app.py

from flask import Flask, render\_template, request, redirect, url\_for

import csv

import os

app = Flask(\_\_name\_\_)

CSV\_FILE = "payments.csv"

# Ensure the CSV file exists

if not os.path.exists(CSV\_FILE):

    with open(CSV\_FILE, "w", newline="") as file:

        writer = csv.writer(file)

        writer.writerow(["Product Name", "Price", "Profit Margin", "Quantity", "Tax", "Vendor", "Reconciliation", "Total Payment"])

# Function to save payment data to CSV

def save\_payment(data):

    with open(CSV\_FILE, "a", newline="") as file:

        writer = csv.writer(file)

        for row in data:

            writer.writerow(row)

# Function to load payment history from CSV

def load\_payments():

    payments = []

    with open(CSV\_FILE, "r") as file:

        reader = csv.DictReader(file)

        for row in reader:

            payments.append(row)

    return payments

@app.route("/", methods=["GET", "POST"])

def index():

    if request.method == "POST":

        # Get form data

        product\_name = request.form.getlist("product\_name")

        price = request.form.getlist("price")

        profit\_margin = request.form.getlist("profit\_margin")

        quantity = request.form.getlist("quantity")

        tax = request.form.getlist("tax")

        vendor = request.form.getlist("vendor")

        reconciliation = request.form.getlist("reconciliation")

        payments = []

        for i in range(len(product\_name)):

            if not product\_name[i] or not price[i] or not quantity[i] or not vendor[i]:

                continue  # Skip empty fields

            price\_value = float(price[i])

            profit\_value = float(profit\_margin[i]) if profit\_margin[i] else 0

            quantity\_value = int(quantity[i])

            tax\_value = float(tax[i]) if tax[i] else 0

            # Calculate Total Payment

            profit\_amount = (profit\_value / 100) \* price\_value

            tax\_amount = (tax\_value / 100) \* price\_value

            total\_payment = (price\_value + profit\_amount + tax\_amount) \* quantity\_value

            # Apply reconciliation discount (if applicable)

            if "discount" in reconciliation[i].lower():

                total\_payment \*= 0.9  # 10% discount

            payments.append([product\_name[i], price\_value, profit\_value, quantity\_value, tax\_value, vendor[i], reconciliation[i], total\_payment])

        save\_payment(payments)  # Save to CSV

        return redirect(url\_for("index"))  # Refresh page

    # Load existing payments from CSV

    payments = load\_payments()

    return render\_template("index.html", payments=payments)

if \_\_name\_\_ == "\_\_main\_\_":

    app.run(debug=True)

index.html

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Vendor Payment Management</title>

    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css">

</head>

<body>

    <div class="container mt-4">

        <h2>Vendor Payment Management</h2>

        <form action="/" method="POST">

            <div id="products-container">

                <div class="product-entry mb-3">

                    <div class="row">

                        <div class="col"><input type="text" class="form-control" name="product\_name" placeholder="Product Name" required></div>

                        <div class="col"><input type="number" class="form-control" name="price" placeholder="Price (₹)" required></div>

                        <div class="col"><input type="number" class="form-control" name="profit\_margin" placeholder="Profit Margin (%)"></div>

                        <div class="col"><input type="number" class="form-control" name="quantity" placeholder="Quantity" required></div>

                        <div class="col"><input type="number" class="form-control" name="tax" placeholder="Tax (%)"></div>

                        <div class="col"><input type="text" class="form-control" name="vendor" placeholder="Vendor" required></div>

                        <div class="col">

                            <select class="form-control" name="reconciliation">

                                <option value="None">None</option>

                                <option value="Discount">Discount</option>

                                <option value="Return">Return</option>

                                <option value="Exchange">Exchange</option>

                                <option value="Perfect">Perfect</option>

                            </select>

                        </div>

                    </div>

                </div>

            </div>

            <button type="button" class="btn btn-primary mt-3" onclick="addProduct()">Add Product</button>

            <button type="submit" class="btn btn-success mt-3">Submit Payment</button>

        </form>

        <h2 class="mt-4">Vendor Payment History</h2>

        <table class="table table-bordered">

            <thead>

                <tr>

                    <th>Product Name</th>

                    <th>Price (₹)</th>

                    <th>Profit Margin (%)</th>

                    <th>Quantity</th>

                    <th>Tax (%)</th>

                    <th>Vendor</th>

                    <th>Reconciliation</th>

                    <th>Total Payment (₹)</th>

                </tr>

            </thead>

            <tbody>

                {% for payment in payments %}

                <tr>

                    <td>{{ payment["Product Name"] }}</td>

                    <td>{{ payment["Price"] }}</td>

                    <td>{{ payment["Profit Margin"] }}</td>

                    <td>{{ payment["Quantity"] }}</td>

                    <td>{{ payment["Tax"] }}</td>

                    <td>{{ payment["Vendor"] }}</td>

                    <td>{{ payment["Reconciliation"] }}</td>

                    <td>{{ payment["Total Payment"] }}</td>

                </tr>

                {% endfor %}

            </tbody>

        </table>

    </div>

    <script>

        function addProduct() {

            let container = document.getElementById("products-container");

            let div = document.createElement("div");

            div.classList.add("product-entry", "mb-3");

            div.innerHTML = container.firstElementChild.innerHTML;

            container.appendChild(div);

        }

    </script>

</body>

</html>