KONGU ENGINEERING COLLEGE

(An Autonomous Institution)

PROJECT

Inventory Management System For Retailers

DONE BY

TEAM ID: PNT2022TMID04517

VARALAKSHMI E (737819CSR214)

SATHYA K (737819CSR184)

VIVEKANANDHAN D (737819CSR228)

MANISH KUMAR R (737819CST233)

TABLE OF CONTENTS

1. INTRODUCTON

1.1 Project Overview:

An inventory management system is a project that helps people control and keep track of the goods they buy, process, and sell. It includes many software programs to track stock levels and movements. This project report on the inventory management system

1.2 Purpose:

Inventory management is the practice of planning the buying, storing and selling of stock—whether it's raw materials, parts or finished goods—to ensure the right type and amount of stock is available without holding excess stock and thereby tying up cash. When done correctly, inventory management saves companies money.

2. Literature Survey

2.1 Existing Problem:

[1] Inventory Management Delivering Profits through Stock

Management

I.A. Aarti Deveshwar and Dhawal Modi

2018

Classification selected methods and requirements for operations and inventory management" gives the theoretical framework for the development of models and algorithms supporting order quantity and due date quoting. At first, alternative generic AATP systems will be identified on the basis of relevant classification criteria. Based upon this classification, the AATP planning mechanisms will be detailed for two generic AATP types. On the basis of the introduced AATP types and the description of selected models we finally derive requirements, which operations and inventory management have to meet in order to ensure a successful application of AATP. Accuracy of the paper: 95%

[2] An approach to evaluate the impact of interaction betweendemand forecasting method and stock control policy on the inventory system performances

Lorenzo Tiacci , Stefano Saetta

2022

Using the aim of this work is not to find or test effective DFMs, but to point out possible interactions between the choice of a forecasting method and the stock control policy. Therefore, in this study two very simple DFMs, described in Section 3.1, will be considered: with these methods, the monthly demands of the year 2004 will be sufficient to provide forecasts for each month of 2005; the two series of demand data for this year (effective and forecasted demand) are the inputs that the simulation experiment needs.Because demand data have a monthly base, orders from central depot to suppliers can be placed only at the beginning of each period (month): for each item, at the beginning of each month, the inventory level is observed, and if the level is lower than an order point s, an order is placed to a supplier so that the inventory position reaches an order-up-to level S. Thus, the basic inventory control policy for each item is a can order policy (R, s, S) with review period R equal to 1 month.

Accuracy of the paper: 95%

[3] Maximization of the return on inventory management expenses in a system withprice and stock dependent demand rate

valentin pando,Luis A.San-Jose

2020

This paper studies a deterministic inventory model where the demand rate depends on both the selling price and the stock level. A lower selling price or a higher stock level lead to a higher demand rate. Three decision variables are considered: the selling price p, the order-level S and the reorder point s. The goal is the maximization of the return on inventory management expense (ROIME), that is, the ratio between the profit and the total cost of the system. Accuracy: 85.9%

[4] Retail inventory management with stock-out based dynamic demand Substitution

Baris Tan,Sulcuk Karabati

2020

In this sign the literature on inventory management under stock-out based substitutions studies the supplier(or manufacturer-) controlled and customer-driven substitution schemes. In the supplier-controlled substitution scheme, in a stock-out instance, the supplier decides whether to fulfill the demand of the customer with another product.

The inventory management (and/or production planning) problem is usually studied in a "one-way substitution" setting, where a higher-graded product can be substituted for a lower-graded product. The primary objective is to minimize the sum of production, inventory holding, and, in some cases, product conversions costs.

Accuracy: 85%

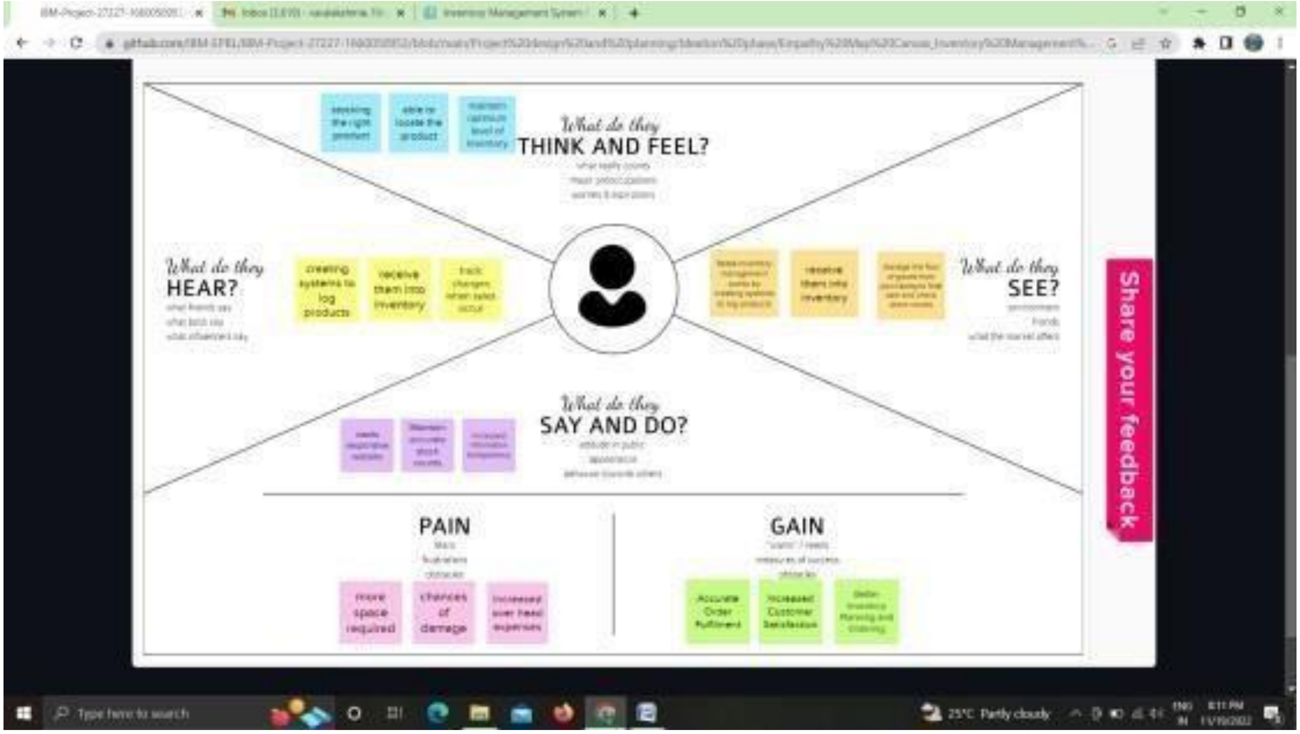
2.2 Problem Statement Definition : .

Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love. A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service

3. Ideation and Proposed Solution

3.1 Empathy Map Canvas:

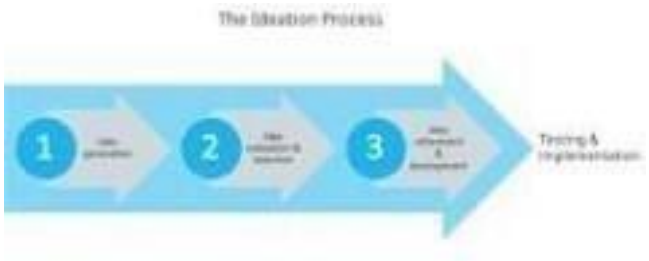
An empathy map canvas helps brands provide a better experience for users by helping teams understand the perspectives and mind set of their customers. Using a template to create an empathy map canvas reduces the preparation time and standardizes the process so you create empathy map canvases of similar quality


seeking the right product
able to locate the product
maintain optimum level of inventory
What do they
THINK AND FEEL?
What do they
HEAR?
what friends say
what boss say
what influencers say
creating systems to log products
receive them into inventory
track changes when sales occur
receive them into inventory
What do they
SEE?
What do they
SAY AND DO?
PAIN
more space required
chances of damage
increased over head expenses
GAIN
Accurate Order Fulfilment
Increased Customer Satisfaction
Better Inventory Planning and Ordering
Share your feedback
Type here to search
25°C Partly cloudy

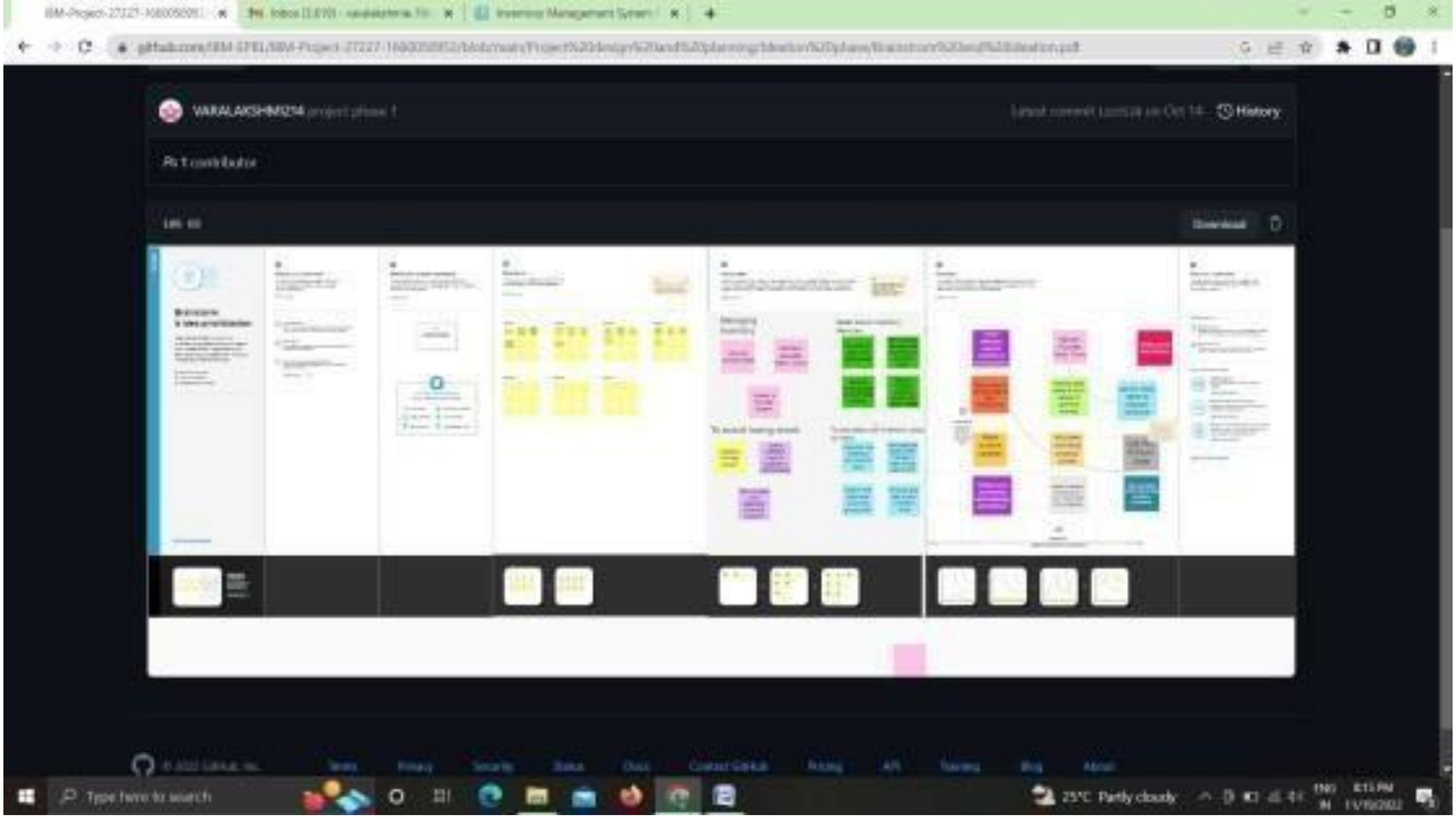
3.2 Ideation and Brainstorming:

Brainstorming is a group activity where everyone comes together to discuss strategies for growth and improvement. You can exchange ideas, share important information and use these meetings as informal catch-up sessions with your co-workers. Brainstorming combines a relaxed, informal approach to problem solving with lateral thinking. It encourages people to come up with thoughts and ideas that can, at first, seem a bit crazy. Some of these ideas can be crafted into original, creative solutions to a problem, while others can spark even more ideas.

Ideation is the process where you generate ideas and solutions through sessions such as Sketching, Prototyping, Brainstorming, Brain writing, Worst Possible Idea, and a wealth of other ideation techniques. Ideation is also the third stage in the Design Thinking process.



As you can see, ideation is not just a one-time idea generation or a brainstorming session. In fact, we can divide ideation in these three stages: generation, selection, and development.



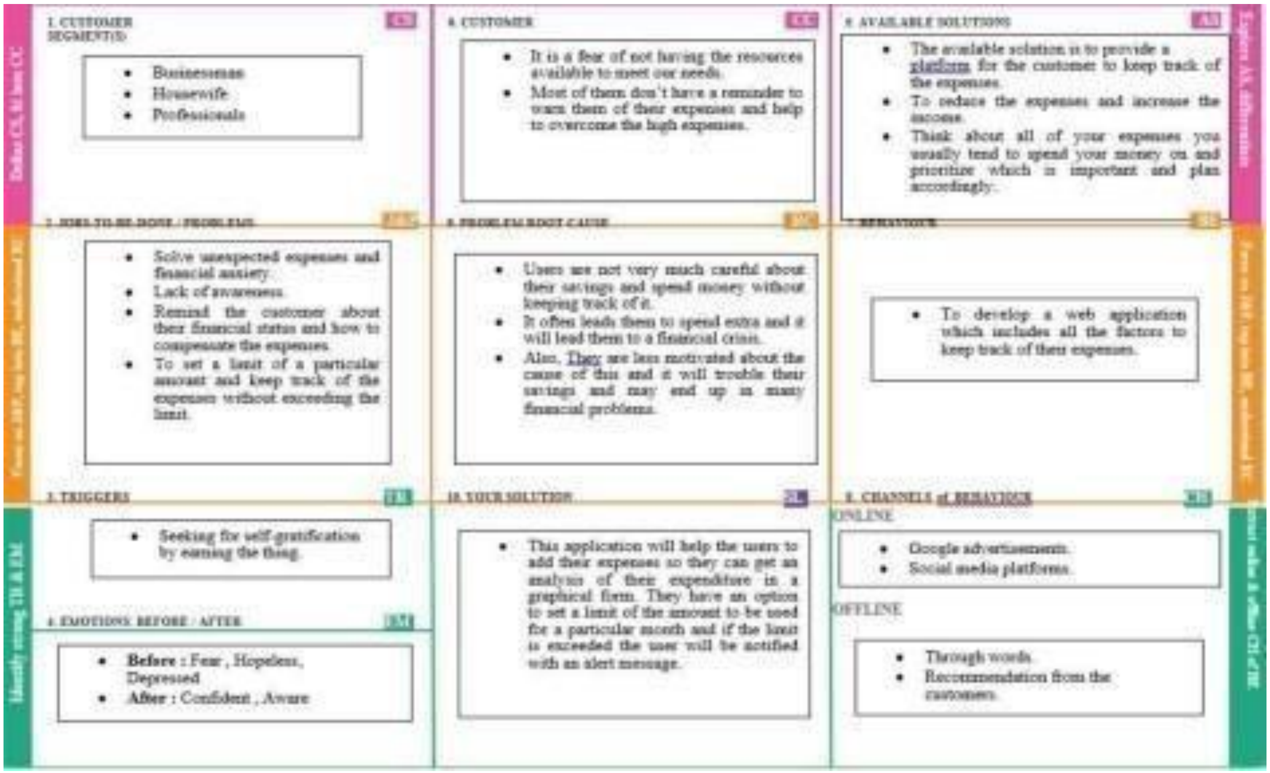
3.3 Proposed Solution:

Expense Tracker is going to be a mobile application so that It can be accessed any time required. This application will have a two-tier architecture: first one is the database tier, where all the data and financial data will be stored. Second it will be the user interface which will support the application user communicate with the system and also store Information in the database. The proposed system should operate offline so it can be accessed at any time without internet availability. The proposed system should provide different categories for the user to select from and they can enter the amount and mode of payment. This system should be able to analyze the information, provide analytics on which category did the user spent most of their money. The proposed system should provide a user interface where the user could store and observe their past expenses. To develop a personal finance application which allows users to add their expenses and based on their expense wallet balance will be updated and displayed. Also, users can get an analysis of their expenditure in graphical forms. They have an option to set a limit for theamount to be used for that particular month and if the limit is exceeded the users will be notified with an email alert

S .No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Retailers' lack of a method to capture and maintain their inventory data is their main issue. Because the owner just keeps the inventory data in the logbook and is not properly structured, it is challenging for them to record it promptly and safely.
2.	Idea / Solution description	In order to maintain inventory information and prepare for future investments, we want to create an inventory management system. The user may see and track the sold and unsold goods. When a stock is about to close, the application will alert the user. Our web application will monitor user's stock by tracking the received SMS's from the user's mobile.

3.	Novelty / Uniqueness	Retailers are informed when the product is close to run out and urge the customer to purchase more. Providing Key Performance Indicator for analysing stock. Demand based advanced stock pre-order
4.	Social Impact / Customer Satisfaction	encourages the user to keep track of product availability and boost revenue. encourages the user to keep track of product availability and boost revenue.
5.	Business Model (Revenue Model)	This model's suggested low design cost makes it more reliable and userfriendly.
6.	Scalability of the Solution	This suggested strategy will be able to manage a huge quantity of user data with effective utilisation of the IBM cloud. A large number of users may readily access and utilise it.

3.4 Problem Fit:



Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

- Businessman
- Housewife
- Professionals

6. CUSTOMER

- It is a fear of not having the resources available to meet our needs.
- Most of them don't have a reminder to warn them of their expenses and help to overcome the high expenses.

5. AVAILABLE SOLUTIONS

- The available solution is to provide a platform for the customer to keep track of the expenses.
- To reduce the expenses and increase the income.
- Think about all of your expenses you usually tend to spend your money on and prioritize which is important and plan accordingly.

Explore AS, differentiate

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS

- Solve unexpected expenses and financial anxiety.
- Lack of awareness.
- Remind the customer about their financial status and how to compensate the expenses.
- To set a limit of a particular amount and keep track of the expenses without exceeding the limit.

9. PROBLEM ROOT CAUSE

- Users are not very much careful about their savings and spend money without keeping track of it.
- It often leads them to spend extra and it will lead them to a financial crisis.
- Also, They are less motivated about the cause of this and it will trouble their savings and may end up in many financial problems.

7. BEHAVIOUR

- To develop a web application which includes all the factors to keep track of their expenses.

Focus on J&P, tap into BE, understand RC

Identify strong TR & EM

3. TRIGGERS

- Seeking for self-gratification by earning the thing.

4. EMOTIONS: BEFORE / AFTER

- **Before :** Fear , Hopeless, Depressed
- **After :** Confident , Aware

10. YOUR SOLUTION

- This application will help the users to add their expenses so they can get an analysis of their expenditure in a graphical form. They have an option to set a limit of the amount to be used for a particular month and if the limit is exceeded the user will be notified with an alert message.

8. CHANNELS of BEHAVIOUR

ONLINE

- Google advertisements.
- Social media platforms.

OFFLINE

- Through words.
- Recommendation from the customers.

Extract online & offline CH of BE

4. Requirement Analysis:

4.1 Functional Requirements:

1. Dashboard panel

The system shall authenticate the user and then display panel based on the particular identified user.

2. Add bill

The system shall allow the user to add bill details based on the user's need to the type of expenses.

3. Expense planner

Reporting and analytics are essential to any retailer because they tell you exactly what’s going on in your business. Analyzing your data correctly enables you to make well-informed decisions around things like stock ordering, promotions, and staffing, among other things.

The Reporting and analytics are essential to any retailer because they tell you exactly what is going on in your business . Analyzing your data correctly enables you to make well-informed decisions around things like stock ordering, promotions and staffing among other things.

4. Expense tracker

The system should graphically represent the yearly expense numbers in form of report

5. Add notes

The system shall allow users to add notes to their expenses.

4.2 Non-Functional Requirements:

1. Usability

There is a consistency in all the modules and webpages. To ease the navigation there is a back tab to provide access to previous page. There is proper instruction on each page.

2. Reliability

Each data record is stored on a well-built efficient database schema. There is no risk of data loss. The internal evaluation of data is well coded.

3. Supportability

The system is well built to support any machine. Maintainability of the system is easy.

4. Performance

In order to ease the accessibility, the types of expenses are categorized along with an option to name on the own. Throughput of the system is increased due to light weight database support.

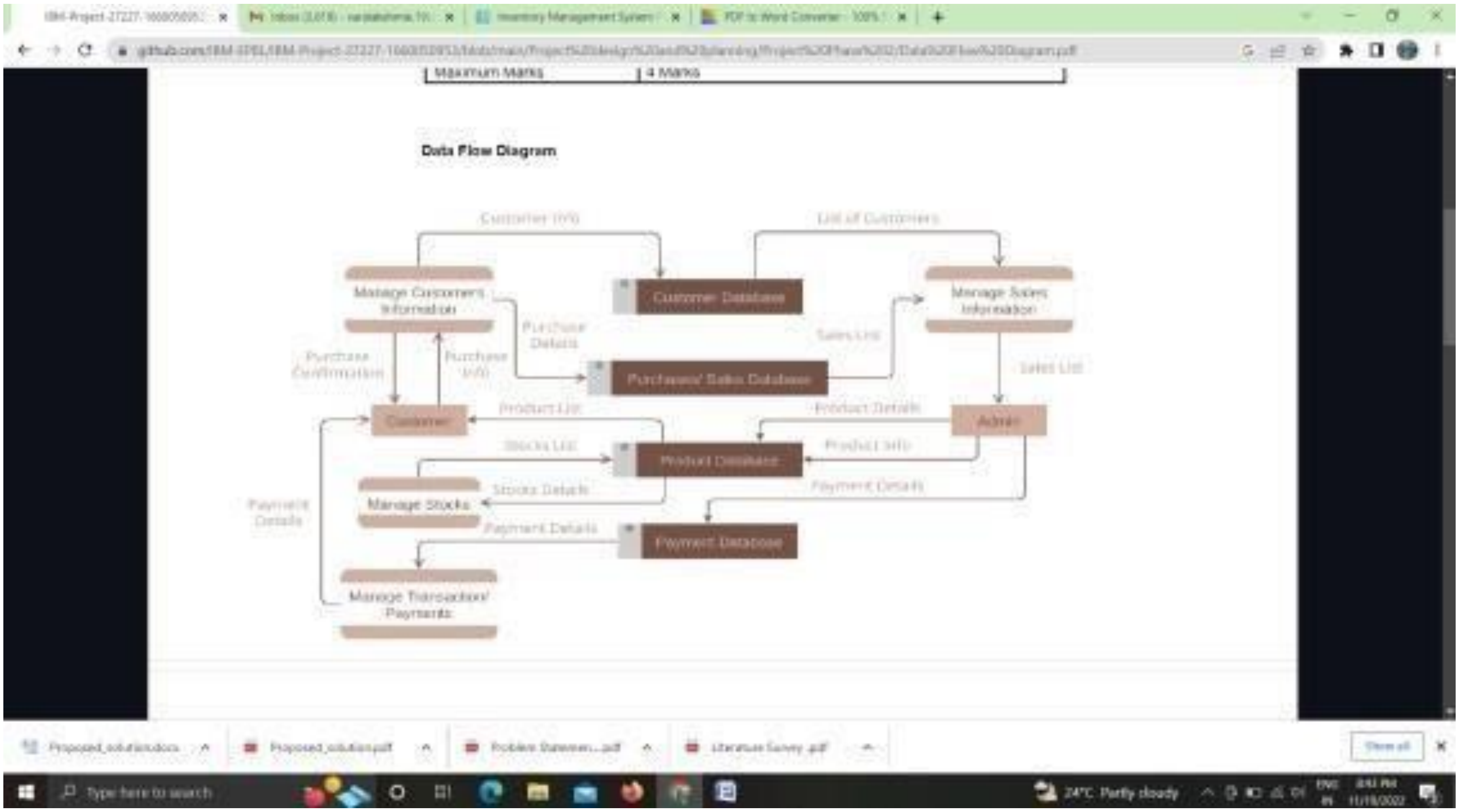
5. Availability

The system is available all the time, no time constraint.

5.Project Design

5.1 Data flow Diagrams:

A data flow diagram (DFD) is a graphical or visual representation using a standardized set of symbols and notations to describe a business's operations through data movement. Data flow diagrams provide a straightforward, efficient way for organizations to understand, perfect, and implement new processes or systems. They're visual representations of your process or system, so they make it easy to understand and prune.

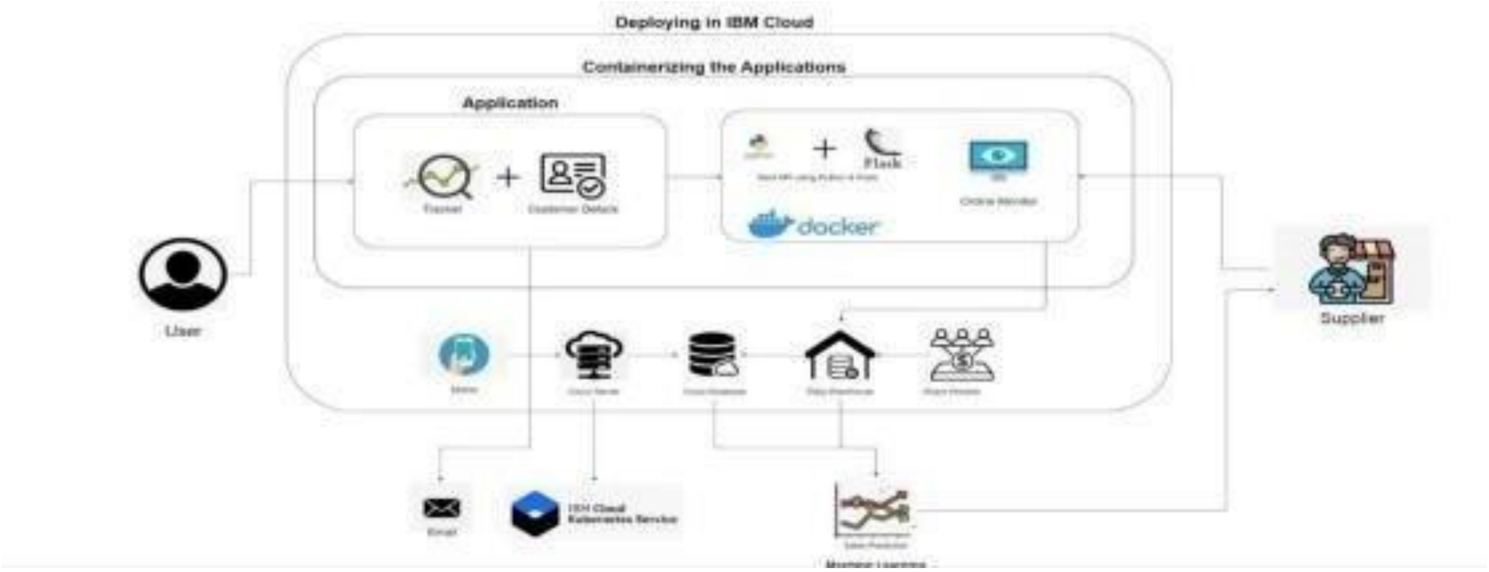


Maximum Marks	4 Marks

Data Flow Diagram

5.2 Solution & Technical Architecture:

Technical Architecture (TA) is a form of IT architecture that is used to design computer systems. It involves the development of a technical blueprint with regard to the arrangement, interaction, and interdependence of all elements so that system-relevant requirements are met.



5.3 User Stories

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password..	2	High
Sprint-1	Registration	USN-2	As a user, I can register for the application through E-mail	1	High

Sprint-2	Registration	USN-3	As a user, I will receive confirmation email once I have registered for the application	2	Low
Sprint-2	Registration	USN-4	As a user, I can log into the application by entering email & password	2	Low
Sprint-1	Registration	USN-5	As a user, I can view the products which are available	2	Medium
Sprint-1	Login	USN-6	As a user, I can add the products I wish to buy to the carts	1	High
Sprint-3	Dashboard	USN-7	As a user, I can add products which are not available in the dashboard to the stock list	1	Low
Sprint-3	Dashboard	USN-8	As a user, I can contact the Customer Care Executive and request any services I want from the customer care	1	High

Sprint-3	**Dashboard**	**USN-9**	**I can be able to report any difficulties I experience as a report**	**2**	**High**
Sprint-4	**Dashboard**	**USN-10**	**As a user, I can able to see the Nearby cheap, and Quality products**	**1**	**Low**
Sprint-4	**Management**	**USN-11**	**As a Administrator, I will update our web application with additional features.**	**2**	**Low**
Sprint-4	**Management**	**USN-12**	**As a Administrator, I can maintain third party Services**	**1**	**High**

6. Project Planning & Scheduling:

6.1. Sprint Delivery Schedule:

A sprint schedule is a document that outlines sprint planning from end to end. It's one of the first steps in the agile sprint planning process—and something that requires adequate research, planning, and communication.

Sprint	**Total Story Points**	**Duration**	**Sprint Start Date**	**Sprint End Date (Planned)**	**Story Points Completed (as on Planned End Date)**	**Sprint Release Date (Actual)**
Sprint-1	20	6 Days	28 Oct 2022	02 Nov 2022	20	02 Nov 2022

Sprint-2	20	6 Days	04 Oct 2022	09 Nov 2022	20	09 Nov 2022
Sprint-3	20	6 Days	11 Oct 2022	16 Nov 2022	20	16 Nov 2022
Sprint-4	20	6 Days	18 Oct 2022	23Nov 2022	20	23 Nov 2022

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

6.2. Sprint Delivery Schedule

Use the below template to create product backlog and sprint schedule:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint -1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password	2	High	Varalakshmi E
Sprint -1	Registration	USN-2	As a user, I can register for the application through E-mail	1	High	Sathya K
Sprint -2	Registration	USN-3	As a user, I will receive confirmation email once I have registered for the application	2	Low	Vivekanandhan D

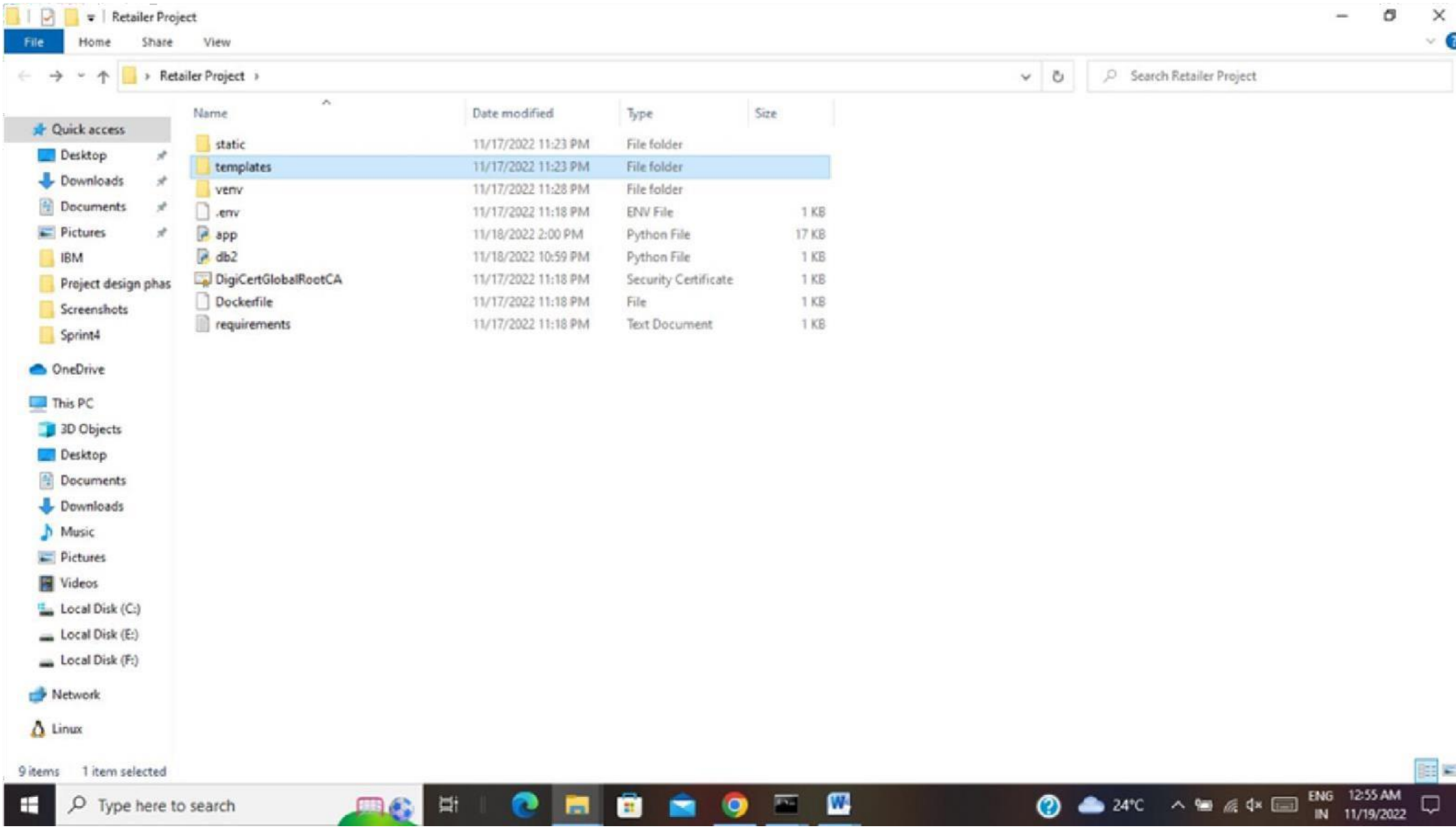
Sprint -2	Registration	USN-4	As a user, I can log into the application by entering email & password	2	Low	Manish kumar T
Sprint -1	Registration	USN-5	As a user, I can view the products which are available	2	Mediu m	Varalaksh mi E
Sprint -1	Login	USN-6	As a user, I can add the products I wish to buy to the carts	1	High	Sathya K

Sprint -3	Dashboard	USN-7	As a user, I can add products which are not available in the dashboard to the stock list	1	Low	Vivekanandhan D
Sprint -3	Dashboard	USN-8	As a user, I can contact the Customer Care Executive and request any services I want from the customer care	1	High	Manish Kumar T

Sprint -3	Dashboard	USN-9	I can be able to report any difficulties I experience as a report	2	High	Varalakshmi E
Sprint -4	Dashboard	USN-1 0	As a user, I can able to see the Nearby cheap, and Quality products	1	Low	Sathya K
Sprint -4	Management	USN-1 1	As a Administrator, I will update our web application with additional features.	2	Low	Vivekanandhan D
Sprint -4	Management	USN-1 2	As a Administrator, I can maintain third party Services	1	High	Manishkumar T

7. Coding & Solution:

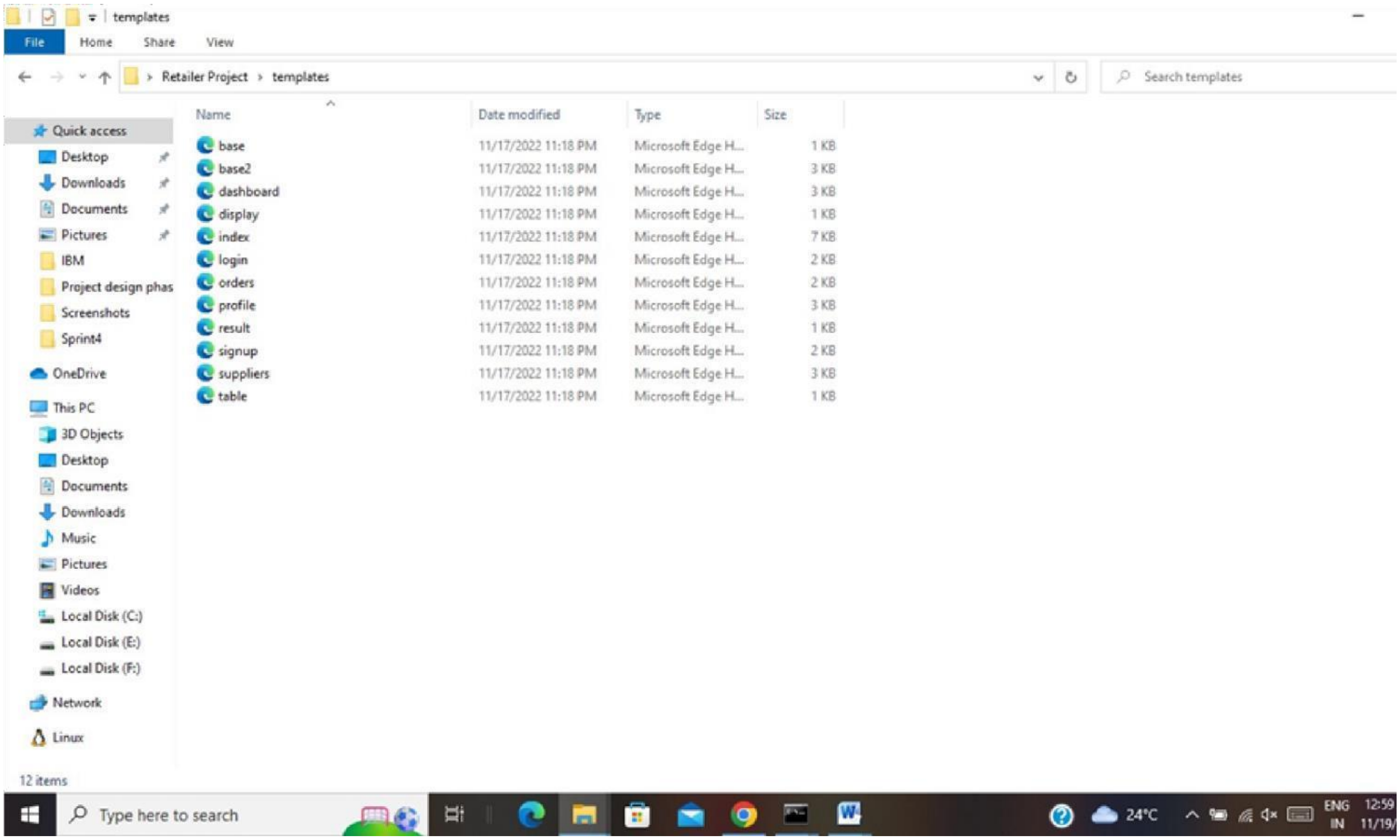
7.1 Feature 1



Name	Date modified	Type	Size
static	11/17/2022 11:23 PM	File folder	
templates	11/17/2022 11:23 PM	File folder	
venv	11/17/2022 11:28 PM	File folder	
.env	11/17/2022 11:18 PM	ENV File	1 KB
app	11/18/2022 2:00 PM	Python File	17 KB
db2	11/18/2022 10:59 PM	Python File	1 KB
DigiCertGlobalRootCA	11/17/2022 11:18 PM	Security Certificate	1 KB
Dockerfile	11/17/2022 11:18 PM	File	1 KB
requirements	11/17/2022 11:18 PM	Text Document	1 KB

This project consists of HTML, PYTHON, CSS, FLASK, DATABASE, JAVASCRIPT , DOCKER, KUBERNATES, WATSAN ASSISTANT.

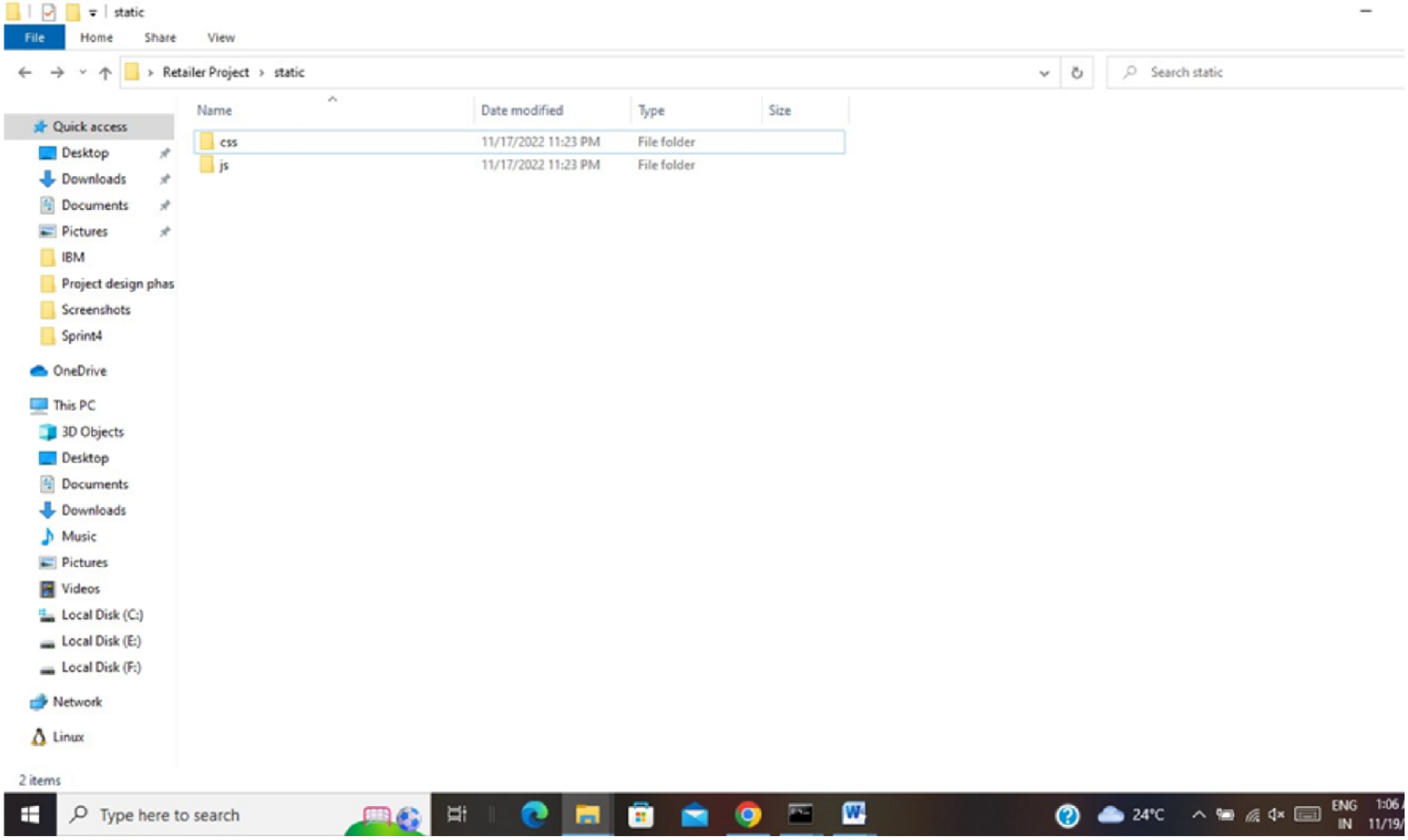
HTML Pages are designed and linked in python flask code and runs as a complete program.



Name	Date modified	Type	Size
base	11/17/2022 11:18 PM	Microsoft Edge H...	1 KB
base2	11/17/2022 11:18 PM	Microsoft Edge H...	3 KB
dashboard	11/17/2022 11:18 PM	Microsoft Edge H...	3 KB
display	11/17/2022 11:18 PM	Microsoft Edge H...	1 KB
index	11/17/2022 11:18 PM	Microsoft Edge H...	7 KB
login	11/17/2022 11:18 PM	Microsoft Edge H...	2 KB
orders	11/17/2022 11:18 PM	Microsoft Edge H...	2 KB
profile	11/17/2022 11:18 PM	Microsoft Edge H...	3 KB
result	11/17/2022 11:18 PM	Microsoft Edge H...	1 KB
signup	11/17/2022 11:18 PM	Microsoft Edge H...	2 KB
suppliers	11/17/2022 11:18 PM	Microsoft Edge H...	3 KB
table	11/17/2022 11:18 PM	Microsoft Edge H...	1 KB

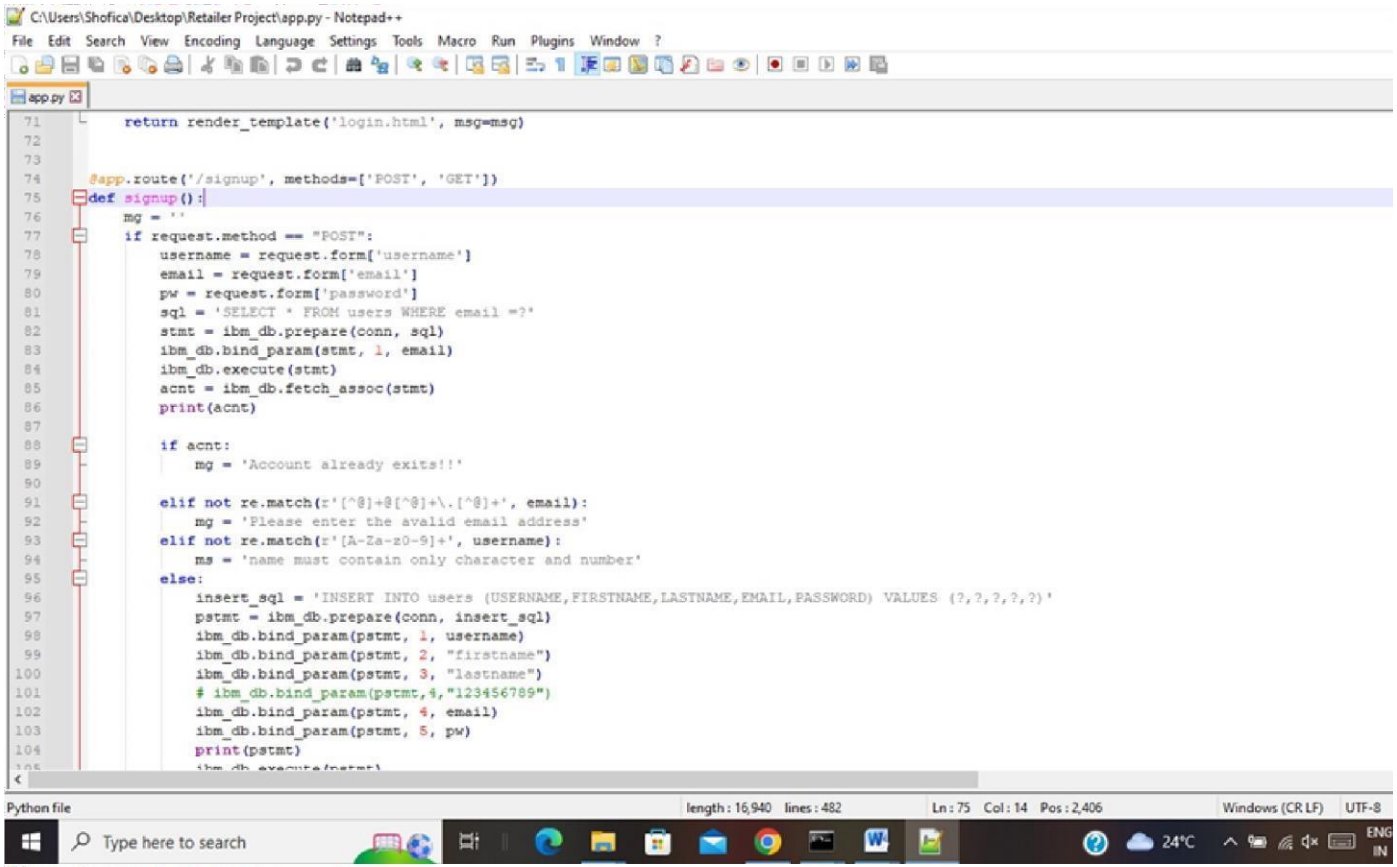
- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

Following are the css and js page designed in this project.

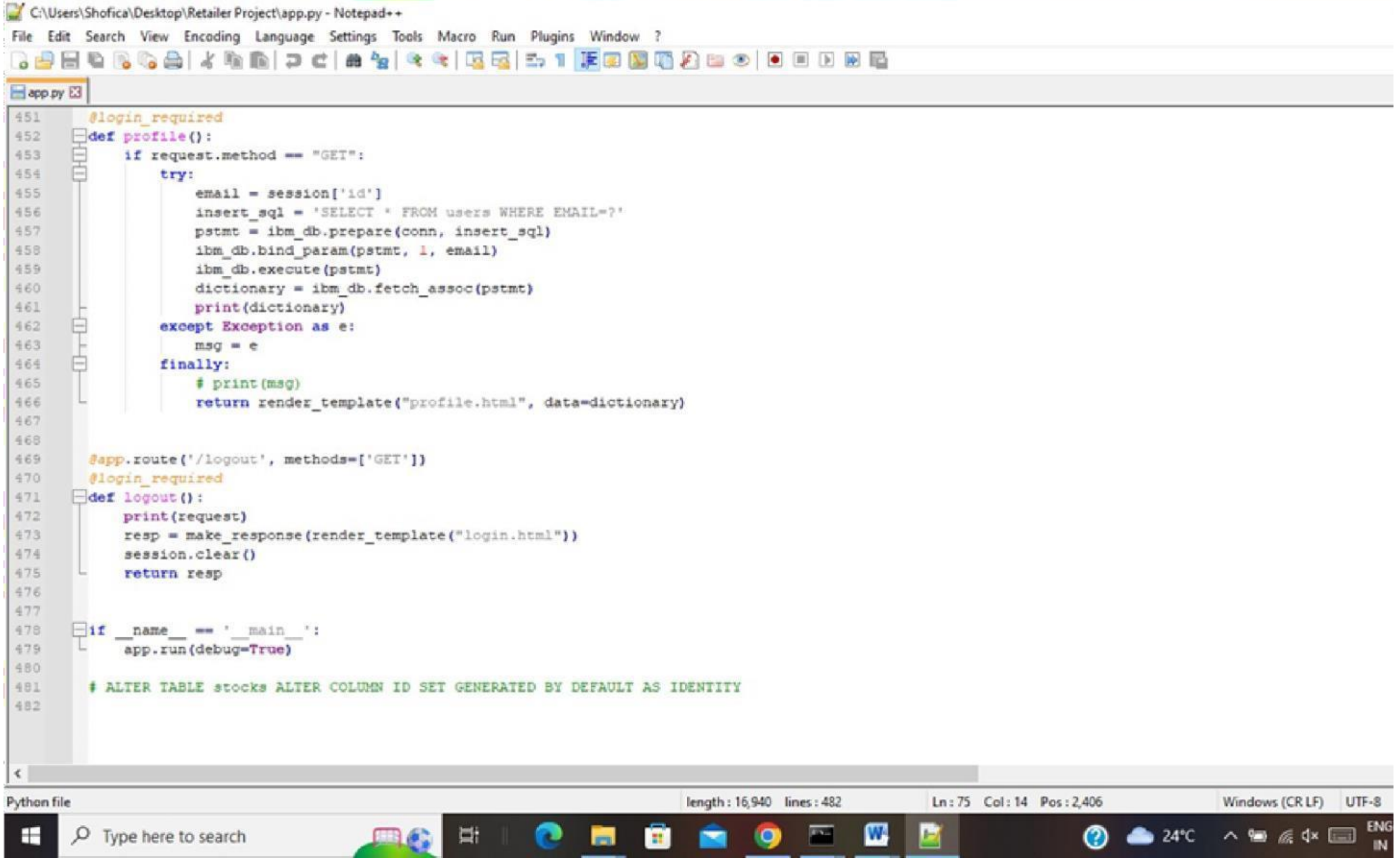


Name	Date modified	Type	Size
css	11/17/2022 11:23 PM	File folder	
js	11/17/2022 11:23 PM	File folder	

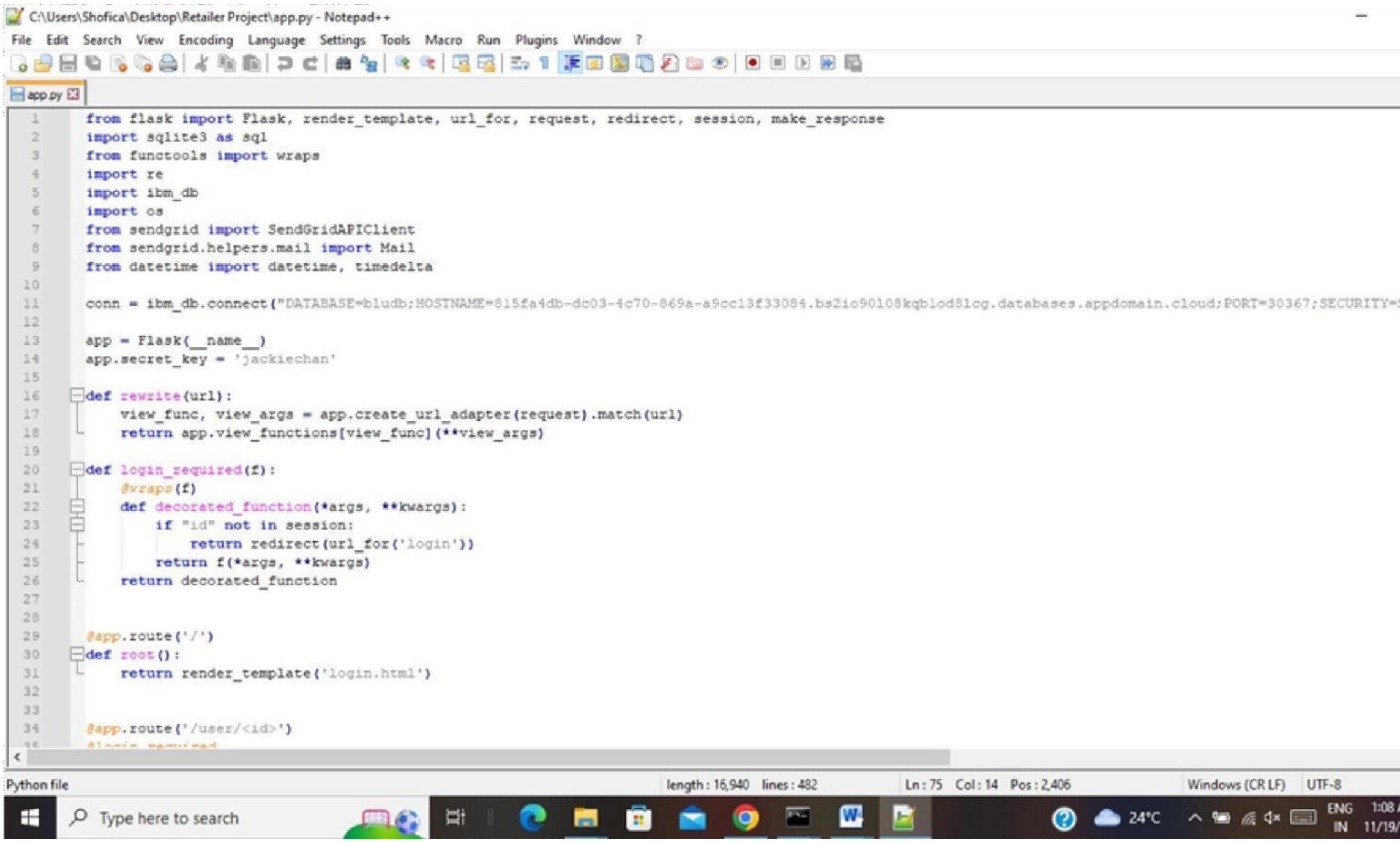
The Following python program is the main program runs and executes the entire project in which the html code and database connections are made. Thus the successful execution of the program app.py in terminal will get output of this project.


C:\Users\Shofica\Desktop\Retailer Project\app.py - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
app.py
Python file
length : 16,940 lines : 482
Ln : 75 Col : 14 Pos : 2,406
Windows (CR LF) UTF-8
Type here to search
24°C
ENG IN

```
        return render_template('login.html', msg=msg)


@app.route('/signup', methods=['POST', 'GET'])
def signup():
    mg = ''
    if request.method == "POST":
        username = request.form['username']
        email = request.form['email']
        pw = request.form['password']
        sql = 'SELECT * FROM users WHERE email =?'
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt, 1, email)
        ibm_db.execute(stmt)
        acnt = ibm_db.fetch_assoc(stmt)
        print(acnt)

        if acnt:
            mg = 'Account already exits!!'

        elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
            mg = 'Please enter the avalid email address'
        elif not re.match(r'[A-Za-z0-9]+', username):
            ms = 'name must contain only character and number'
        else:
            insert_sql = 'INSERT INTO users (USERNAME,FIRSTNAME,LASTNAME,EMAIL,PASSWORD) VALUES (?,?,?,?,?)'
            pstmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(pstmt, 1, username)
            ibm_db.bind_param(pstmt, 2, "firstname")
            ibm_db.bind_param(pstmt, 3, "lastname")
            # ibm_db.bind_param(pstmt,4,"123456789")
            ibm_db.bind_param(pstmt, 4, email)
            ibm_db.bind_param(pstmt, 5, pw)
            print(pstmt)
            ibm_db.execute(pstmt)
```


C:\Users\Shofica\Desktop\Retailer Project\app.py - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
app.py
Python file
length : 16,940 lines : 482
Ln : 75 Col : 14 Pos : 2,406
Windows (CR LF) UTF-8
Type here to search
24°C
ENG IN

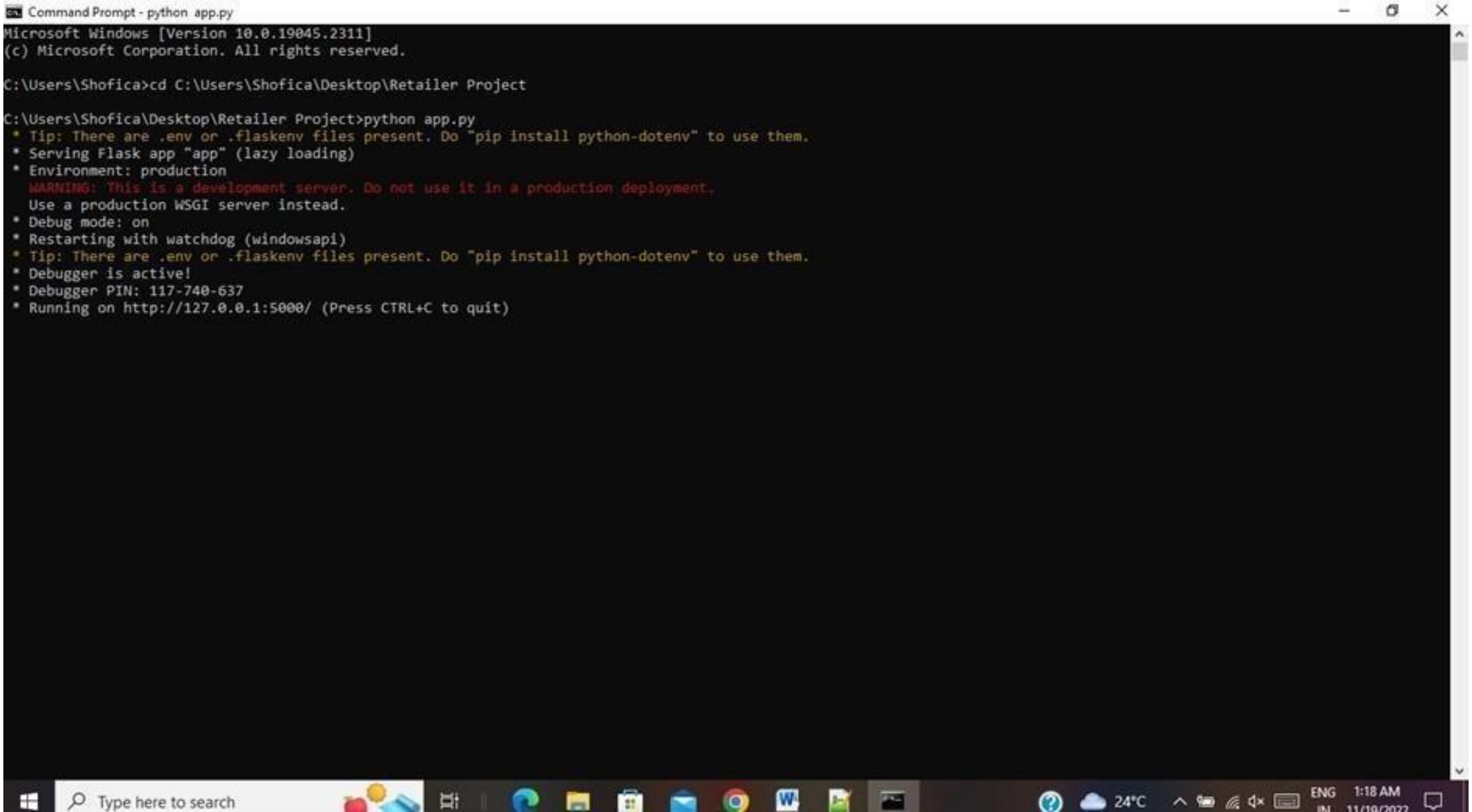
```
@login_required
def profile():
    if request.method == "GET":
        try:
            email = session['id']
            insert_sql = 'SELECT * FROM users WHERE EMAIL=?'
            pstmt = ibm_db.prepare(conn, insert_sql)
            ibm_db.bind_param(pstmt, 1, email)
            ibm_db.execute(pstmt)
            dictionary = ibm_db.fetch_assoc(pstmt)
            print(dictionary)
        except Exception as e:
            msg = e
        finally:
            # print(msg)
            return render_template("profile.html", data=dictionary)


@app.route('/logout', methods=['GET'])
@login_required
def logout():
    print(request)
    resp = make_response(render_template("login.html"))
    session.clear()
    return resp


if __name__ == '__main__':
    app.run(debug=True)

# ALTER TABLE stocks ALTER COLUMN ID SET GENERATED BY DEFAULT AS IDENTITY

```


C:\Users\Shofica\Desktop\Retailer Project\app.py - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
app.py
Python file
length : 16,940 lines : 482
Ln : 75 Col : 14 Pos : 2,406
Windows (CR LF) UTF-8
Type here to search
24°C
ENG IN

```python
from flask import Flask, render_template, url_for, request, redirect, session, make_response
import sqlite3 as sql
from functools import wraps
import re
import ibm_db
import os
from sendgrid import SendGridAPIClient
from sendgrid.helpers.mail import Mail
from datetime import datetime, timedelta

conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=815fa4db-dc03-4c70-869a-a9cc13f33084.bs2io90108kqblod8lcg.databases.appdomain.cloud;PORT=30367;SECURITY=

app = Flask(__name__)
app.secret_key = 'jackiechan'

def rewrite(url):
    view_func, view_args = app.create_url_adapter(request).match(url)
    return app.view_functions[view_func](**view_args)

def login_required(f):
    @wraps(f)
    def decorated_function(*args, **kwargs):
        if "id" not in session:
            return redirect(url_for('login'))
        return f(*args, **kwargs)
    return decorated_function


@app.route('/')
def root():
    return render_template('login.html')


@app.route('/user/<id>')
@login_required
```

7.2 Feature 2

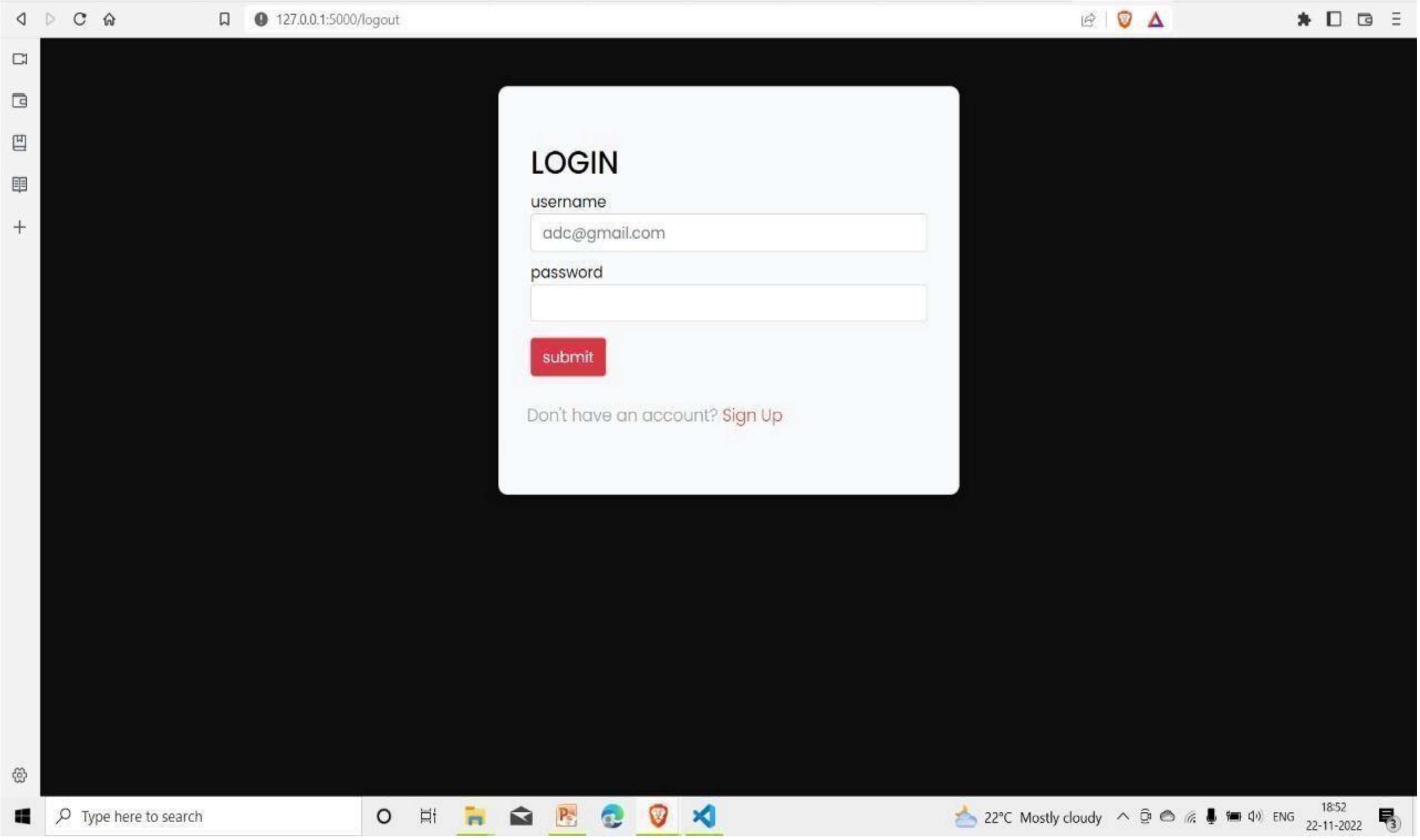
Set the path to the command prompt and run the program.



```
Microsoft Windows [Version 10.0.19045.2311]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Shofica>cd C:\Users\Shofica\Desktop\Retailer Project

C:\Users\Shofica\Desktop\Retailer Project>python app.py
 * Tip: There are .env or .flaskenv files present. Do "pip install python-dotenv" to use them.
 * Serving Flask app "app" (lazy loading)
 * Environment: production
   WARNING: This is a development server. Do not use it in a production deployment.
   Use a production WSGI server instead.
 * Debug mode: on
 * Restarting with watchdog (windowsapi)
 * Tip: There are .env or .flaskenv files present. Do "pip install python-dotenv" to use them.
 * Debugger is active!
 * Debugger PIN: 117-740-637
 * Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

LOGIN PAGE

HERE USER CAN LOGIN IF ALREADY REGISTERED



LOGIN

username

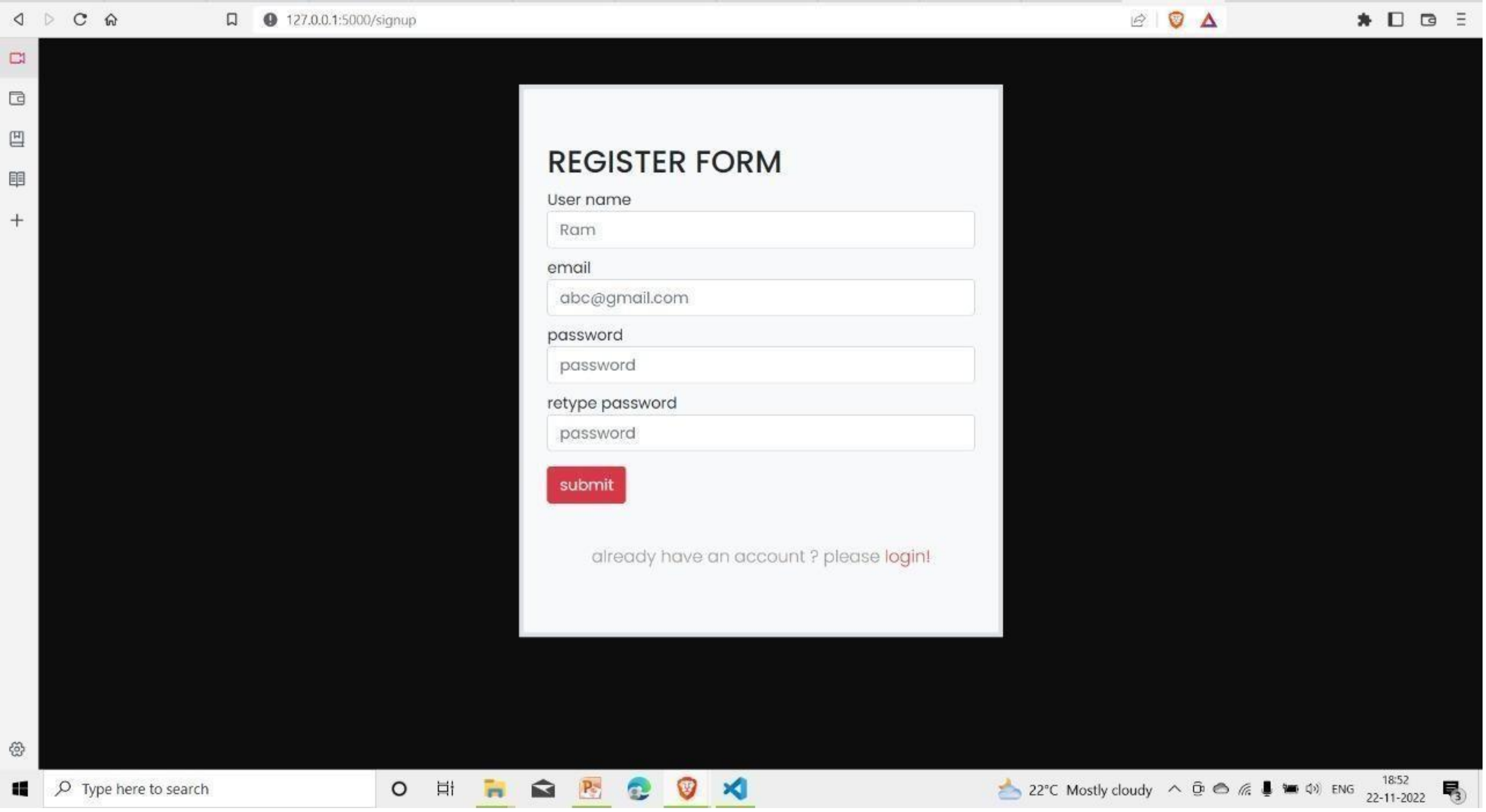
adc@gmail.com

password

Don't have an account? Sign Up

REGISTRATION PAGE

This page is for the new user



REGISTER FORM

User name

Ram

email

abc@gmail.com

password

password

retype password

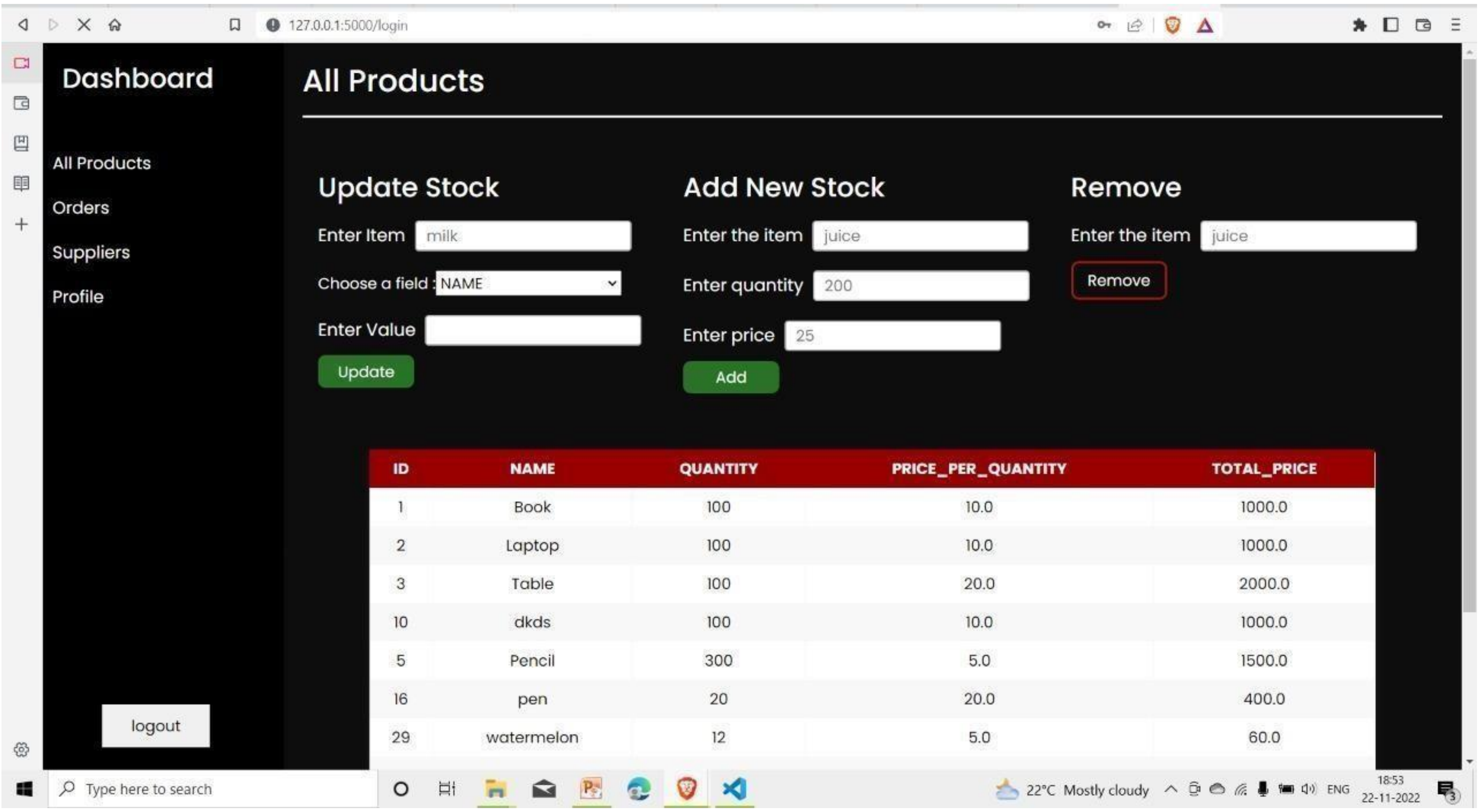
password

submit

already have an account ? please login!

DASHBOARD

Dashboard contains Watson assistant, orders, suppliers, profile and logout.



All Products

Update Stock

Enter Item milk

Choose a field : NAME

Enter Value

Update

Add New Stock

Enter the item juice

Enter quantity 200

Enter price 25

Add

Remove

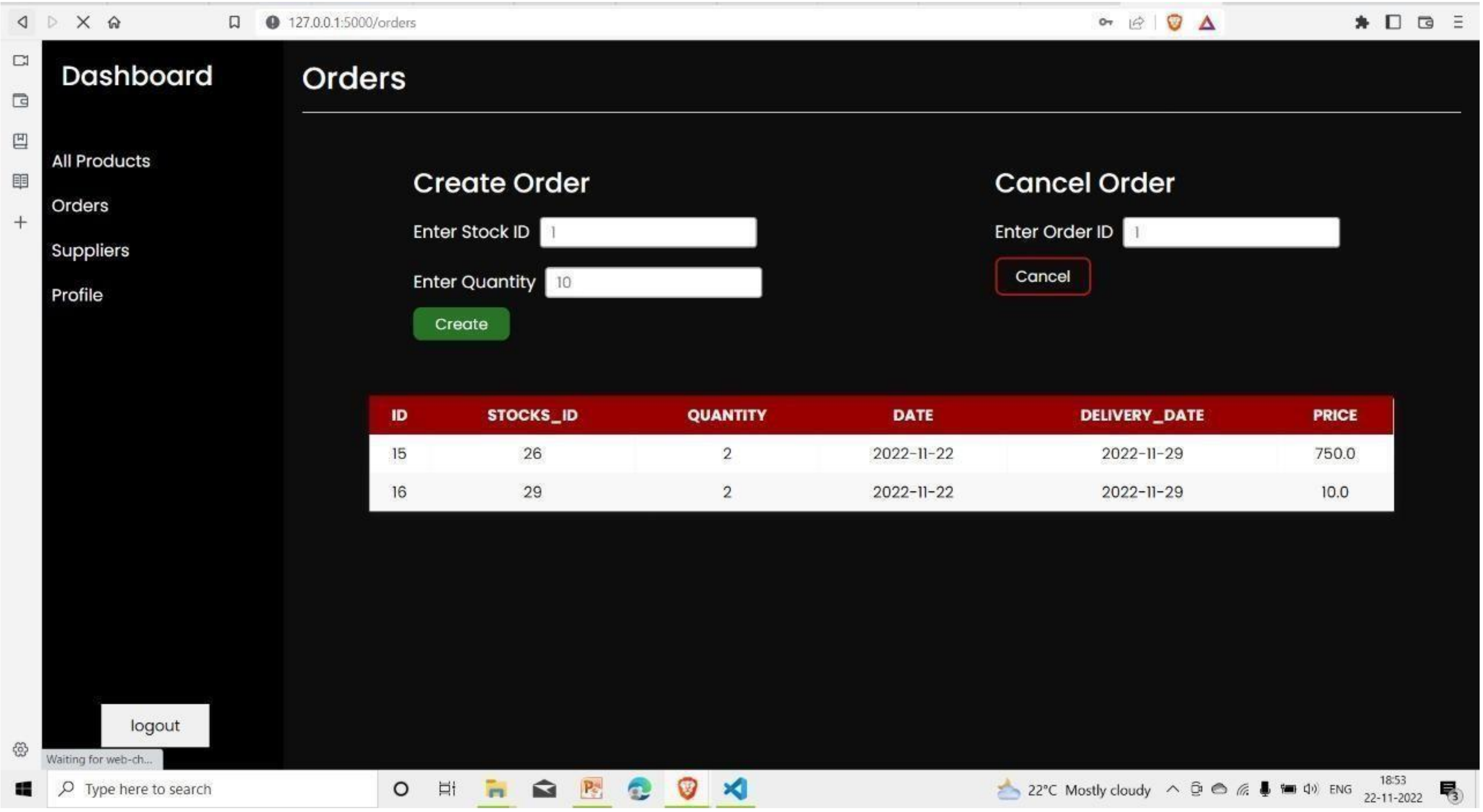
Enter the item juice

Remove

ID	NAME	QUANTITY	PRICE_PER_QUANTITY	TOTAL_PRICE
1	Book	100	10.0	1000.0
2	Laptop	100	10.0	1000.0
3	Table	100	20.0	2000.0
10	dkds	100	10.0	1000.0
5	Pencil	300	5.0	1500.0
16	pen	20	20.0	400.0
29	watermelon	12	5.0	60.0

ORDERS

The user can make orders in this page.



Orders

Create Order

Enter Stock ID 1

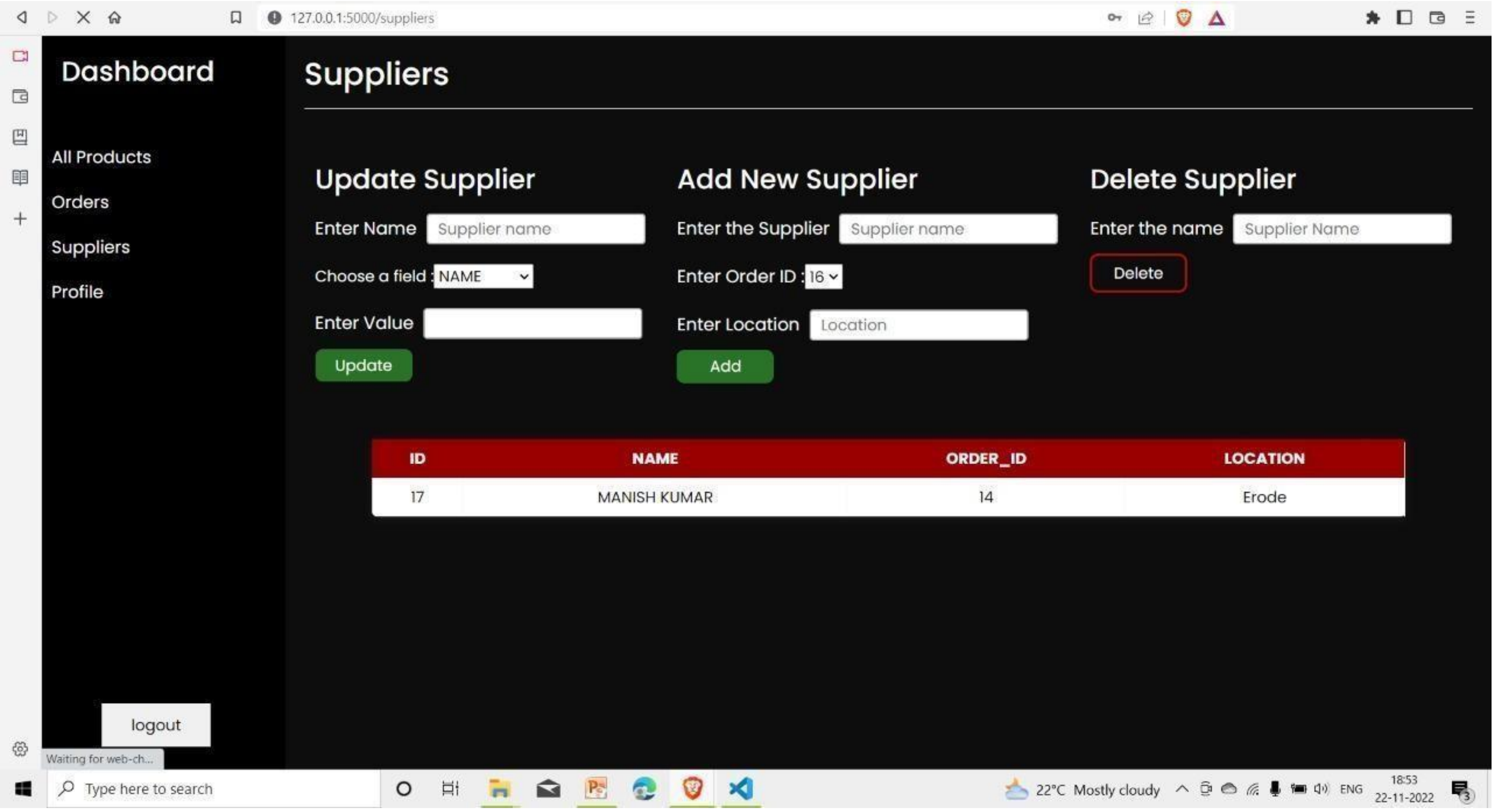
Enter Quantity 10

Cancel Order

Enter Order ID 1

ID	STOCKS_ID	QUANTITY	DATE	DELIVERY_DATE	PRICE
15	26	2	2022-11-22	2022-11-29	750.0
16	29	2	2022-11-22	2022-11-29	10.0

SUPPLIERS



Suppliers

Update Supplier

Enter Name Supplier name

Choose a field NAME

Enter Value

Add New Supplier

Enter the Supplier Supplier name

Enter Order ID 16

Enter Location Location

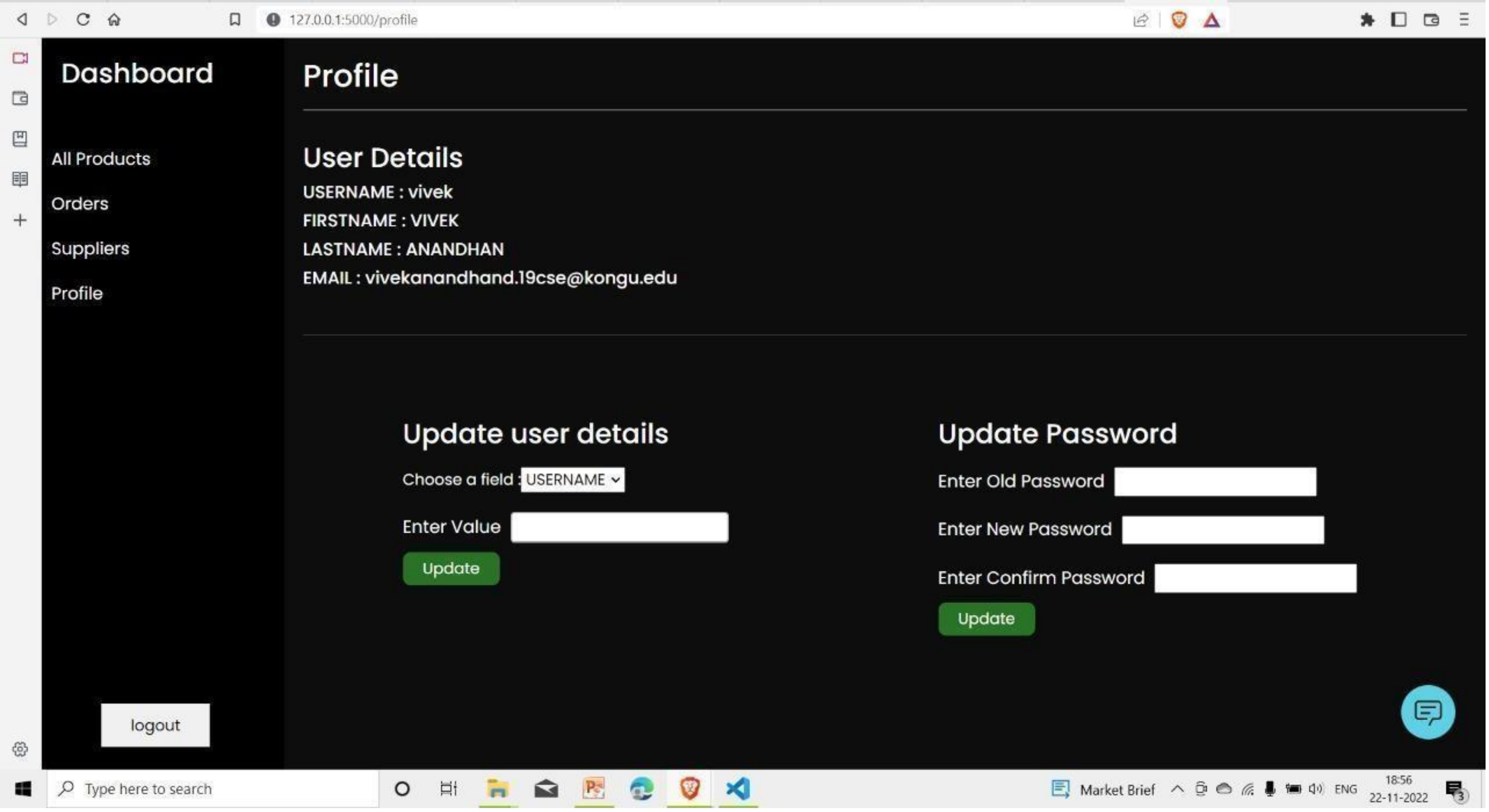
Delete Supplier

Enter the name Supplier Name

ID	NAME	ORDER_ID	LOCATION
17	MANISH KUMAR	14	Erode

PROFILE

In this page the user can check and update their profile.



Profile

User Details

USERNAME : vivek
FIRSTNAME : VIVEK
LASTNAME : ANANDHAN
EMAIL : vivekanandhand.19cse@kongu.edu

Update user details

Choose a field : USERNAME

Enter Value

Update

Update Password

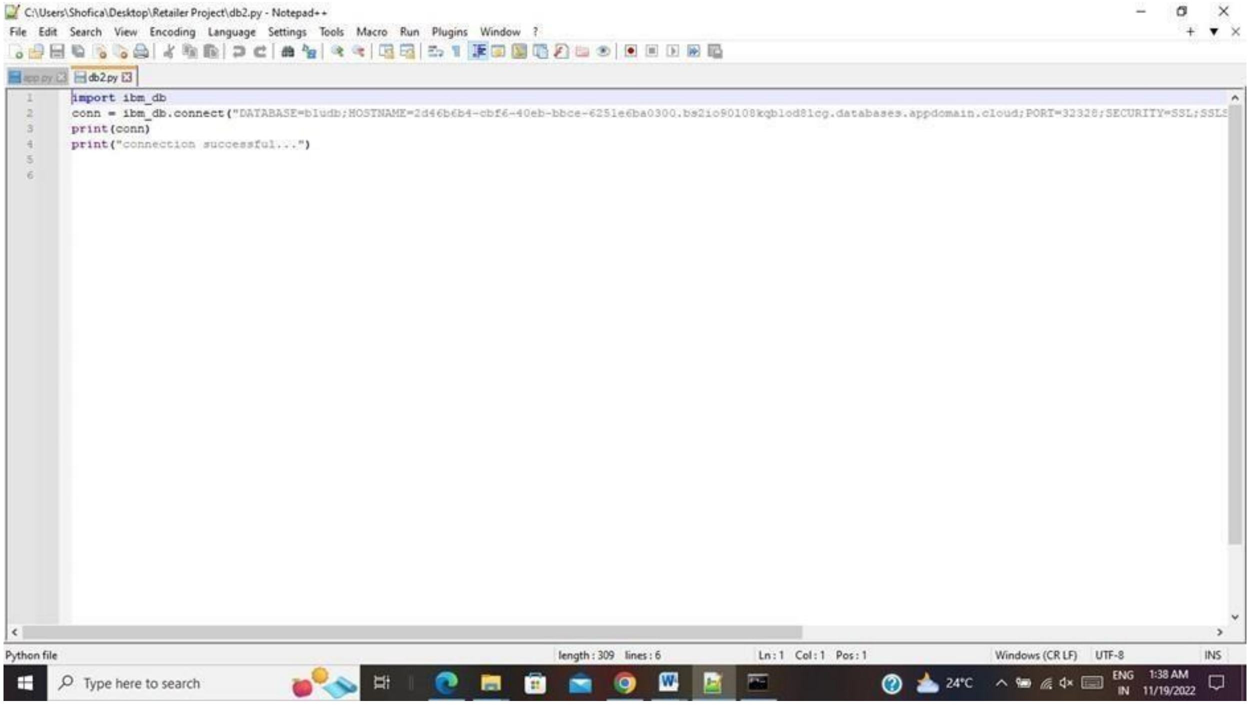
Enter Old Password

Enter New Password

Enter Confirm Password

Update

7.3 DATABASE SCHEMA



```
import ibm_db
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=2d46b6b4-cbf6-40eb-bbce-6251e6ba0300.bs2io90108kqb1od8lcg.databases.appdomain.cloud;PORT=32328;SECURITY=SSL;SSLS
print(conn)
print("connection successful...")
```

C:\Users\Shofica\Desktop\Retailer Project\db2.py - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
app.py
db2.py
Python file
length : 309 lines : 6
Ln : 1 Col : 1 Pos : 1
Windows (CR LF) UTF-8 INS
Type here to search
24°C
ENG IN
1:38 AM
11/19/2022

8. Testing

8.1 Test Cases Test Cases

Test case ID	Feature Type	Component	Test Scenario
LoginPage_TC_OO1	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button
LoginPage_TC_OO2	UI	Home Page	Verify the UI elements in Login/Signup popup
LoginPage_TC_OO3	Functional	Home page	Verify user is able to log into application with Valid credentials

LoginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with Invalid credentials
LoginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with Invalid credentials
LoginPage_TC_OO5	Functional	Login page	Verify user is able to log into application with Invalid credentials

9.Results

Dashboard:

```
{% extends 'base2.html '%} {% block head %}

<title>Dashboard</title>

{% endblock%} {%block body%}

<h2>Dashboard</h2>

<p>

 Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
    tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim
                                                                  veniam,

</p>

{% include 'table.html' %} {% endblock%}
```

Display:

```
<!DOCTYPE html> <html

lang="en">


<head>

  <meta charset="UTF-8" />

  <meta http-equiv="X-UA-Compatible" content="IE=edge" />

  <meta name="viewport" content="width=device-width, initial-scale=1.0" /> <title>Document</title>
```

```
</head>

<body>
  <p>the msg:{{ msg}}</p>
  <p></p>
</body>

</html>
```

Index:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Sidebar Menu</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.2/dist/css/bootstrap.min.css" rel="stylesheet"
integrity="sha384-Zenh87qX5JnK2Jl0vWa8Ck2rdkQ2Bzep5IDxbcnCeuOxjzrPF/et3URy9Bv1WTRi"
crossorigin="anonymous" />
  <link rel="stylesheet" href="static/css/style.css" />
</head>

<body>
  <div class="wrapper">
    <!-- Sidebar -->
    <nav id="sidebar">
      <div class="sidebar-header">
        <h3>Inventory</h3>
      </div>
    <ul class="list-unstyled components">
      <li class="active">
        <a>Dashboard</a>
      </li>
      <li>
        <a href="#">Add item</a>
      </li>
      <li>
        <a href="#pageSubmenu">Pages</a>
      </li>
      <li>
        <a href="#">delete items</a>
      </li>
      <li>
        <a href="#">Help</a>
      </li>
    </ul>
  </nav>
  <!-- Page Content -->
  <div id="content">
    <h2>Dashboard</h2>
    <p>
      Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod
      tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim
      veniam,
    </p>
  </div>
</div>
<nav class="navbar navbar-expand-lg bg-light">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">Navbar</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bstarget="#navbarNavDropdown"
     aria-controls="navbarNavDropdown" aria-expanded="false" arialabel="Toggle navigation"> <span
     class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarNavDropdown">
     <ul class="navbar-nav">
      <li class="nav-item">
       <a class="nav-link active" aria-current="page" href="#">Home</a>
      </li>
      <li class="nav-item">
       <a class="nav-link" href="#">Features</a>
      </li>
      <li class="nav-item">
       <a class="nav-link" href="#">Pricing</a>
      </li>
      <li class="nav-item dropdown">
       <a class="nav-link dropdown-toggle" href="#" role="button" data-bs-toggle="dropdown" aria-expanded="false">
        Dropdown link
       </a>
       <ul class="dropdown-menu">
        <li><a class="dropdown-item" href="#">Action</a></li>
        <li><a class="dropdown-item" href="#">Another action</a></li>
        <li>
         <a class="dropdown-item" href="#">Something else here</a> </li>
       </ul>
      </li>
     </ul>
    </div>
   </div>
  </nav>
```

```
<nav>
  <div class="search">
    <i class="bx bx-search"></i>
    <input type="text" class="hide" placeholder="Quick Search ..." />
  </div>

  <div class="sidebar-links">
    <ul>
      <div class="active-tab"></div>
      <li class="tooltip-element" data-tooltip="0">
        <a href="#" class="active" data-active="0">
          <div class="icon">
            <i class="bx bx-tachometer"></i>
            <i class="bx bxs-tachometer"></i>
          </div>
          <span class="link hide">Dashboard</span>
        </a>
      </li>
      <li class="tooltip-element" data-tooltip="1">
        <a href="#" data-active="1">
          <div class="icon">
            <i class="bx bx-folder"></i>
            <i class="bx bxs-folder"></i>
          </div>
          <span class="link hide">Products</span>
        </a>
      </li>
      <li class="tooltip-element" data-tooltip="2">
        <a href="#" data-active="2">
          <div class="icon">
            <i class="bx bx-message-square-detail"></i>
```

```html
      <i class="bx bxs-message-square-detail"></i>
    </div>
    <span class="link hide">Add items</span>
  </a>
</li>
<li class="tooltip-element" data-tooltip="3">
  <a href="#" data-active="3">
    <div class="icon">
      <i class="bx bx-bar-chart-square"></i>
      <i class="bx bxs-bar-chart-square"></i>
    </div>
    <span class="link hide">Remove items</span>
  </a>
</li>
<div class="tooltip">
  <span class="show">Dashboard</span>
  <span>Projects</span>
  <span>Messages</span>
  <span>Analytics</span>
</div>

<li class="tooltip-element" data-tooltip="1">
  <a href="#" data-active="5">
    <div class="icon">
      <i class="bx bx-help-circle"></i>
      <i class="bx bxs-help-circle"></i>
    </div>
    <span class="link hide">Help</span>
  </a>
</li>
<li class="tooltip-element" data-tooltip="2">
```

```
      <a href="#" data-active="6">
        <div class="icon">
          <i class="bx bx-cog"></i>
          <i class="bx bxs-cog"></i>
        </div>
        <span class="link hide">Settings</span>
      </a>
    </li>
    <div class="tooltip">
      <span class="show">Tasks</span>
      <span>Help</span>
      <span>Settings</span>
    </div>
  </ul>
</div>
<div class="sidebar-footer">
  <a href="#" class="account tooltip-element" data-tooltip="0">
    <i class="bx bx-user"></i>
  </a>
  <div class="admin-user tooltip-element" data-tooltip="1">
    <div class="admin-profile hide">
      <img src="./img/face-1.png" alt="" />
      <div class="admin-info">
        <h3>Ganesh</h3>
        <h5>user</h5>
      </div>
    </div>
    <a href="#" class="log-out">
      <i class="bx bx-log-out"></i>
    </a>
  </div>
```

```
      <div class="tooltip">
        <span class="show">Ganesh</span>
        <span>Logout</span>
      </div>
    </div>
  </nav>

  <main>
    <h1>My Dashboard</h1>
  </main>
  <script src="static/js/app.js"></script>
</body>
</html>
```

Order:

```
{% extends 'base.html '%}
{% block head %}
<title>Login page</title> {%
endblock%}

{%block body%}

<main class="container ">
    <div class="mx-auto mt-5 border bg-light login-card " style="width:500px;">
        <h2 class='mx-4 mt-2'>LOGIN</h2>
        <form action="{{url_for('login') }}" method="post">
            <div class="mx-4 mt-2 text-danger">{{ msg }}</div>
            <div class="my-2 mx-4">
                <label for="username">username</label>
                 <input type="text" class="form-control" placeholder="adc@gmail.com" name="username" required />
            </div>
            <div class="my-2 mx-4">
        <label for="password_1">password</label>
        <input type="password" class="form-control" name="password_1" required />
      </div>
      <input type="submit" value="submit" class="btn btn-primary my-4 mt-2 mx-4" />

    </form>
    <p>Don't have an account?<a href="{{ url_for('signup') }}"> Sign Up</a>
  </div>
</main>
</p>
</main>
{% endblock%}
```

Advantages:

1. **You have no control over your money** If you don’t check your spending and create a budget, you will have no control whatsoever on your money. Instead, money will control you, and you will either have perpetual lack of funds or you will end up steeped in debt. A money manager app helps you decide between short-term and long-term spending.

2. **You have no financial goals:** If you are spending money frivolously, you will not have money to set financial goals. However, when you have a daily expense manager, you will be able to work with limited resources and use your money in a wise manner so that you can create financial goals and ensure you meet them.

3. **You are unaware what is happening with your money:** If you are clueless about how much is your inflow and how much you are spending; you will not know at the end of the month what happened to your money. An expense tracker helps you figure out what is happening to your money, and whether you can afford something you want.

4. **You spend and save in a haphazard manner:** If you don’t have great financial management skills, you will not know how to categorize your expenses. However, tracking your expenses and budgeting them will help you become aware of how much you have to allocate to each expense category, and if you are short, you will be able to make adjustments with ease**.**

5. **You have no clue about making your money work for you:** In this day and age, when expenses are going through the roof, it has become crucial that you learn to make your money work for you so that you can create a nest egg for the future.

6. **You don’t have funds for emergencies** Remember, emergencies come when you least expect. Hence, if you don’t have money stashed away for a rainy day, you will end up borrowing from family and friends. This way you could get into debt that will be difficult to pay back due to your poor money management skills

Disadvantages:

Your information is less secure, and probably being used and sold. If the service is free, then the product is you. Mint.com, like other financial apps, is a free service. They have to pay their bills somehow, so regardless of what their privacy policy may or may not say, just assume that your spending history and trends are going to be recorded and analysed, by someone, somewhere. Now, you shouldn’t have to worry about credit card fraud or identity theft, these companies are large enough and secure enough that you’ll never have to worry about something like that. Just recognize that your information, most likely anonymous, will be used and potentially even sold. Personally, I have no problem with that, but if you do, then make sure you avoid these types of services**.** Automating everything to do with your finances can make you financially lazy. If your bills are paid automatically and your finances are track automatically, then what is there left for you to do? Not a lot, to be honest. So you might stop caring about what you’re spending and where your money is going. Eventually you may look at your Mint data and realize that you’ve blown your budget over the last two months, but by then it is too late. So if you do choose to use this program, ensure that you are also being diligent in checking in on your finances. Set up a weekly or biweekly check for yourself to go through your finances and hit on all the important points**.**

Conclusion:

After making this application we assure that this application will help its users to manage the cost of their daily expenditure. It will guide them and aware them about their daily expenses. It will prove to be helpful for the people who are frustrated with their daily budget management, irritated because of amount of expenses and wishes to manage money and to preserve the record of their daily cost which may be useful to change their way of spending money. In short, this application will help its users to overcome the wastage of money

GitHub Link:

https://github.com/IBM-EPBL/IBM-Project-29655-1660128156

Project Demo Link:

https://drive.google.com/file/d/1WPdFQEY2OI03WlgpKj45zCsHZUX5BOAt/view?usp=drivesdk