.connect(user=os.getenv("DB\_USERNAME"),passwd=os.getenv("DB\_PASSWORD"),

host=os.getenv("DB\_HOST"),database=os.getenv("DB\_NAME"))

cursor = db.cursor()

#query to add the product details to the table

query = "INSERT INTO products(date,prodName,prodPrice) VALUES(%s,%s,%s)"

details = (dt,pname,price)

#Executing the query and showing the pop up message

try:

cursor.execute(query,details)

db.commit()

messagebox.showinfo('Success',"Product added successfully")

except Exception as e:

print("The exception is:",e)

messagebox.showinfo("Error","Trouble adding data into Database")

wn.destroy()

#Function to get details of the product to be added

def addProd():

global prodName, prodPrice, date, Canvas1, wn

#Creating the window

wn = tkinter.Tk()

wn.title(os.getenv("APP\_TITLE"))

wn.configure(bg='mint cream')

wn.minsize(width=500,height=500)

wn.geometry("700x600")

Canvas1 = Canvas(wn)

Canvas1.config(bg='LightBlue1')

Canvas1.pack(expand=True,fill=BOTH)

headingFrame1 = Frame(wn,bg='LightBlue1',bd=5)

headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

headingLabel = Label(headingFrame1, text="Add a Product", fg='grey19', font=('Courier',15,'bold'))

headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

labelFrame = Frame(wn)

labelFrame.place(relx=0.1,rely=0.4,relwidth=0.8,relheight=0.4)

# Getting Date

lable1 = Label(labelFrame,text="Date : ", fg='black')

lable1.place(relx=0.05,rely=0.3, relheight=0.08)

date = Entry(labelFrame)

date.place(relx=0.3,rely=0.3, relwidth=0.62, relheight=0.08)

# Product Name

lable2 = Label(labelFrame,text="Product Name : ", fg='black')

lable2.place(relx=0.05,rely=0.45, relheight=0.08)

prodName = Entry(labelFrame)

prodName.place(relx=0.3,rely=0.45, relwidth=0.62, relheight=0.08)

# Product Price

lable3 = Label(labelFrame,text="Product Price : ", fg='black')

lable3.place(relx=0.05,rely=0.6, relheight=0.08)

prodPrice = Entry(labelFrame)

prodPrice.place(relx=0.3,rely=0.6, relwidth=0.62, relheight=0.08)

# Add Button

Btn = Button(wn,text="ADD",bg='#d1ccc0', fg='black',command=prodtoTable)

Btn.place(relx=0.28,rely=0.85, relwidth=0.18,relheight=0.08)

Quit= Button(wn,text="Quit",bg='#f7f1e3', fg='black',command=wn.destroy)

Quit.place(relx=0.53,rely=0.85, relwidth=0.18,relheight=0.08)

wn.mainloop()

# Function to remove the product from the database

def removeProd():

#Getting the product name from the user to be removed

name = prodName.get()

name = name.lower()

#Connecting to the database

db=mysql.connector.connect(user=os.getenv("DB\_USERNAME"),passwd=os.getenv("DB\_PASSWORD"),host=os.getenv("DB\_HOST"),database=os.getenv("DB\_NAME"))

cursor = db.cursor()

#Query to delete the respective product from the database

query = "DELETE from products where LOWER(prodName) = '"+name+"'"

#Executing the query and showing the message box

try:

cursor.execute(query)

db.commit()

messagebox.showinfo('Success',"Product Record Deleted Successfully")

except Exception as e:

print("The exception is:",e)

messagebox.showinfo("Please check Product Name")

wn.destroy()

# Function to get product details from the user to be deleted

def delProd():

global prodName, Canvas1, wn

#Creating a window

wn = tkinter.Tk()

wn.title(os.getenv("APP\_TITLE"))

wn.configure(bg='mint cream')

wn.minsize(width=500,height=500)

wn.geometry("700x600")

Canvas1 = Canvas(wn)

Canvas1.config(bg="misty rose")

Canvas1.pack(expand=True,fill=BOTH)

headingFrame1 = Frame(wn,bg="misty rose",bd=5)

headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

headingLabel = Label(headingFrame1, text="Delete Product", fg='grey19', font=('Courier',15,'bold'))

headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

labelFrame = Frame(wn)

labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)

# Product Name to Delete

lable = Label(labelFrame,text="Product Name : ", fg='black')

lable.place(relx=0.05,rely=0.5)

prodName = Entry(labelFrame)

prodName.place(relx=0.3,rely=0.5, relwidth=0.62)

# Delete Button

Btn = Button(wn,text="DELETE",bg='#d1ccc0', fg='black',command=removeProd)

Btn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)

Quit = Button(wn,text="Quit",bg='#f7f1e3', fg='black', command=wn.destroy)

Quit.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)

wn.mainloop()

def viewProds():

global wn

# Creating the window to show the products details

wn = tkinter.Tk()

wn.title(os.getenv("APP\_TITLE"))

wn.configure(bg='mint cream')

wn.minsize(width=500, height=500)

wn.geometry("700x600")

Canvas1 = Canvas(wn)

Canvas1.config(bg="old lace")

Canvas1.pack(expand=True, fill=BOTH)

headingFrame1 = Frame(wn, bg='old lace', bd=5)

headingFrame1.place(relx=0.25, rely=0.1, relwidth=0.5, relheight=0.13)

headingLabel = Label(headingFrame1, text="View Products", fg='black', font=('Courier', 15, 'bold'))

headingLabel.place(relx=0, rely=0, relwidth=1, relheight=1)

labelFrame = Frame(wn)

labelFrame.place(relx=0.1, rely=0.3, relwidth=0.8, relheight=0.5)

y = 0.25

# Connecting to database

db = mysql.connector.connect(user=os.getenv("DB\_USERNAME"), passwd=os.getenv("DB\_PASSWORD"), host=os.getenv("DB\_HOST"), database=os.getenv("DB\_NAME"))

cursor = db.cursor()

# Query to select all products from the table

query = 'SELECT \* FROM products'

Label(labelFrame, text="%-50s%-50s%-50s" % ('Date', 'Product', 'Price'), font=('calibri', 11, 'bold'), fg='black').place(relx=0.07, rely=0.1)

Label(labelFrame, text="----------------------------------------------------------------------------", fg='black').place(relx=0.05, rely=0.2)

try:

cursor.execute(query)

res = cursor.fetchall()

for i in res:

# Decode byte arrays to strings using UTF-8 encoding

date\_str = i[0]

prodName\_str = i[1]

prodPrice\_str = i[2]

Label(labelFrame, text="%-50s%-50s%-50s" % (date\_str, prodName\_str, prodPrice\_str), fg='black').place(relx=0.07, rely=y)

y += 0.1

except Exception as e:

print("The exception is:", e)

messagebox.showinfo("Failed to fetch files from database")

Quit = Button(wn, text="Quit", bg='#f7f1e3', fg='black', command=wn.destroy)

Quit.place(relx=0.4, rely=0.9, relwidth=0.18, relheight=0.08)

wn.mainloop()

def bill():

# Creating a window

wn = tkinter.Tk()

wn.title(os.getenv("APP\_TITLE"))

wn.configure(bg='#FFF0F5')

wn.minsize(width=500, height=500)

wn.geometry("700x600")

headingFrame1 = Frame(wn, bg="#FFF0F5", bd=5)

headingFrame1.place(relx=0.2, rely=0.1, relwidth=0.6, relheight=0.16)

headingLabel = Label(headingFrame1, text="Bill", fg='grey19', font=('Courier', 15, 'bold'))

headingLabel.place(relx=0, rely=0, relwidth=1, relheight=1)

labelFrame = Frame(wn)

labelFrame.place(relx=0.1, rely=0.3, relwidth=0.8, relheight=0.5)

y = 0.35

Label(labelFrame, text="%-40s%-40s%-40s%-40s" % ('Product', 'Price', 'Quantity', 'Total'), font=('calibri', 11, 'bold'),

fg='black').place(relx=0.07, rely=0.2)

# Getting date and customer name

dt = date.get()

cName = custName.get()

totalBill = 0

# Connecting to database

db = mysql.connector.connect(user=os.getenv("DB\_USERNAME"), passwd=os.getenv("DB\_PASSWORD"), host=os.getenv("DB\_HOST"), database=os.getenv("DB\_NAME"))

cursor = db.cursor()

# Query to select all the products

query = 'SELECT \* FROM products'

cursor.execute(query)

res = cursor.fetchall()

# Checking if the quantity of the 1st product is entered and calculating price, showing it on window, and adding to database

if len(name1.get()) != 0:

i = res[0]

qty = int(name1.get())

price = int(i[2]) # Decode product price from byte array

total = qty \* price

product\_name = i[1] # Decode product name from byte array

Label(labelFrame, text="%-40s%-40s%-40s%-40s" % (product\_name, price, qty, total), fg='black').place(relx=0.07, rely=y)

totalBill += total

y += 0.1

query = "INSERT INTO sale(date,custName, prodName, qty, total) VALUES(%s, %s, %s, %s, %s)"

details = (cName, dt, product\_name, qty, total)

# Checking if the quantity of the 2nd product is entered and calculating price, showing it on window, and adding to database

if len(name2.get()) != 0:

i = res[1]

qty = int(name2.get())

price = int(i[2]) # Decode product price from byte array

total = qty \* price

product\_name = i[1] # Decode product name from byte array

Label(labelFrame, text="%-40s%-40s%-40s%-40s" % (product\_name, price, qty, total), fg='black').place(relx=0.07, rely=y)

totalBill += total

y += 0.1

query = "INSERT INTO sale(date,custName, prodName, qty, total) VALUES(%s, %s, %s, %s, %s)"

details = (cName, dt, product\_name, qty, total)

# Checking if the quantity of the 3rd product is entered and calculating price, showing it on window, and adding to database

if len(name3.get()) != 0:

i = res[2]

qty = int(name3.get())

price = int(i[2]) # Decode product price from byte array

total = qty \* price

product\_name = i[1] # Decode product name from byte array

Label(labelFrame, text="%-40s%-40s%-40s%-40s" % (product\_name, price, qty, total), fg='black').place(relx=0.07, rely=y)

totalBill += total

y += 0.1

query = "INSERT INTO sale(date,custName, prodName, qty, total) VALUES(%s, %s, %s, %s, %s)"

details = (cName, dt, product\_name, qty, total)

# Showing total of the bill

Label(labelFrame, text="------------------------------------------------------------------------------------", fg='black').place(relx=0.05, rely=y)

y += 0.1

Label(labelFrame, text="\t\t\t\t\t\t\t\t" + str(totalBill), fg='black').place(relx=0.07, rely=y)

Quit = Button(wn, text="Quit", bg='#f7f1e3', fg='black', command=wn.destroy)

Quit.place(relx=0.53, rely=0.9, relwidth=0.18, relheight=0.08)

wn.mainloop()

# Function to take user input for generating bill

def genBill():

global wn, custName, date, name1, name2, name3, name4

#Creating a window

wn = tkinter.Tk()

wn.title(os.getenv("APP\_TITLE"))

wn.configure(bg='alice blue')

wn.minsize(width=500,height=500)

wn.geometry("700x600")

headingFrame1 = Frame(wn,bg="alice blue",bd=5)

headingFrame1.place(relx=0.2,rely=0.1,relwidth=0.6,relheight=0.16)

headingLabel = Label(headingFrame1, text="Generate Bill", fg='grey19', font=('Courier',15,'bold'))

headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

labelFrame = Frame(wn)

labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)

# Date Entry

lable1 = Label(labelFrame,text="Date : ", fg='black')

lable1.place(relx=0.05,rely=0.2)

date = Entry(labelFrame)

date.place(relx=0.3,rely=0.2, relwidth=0.62)

# Customer Name Entry

lable2 = Label(labelFrame,text="Customer Name : ", fg='black')

lable2.place(relx=0.05,rely=0.3)

custName = Entry(labelFrame)

custName.place(relx=0.3,rely=0.3, relwidth=0.62)

# Product 1 details Entry

lable3 = Label(labelFrame,text="Product 1 : ", fg='black')

lable3.place(relx=0.05,rely=0.4)

name1 = Entry(labelFrame)

name1.place(relx=0.3,rely=0.4, relwidth=0.62)

# Product 2 details Entry

lable4 = Label(labelFrame,text="Product 2 : ", fg='black')

lable4.place(relx=0.05,rely=0.5)

name2 = Entry(labelFrame)

name2.place(relx=0.3,rely=0.5, relwidth=0.62)

# Product 3 details Entry

lable5 = Label(labelFrame,text="Product 3 : ", fg='black')

lable5.place(relx=0.05,rely=0.6)

name3 = Entry(labelFrame)

name3.place(relx=0.3,rely=0.6, relwidth=0.62)

# Product 4 details Entry

lable6 = Label(labelFrame,text="Product 4 : ", fg='black')

lable6.place(relx=0.05,rely=0.7)

name4 = Entry(labelFrame)

name4.place(relx=0.3,rely=0.7, relwidth=0.62)

#Generate bill button

Btn = Button(wn,text="Generate Bill",bg='#d1ccc0', fg='black',command=bill)

Btn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)

Quit= Button(wn,text="Quit",bg='#f7f1e3', fg='black', command=wn.destroy)

Quit.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)

wn.mainloop()

# Main window of the application

wn = tkinter.Tk()

wn.title(os.getenv("APP\_TITLE"))

wn.configure(bg='powder blue')

wn.minsize(width=500,height=500)

wn.geometry("700x600")

headingFrame1 = Frame(wn,bg="powder blue",bd=5)

headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

headingLabel = Label(headingFrame1, text=f"WELCOME TO {os.getenv('APP\_TITLE')}", fg='grey19', font=('Courier',15,'bold'))

headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

# Add Product Button

addProduct = Button(wn,text="Add Product",bg='#d1ccc0', fg='black',command=addProd)

addProduct.place(relx=0.28,rely=0.4, relwidth=0.45,relheight=0.1)

# Remove Product Button

remProduct = Button(wn,text="Remove Product",bg='#d1ccc0', fg='black',command=delProd)

remProduct.place(relx=0.28,rely=0.5, relwidth=0.45,relheight=0.1)

# View Products Button

viewProducts = Button(wn,text="View Products",bg='#d1ccc0', fg='black',command=viewProds)

viewProducts.place(relx=0.28,rely=0.6, relwidth=0.45,relheight=0.1)

# Generate Bill Button

genBill = Button(wn,text="Generate Bill",bg='#d1ccc0', fg='black',command=genBill)

genBill.place(relx=0.28,rely=0.7, relwidth=0.45,relheight=0.1)

# Quit Button

quitButton = Button(wn,text="Quit",bg='#f7f1e3', fg='black', command=wn.destroy)

quitButton.place(relx=0.28,rely=0.8, relwidth=0.45,relheight=0.1)

wn.mainloop()













