

PYTHON PROJECT 1: SMITH GRACE

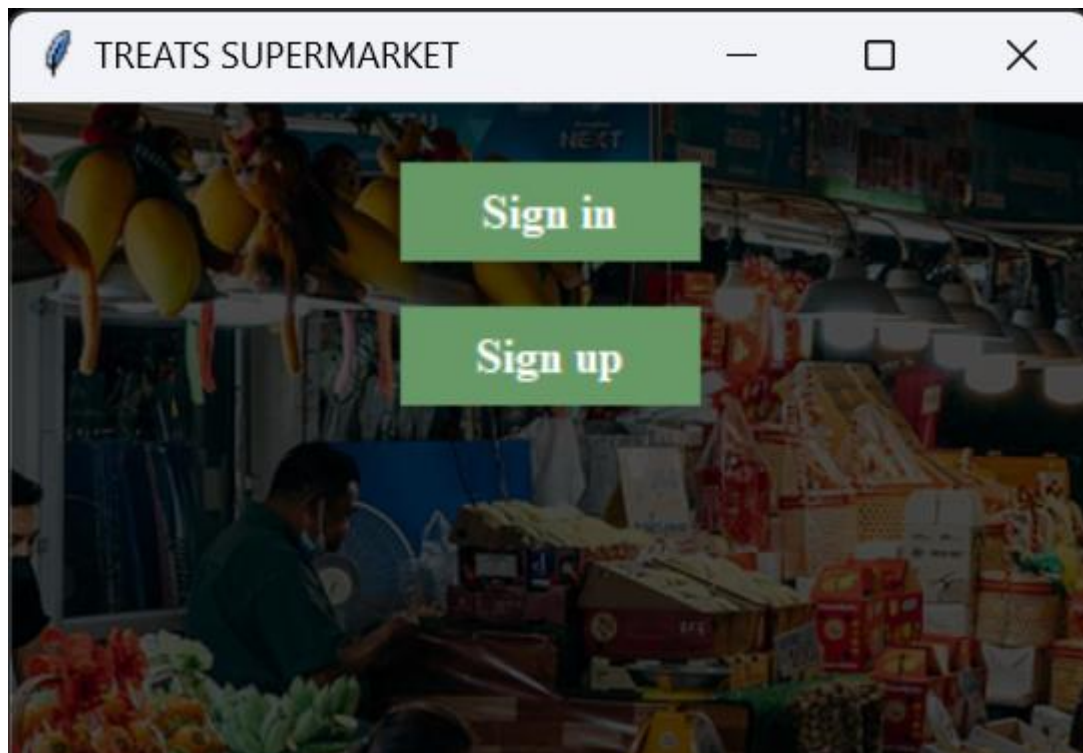
AN AUTOMATED INVENTORY SYSTEM WITH TEXT TO SPEECH FEATURES.

APP OVERVIEW:

This automated inventory app is for a supermarket called 'TREATS'. Please note that this app is already connected to a locally hosted XAMPP database server. It has six windows briefly explained below:

- ❖ **The Welcome Window:** This window has the sign in and sign-up buttons that lead to the sign in and sign up windows.
- ❖ **The Sign-Up Window:** This window is where new staff can register into the supermarket's database after being employed. It is assumed that registration is permitted since it is being done on the company computer.

Welcome Window



Sign Up Window



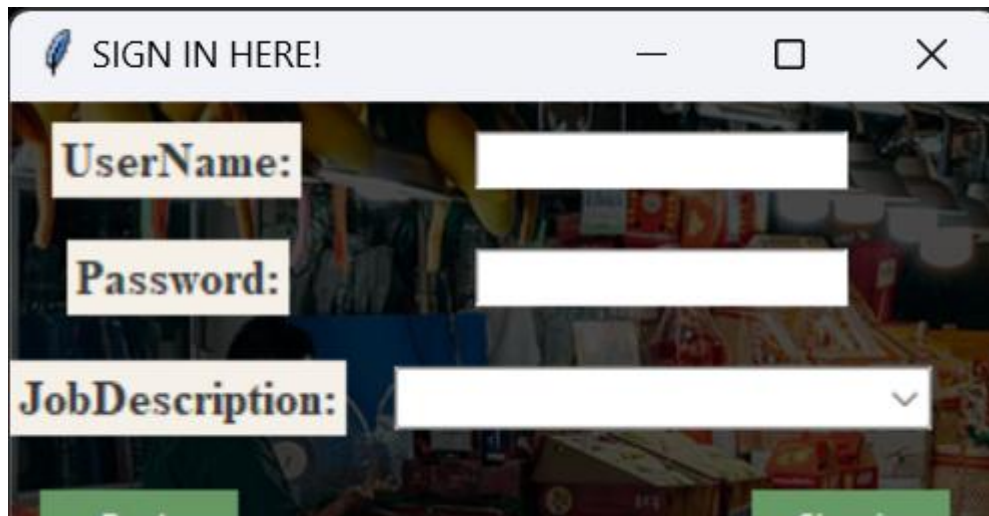
The image shows a screenshot of a web application window titled "SIGN UP HERE!". The window contains a registration form with the following fields:

- FirstName: [Text Input]
- LastName: [Text Input]
- Password: [Text Input]
- Email: [Text Input]
- PhoneNumber: [Text Input]
- Gender: [Text Input]
- Age: [Text Input]
- Address: [Text Input]
- JobDescription: [Dropdown Menu]
- JobRole: [Dropdown Menu]

At the bottom of the form, there are two buttons: "Back" and "Register". The background of the form is a blurred image of a market stall.

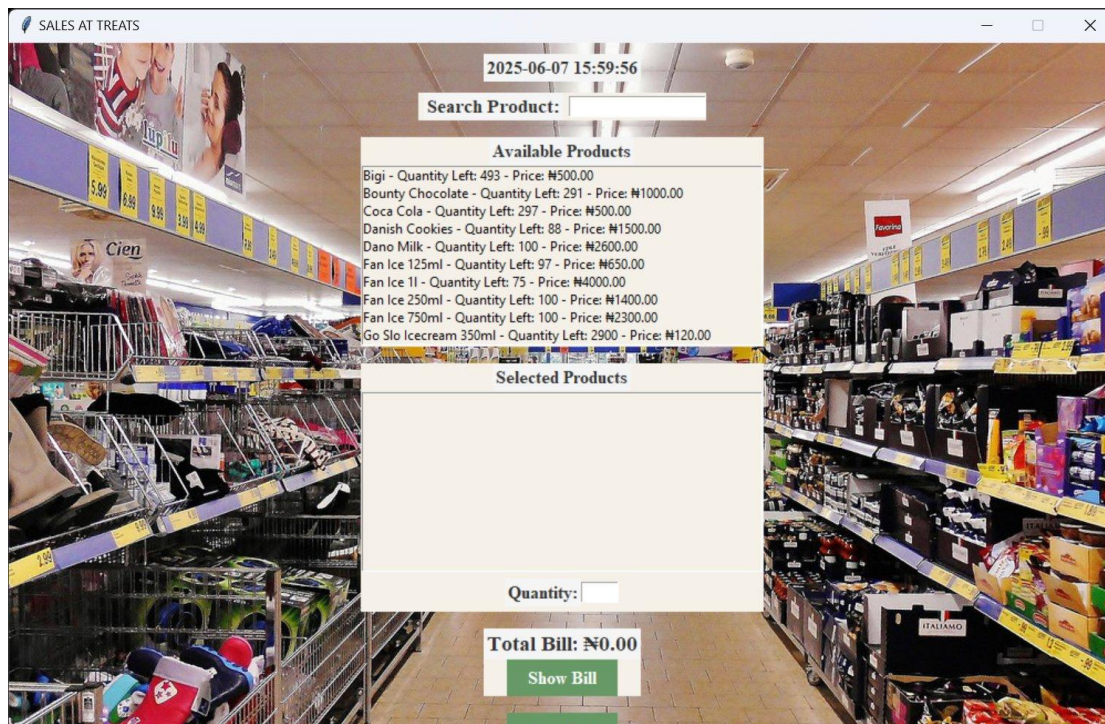
- ❖ **The Sign In Window:** After signing up, the staff can now sign in and have access to different dashboards depending on their job descriptions i.e if a new staff has been registered as a salesperson, he/she can only have access to the salespersons' window and access is denied if he/she tries to access the dashboard for another job description.
- ❖ **The Salesperson Window:** This is for the salesperson, he/she can: see products in the database, search for products to be bought by the customer, calculate the bill and print the bill. The text to speech features show when the bill has been calculated. These are the only things the Salesperson is permitted to do.

Sign In Window



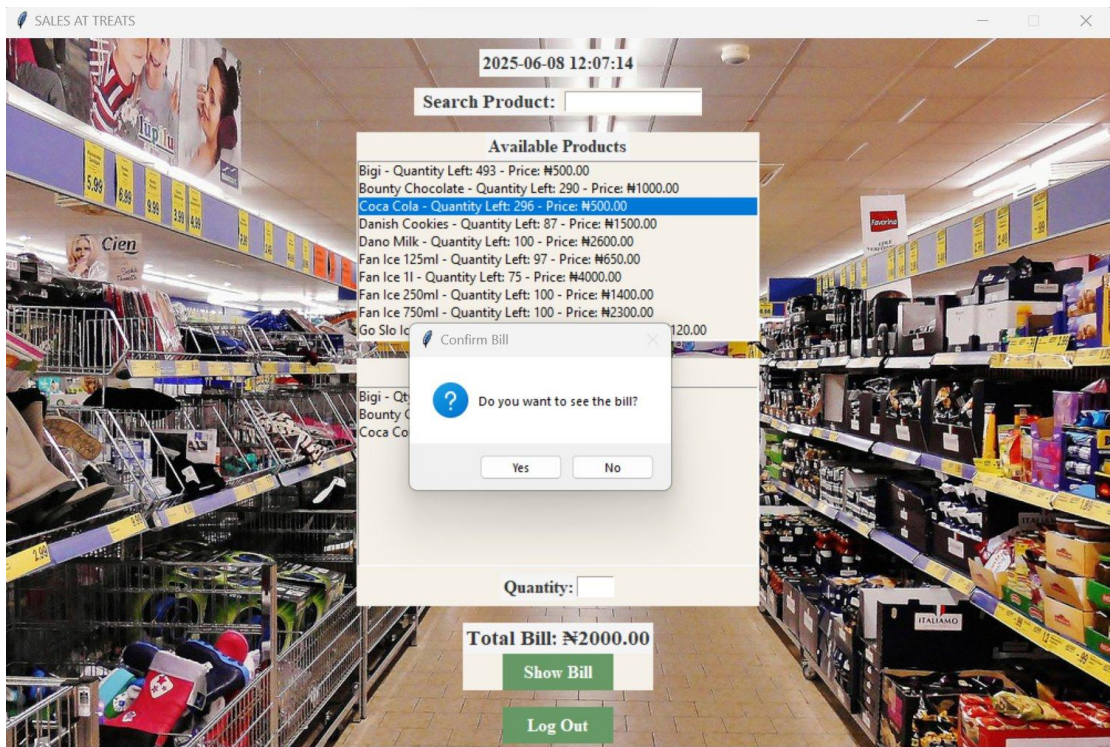
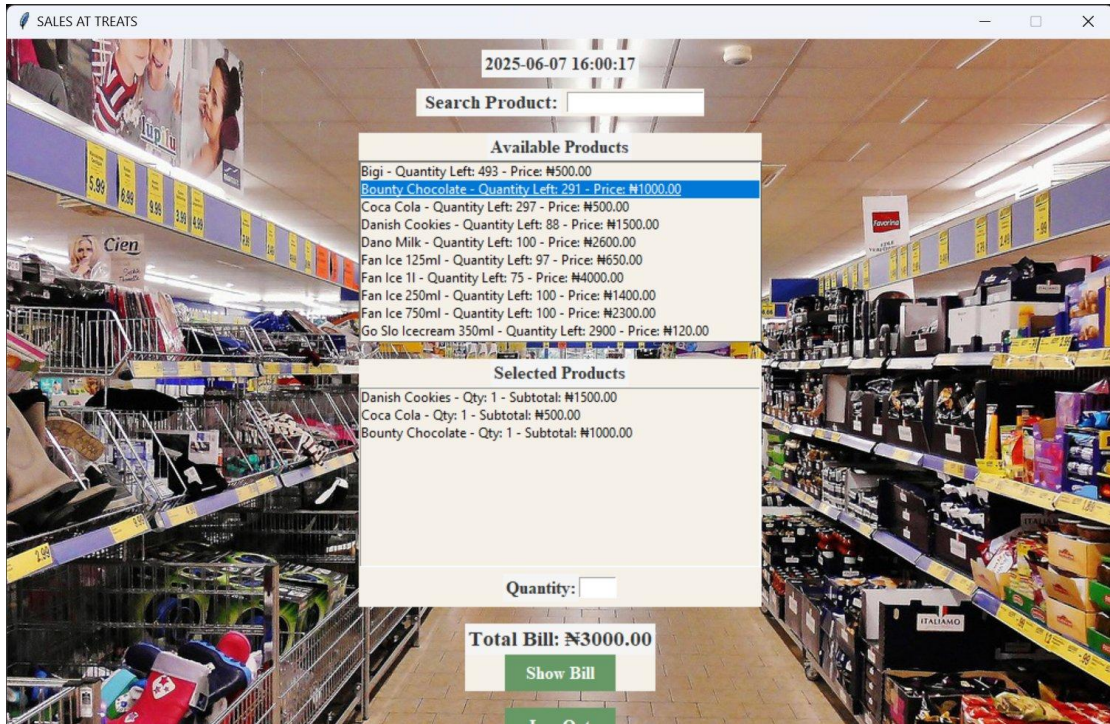
The screenshot shows a window titled "SIGN IN HERE!" with a feather icon on the left and standard window controls (minimize, maximize, close) on the right. The background is a blurred image of a store aisle. The form contains three input fields: "UserName:" with a white text box, "Password:" with a white text box, and "JobDescription:" with a white dropdown menu. A green button is partially visible at the bottom.

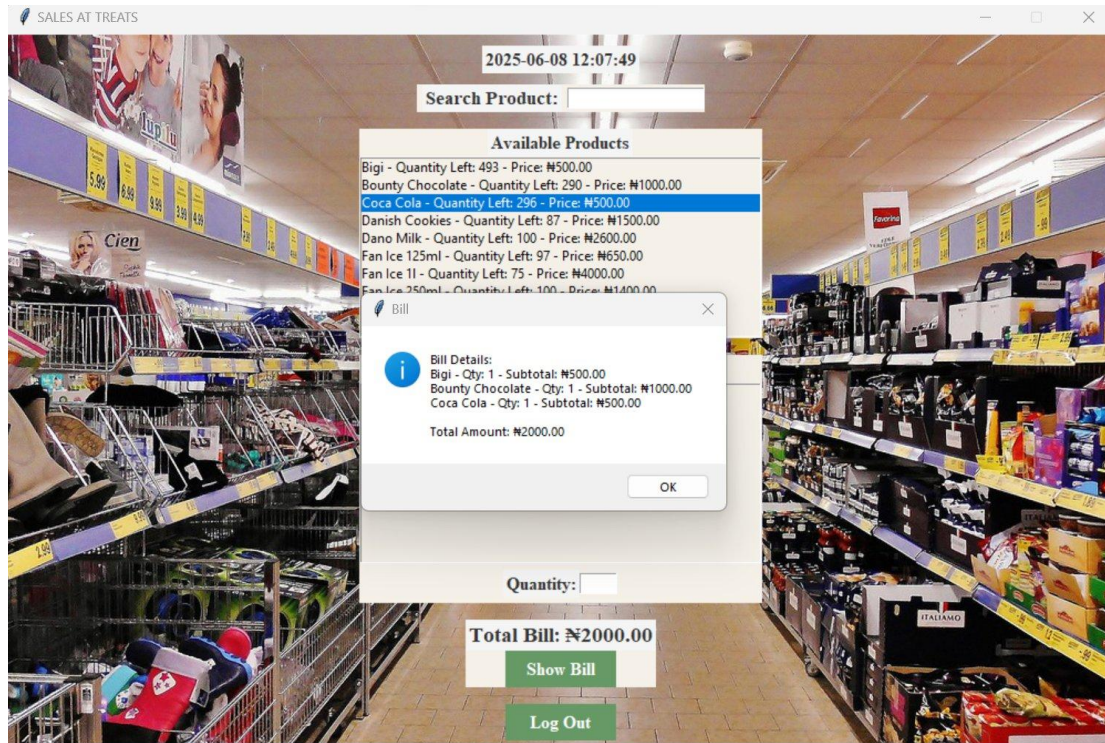
Salesperson Window and Functionality



The screenshot shows a window titled "SALES AT TREATS" with a feather icon on the left and standard window controls on the right. The background is a blurred image of a store aisle. The window displays a date and time "2025-06-07 15:59:56" and a "Search Product:" input field. Below this is a list of "Available Products" with their respective quantities and prices. A "Selected Products" section is currently empty. At the bottom, there is a "Quantity:" input field, a "Total Bill: ₦0.00" display, and a green "Show Bill" button.

Available Products	
Bigi - Quantity Left: 493 - Price: ₦500.00	
Bounty Chocolate - Quantity Left: 291 - Price: ₦1000.00	
Coca Cola - Quantity Left: 297 - Price: ₦500.00	
Danish Cookies - Quantity Left: 88 - Price: ₦1500.00	
Dano Milk - Quantity Left: 100 - Price: ₦2600.00	
Fan Ice 125ml - Quantity Left: 97 - Price: ₦650.00	
Fan Ice 1l - Quantity Left: 75 - Price: ₦4000.00	
Fan Ice 250ml - Quantity Left: 100 - Price: ₦1400.00	
Fan Ice 750ml - Quantity Left: 100 - Price: ₦2300.00	
Go Slo Icecream 350ml - Quantity Left: 2900 - Price: ₦120.00	





- ❖ **The Inventory Personnel Window:** This window is for those taking stock of the products available in the supermarket. The only thing they can do is enter products into the database with their prices and the quantity of the products available.
- ❖ **The Admin Window:** This window is for the supervisor and director of the supermarket. Since they oversee the company, they can do basically everything including: restricting a staff from logging in, adding new staff to the database, removing staff from the database, add new products as well as editing existing ones.

Inventory Personnel Window

The screenshot shows a window titled "INVENTORY AT TREATS" with a background image of a grocery store aisle. In the center, there is a form with three input fields: "Item Name:", "Quantity:", and "Price (₦):". Below these fields is a green "Add Item" button. A timestamp "2025-06-07 16:02:08" is displayed above a list of inventory items. The list is titled "Inventory Items and Quantities:" and contains the following items:

- Bigi - Quantity Left: 493 - Price: ₦500.00
- Bounty Chocolate - Quantity Left: 290 - Price: ₦1000.00
- Coca Cola - Quantity Left: 296 - Price: ₦500.00
- Danish Cookies - Quantity Left: 87 - Price: ₦1500.00
- Dano Milk - Quantity Left: 100 - Price: ₦2600.00
- Fan Ice 125ml - Quantity Left: 97 - Price: ₦650.00
- Fan Ice 1l - Quantity Left: 75 - Price: ₦4000.00
- Fan Ice 250ml - Quantity Left: 100 - Price: ₦1400.00
- Fan Ice 750ml - Quantity Left: 100 - Price: ₦2300.00
- Go Slo Icecream 350ml - Quantity Left: 2900 - Price: ₦120.00
- Go Slo Icecream 700ml - Quantity Left: 6500 - Price: ₦100.00
- Lacaseria - Quantity Left: 200 - Price: ₦350.00
- Malt - Quantity Left: 400 - Price: ₦550.00
- Maryland Cookies - Quantity Left: 6 - Price: ₦1000.00
- Mirinda - Quantity Left: 150 - Price: ₦500.00
- Pepsi - Quantity Left: 200 - Price: ₦500.00
- Snickers Chocolate - Quantity Left: 250 - Price: ₦1200.00
- Sosa Big - Quantity Left: 250 - Price: ₦900.00
- Sosa Small - Quantity Left: 300 - Price: ₦350.00
- Treats Bread Big - Quantity Left: 50 - Price: ₦1500.00
- Treats Bread Large - Quantity Left: 50 - Price: ₦2200.00

Admin Window and Functionality

The screenshot shows a window titled "SUPERVISING TREATS" with a background image of a grocery store aisle. A timestamp "2025-06-07 16:03:01" is displayed at the top. The window is divided into two main sections: "Staff Management" and "Product Management".

Staff Management

- A list of staff members with their names and email addresses: Ayo Salami - ayo.com, Damilola Williams - dami.com, Grace Smith - grace.com, Femi Falana - femi.com, Sayo Ade - sayo.com, and Bola Martins - bola.com. The "Bola Martins - bola.com" entry is highlighted in blue.
- Four green buttons are positioned to the right of the list: "Restrict Login", "Unrestrict Login", "Add Staff", and "Remove Staff".

Product Management

- A list of products with their names, quantities, and prices: Danish Cookies - Qty: 87 - Price: ₦1500.0, Maryland Cookies - Qty: 6 - Price: ₦1000.0, Bounty Chocolate - Qty: 290 - Price: ₦1000.0, Go Slo Icecream 350ml - Qty: 2900 - Price: ₦120.0, Go Slo Icecream 700ml - Qty: 6500 - Price: ₦100.0, Snickers Chocolate - Qty: 250 - Price: ₦1200.0, Treats Bread Small - Qty: 50 - Price: ₦400.0, Treats Bread Medium - Qty: 50 - Price: ₦900.0, Treats Bread Big - Qty: 50 - Price: ₦1500.0, Treats Bread Large - Qty: 50 - Price: ₦2200.0, Sosa Small - Qty: 300 - Price: ₦350.0, and Sosa Big - Qty: 250 - Price: ₦900.0.
- Two green buttons are positioned to the right of the list: "Add Product" and "Edit Product".

SUPERVISING TREATS 2025-06-08 12:04:31

Staff Management

Ayo Salami - ayo.com
Damilola Williams - dami.com
Grace Smith - grace.com
Femi Falana - femi.com
Sayo Ade - sayo.com
Bola Martins - bola.com

Restrict Login

Unrestrict Login

Add Staff

Remove Staff

Add Staff

First Name:

Last Name:

Email:

Add Staff

Product Management

Danish Cookies - Qty: 87 - Price: ₦1500.0
Maryland Cookies - Qty: 6 - Price: ₦1000.0
Bounty Chocolate - Qty: 290 - Price: ₦1000.0
Go Slo Icecream 350ml - Qty: 2900 - Price: ₦120.0
Go Slo Icecream 700ml - Qty: 6500 - Price: ₦100.0
Snickers Chocolate - Qty: 250 - Price: ₦1200.0
Treats Bread Small - Qty: 50 - Price: ₦400.0
Treats Bread Medium - Qty: 50 - Price: ₦900.0
Treats Bread Big - Qty: 50 - Price: ₦1500.0
Treats Bread Large - Qty: 50 - Price: ₦2200.0
Sosa Small - Qty: 300 - Price: ₦350.0
Sosa Big - Qty: 250 - Price: ₦900.0

Add Product

Edit Product

Log Out

SUPERVISING TREATS 2025-06-08 12:05:32

Staff Management

Ayo Salami - ayo.com
Damilola Williams - dami.com
Grace Smith - grace.com
Femi Falana - femi.com
Sayo Ade - sayo.com
Bola Martins - bola.com

Restrict Login

Unrestrict Login

Add Staff

Remove Staff

Add Product

Product Name:

Quantity:

Price:

Add Product

Product Management

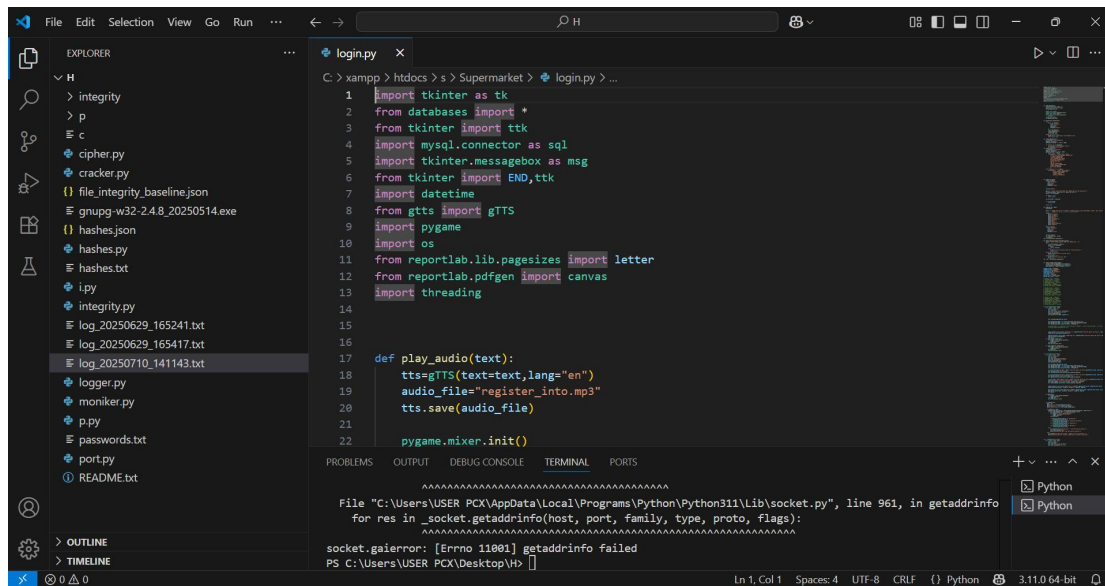
Danish Cookies - Qty: 87 - Price: ₦1500.0
Maryland Cookies - Qty: 6 - Price: ₦1000.0
Bounty Chocolate - Qty: 290 - Price: ₦1000.0
Go Slo Icecream 350ml - Qty: 2900 - Price: ₦120.0
Go Slo Icecream 700ml - Qty: 6500 - Price: ₦100.0
Snickers Chocolate - Qty: 250 - Price: ₦1200.0
Treats Bread Small - Qty: 50 - Price: ₦400.0
Treats Bread Medium - Qty: 50 - Price: ₦900.0
Treats Bread Big - Qty: 50 - Price: ₦1500.0
Treats Bread Large - Qty: 50 - Price: ₦2200.0
Sosa Small - Qty: 300 - Price: ₦350.0
Sosa Big - Qty: 250 - Price: ₦900.0

Add Product

Edit Product

Log Out

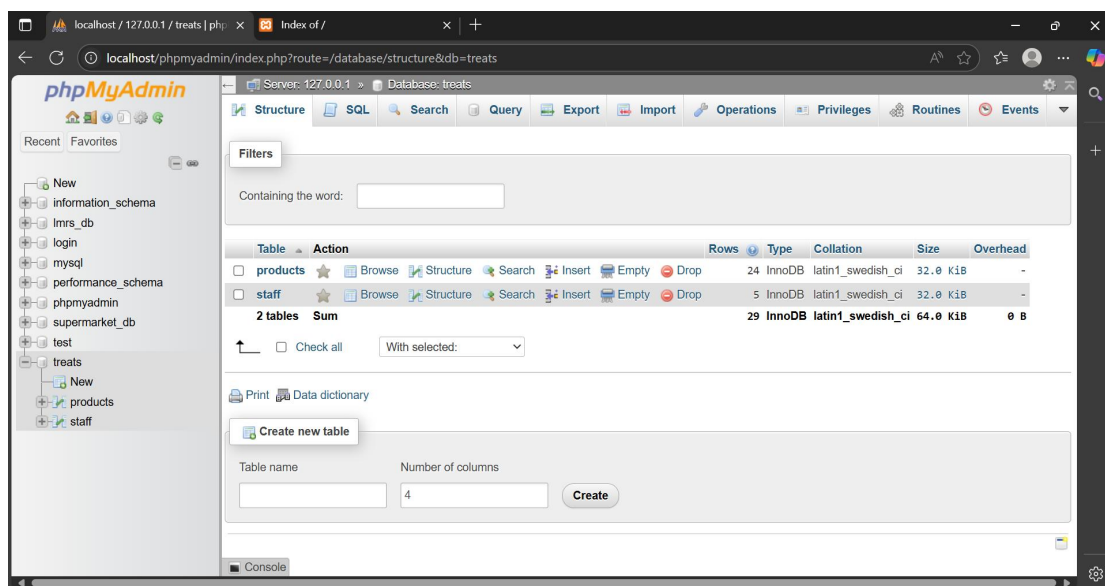
This app runs only on python script:



```
1 import tkinter as tk
2 from databases import *
3 from tkinter import ttk
4 import mysql.connector as sql
5 import tkinter.messagebox as msg
6 from tkinter import END,ttk
7 import datetime
8 from gtts import gTTS
9 import pygame
10 import os
11 from reportlab.lib.pagesizes import letter
12 from reportlab.pdfgen import canvas
13 import threading
14
15
16
17 def play_audio(text):
18     tts=gTTS(text=text,lang="en")
19     audio_file="register_into.mp3"
20     tts.save(audio_file)
21
22     pygame.mixer.init()
```

File "C:\Users\USER\PCX\AppData\Local\Programs\Python\Python311\Lib\socket.py", line 961, in getaddrinfo
for res in _socket.getaddrinfo(host, port, family, type, proto, flags):
socket.gaierror: [Errno 11001] getaddrinfo failed
PS C:\Users\USER\PCX\Desktop\H>

And the database is on a locally hosted server:



Key Takeaways:

1. Python Proficiency (Knowledge in aspect of app development)
2. Knowledge of Database Management & SQL
3. GUI Programming