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

**import mysql.connector**

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

**# Cấu hình kết nối 2 database**

**config = {**

**'uk': {**

**'host': 'localhost',**

**'user': 'crawler',**

**'password': '123456',**

**'database': 'crawl\_data\_uk',**

**'table': 'books\_uk'**

**},**

**'tiki': {**

**'host': 'localhost',**

**'user': 'crawler',**

**'password': '123456',**

**'database': 'crawl\_data\_tiki',**

**'table': 'books\_tiki'**

**}**

**}**

**# Template base + các trang được nhúng trong đây (dùng render\_template\_string)**

**base\_template = """**

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

**<meta charset="UTF-8" />**

**<title>Book Manager</title>**

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

**<style>**

**body { background-color: #f8f9fa; }**

**h1 { font-weight: bold; font-family: 'Segoe UI', sans-serif; margin-bottom: 30px; }**

**.table th { background-color: #dee2e6; }**

**</style>**

**</head>**

**<body>**

**<div class="container mt-4">**

**<h1 class="text-center">📚 Book Manager</h1>**

**{% block content %}{% endblock %}**

**</div>**

**</body>**

**</html>**

**"""**

**index\_template = """**

**{% extends base\_template %}**

**{% block content %}**

**<div class="mb-3">**

**<a href="{{ url\_for('list\_books', db='uk') }}" class="btn btn-secondary">UK Books</a>**

**<a href="{{ url\_for('list\_books', db='tiki') }}" class="btn btn-secondary">Tiki Books</a>**

**{% if db %}**

**<a href="{{ url\_for('add\_book', db=db) }}" class="btn btn-success">Add Book</a>**

**<a href="{{ url\_for('query', db=db) }}" class="btn btn-outline-primary">Query</a>**

**{% endif %}**

**</div>**

**{% if books %}**

**<table class="table table-bordered table-striped">**

**<thead>**

**<tr>**

**{% for col in columns %}**

**<th>{{ col }}</th>**

**{% endfor %}**

**<th>Actions</th>**

**</tr>**

**</thead>**

**<tbody>**

**{% for row in books %}**

**<tr>**

**{% for item in row %}**

**<td>{{ item }}</td>**

**{% endfor %}**

**<td>**

**<a href="{{ url\_for('edit\_book', db=db, book\_id=row[0]) }}" class="btn btn-warning btn-sm">Edit</a>**

**<a href="{{ url\_for('delete\_book', db=db, book\_id=row[0]) }}" class="btn btn-danger btn-sm" onclick="return confirm('Delete?')">Delete</a>**

**</td>**

**</tr>**

**{% endfor %}**

**</tbody>**

**</table>**

**{% else %}**

**<p>No books to display. Please select a database.</p>**

**{% endif %}**

**{% endblock %}**

**"""**

**form\_template = """**

**{% extends base\_template %}**

**{% block content %}**

**<h3>{{ action }} Book ({{ db|capitalize }})</h3>**

**<form method="POST">**

**<div class="mb-3">**

**<label>Title</label>**

**<input name="title" class="form-control" required value="{{ book[1] if book else '' }}">**

**</div>**

**<div class="mb-3">**

**<label>Price</label>**

**<input name="price" class="form-control" type="number" step="1000" required value="{{ book[2] if book else '' }}">**

**</div>**

**<div class="mb-3">**

**<label>Rating</label>**

**<input name="rating" class="form-control" type="number" step="0.1" required value="{{ book[3] if book else '' }}">**

**</div>**

**<div class="mb-3">**

**<label>URL</label>**

**<input name="url" class="form-control" required value="{{ book[4] if book else '' }}">**

**</div>**

**<button class="btn btn-primary">{{ action }}</button>**

**<a href="{{ url\_for('list\_books', db=db) }}" class="btn btn-secondary">Back</a>**

**</form>**

**{% endblock %}**

**"""**

**query\_template = """**

**{% extends base\_template %}**

**{% block content %}**

**<h3>SQL Query on {{ db|capitalize }} DB</h3>**

**<form method="POST">**

**<textarea name="query" class="form-control" rows="5" placeholder="Enter SQL here...">{{ request.form.query }}</textarea>**

**<button type="submit" class="btn btn-primary mt-2">Execute</button>**

**</form>**

**{% if error %}**

**<div class="alert alert-danger mt-3">{{ error }}</div>**

**{% endif %}**

**{% if result %}**

**{% if headers %}**

**<table class="table table-bordered mt-3">**

**<thead>**

**<tr>{% for h in headers %}<th>{{ h }}</th>{% endfor %}</tr>**

**</thead>**

**<tbody>**

**{% for row in result %}**

**<tr>{% for cell in row %}<td>{{ cell }}</td>{% endfor %}</tr>**

**{% endfor %}**

**</tbody>**

**</table>**

**{% else %}**

**<div class="alert alert-success mt-3">{{ result }}</div>**

**{% endif %}**

**{% endif %}**

**{% endblock %}**

**"""**

**def get\_connection\_and\_table(db):**

**if db not in config:**

**return None, None**

**conf = config[db]**

**conn = mysql.connector.connect(**

**host=conf['host'],**

**user=conf['user'],**

**password=conf['password'],**

**database=conf['database']**

**)**

**return conn, conf['table']**

**@app.route('/')**

**def home():**

**return render\_template\_string(index\_template, base\_template=base\_template, books=[], columns=[], db=None)**

**@app.route('/books/<db>')**

**def list\_books(db):**

**conn, table = get\_connection\_and\_table(db)**

**cursor = conn.cursor()**

**cursor.execute(f"SELECT \* FROM {table}")**

**books = cursor.fetchall()**

**columns = [desc[0] for desc in cursor.description]**

**cursor.close()**

**conn.close()**

**return render\_template\_string(index\_template, base\_template=base\_template, books=books, columns=columns, db=db)**

**@app.route('/add/<db>', methods=['GET', 'POST'])**

**def add\_book(db):**

**if request.method == 'POST':**

**title = request.form['title']**

**price = float(request.form['price'])**

**rating = float(request.form['rating'])**

**url = request.form['url']**

**conn, table = get\_connection\_and\_table(db)**

**cursor = conn.cursor()**

**cursor.execute(f"INSERT INTO {table} (title, price, rating, url) VALUES (%s, %s, %s, %s)",**

**(title, price, rating, url))**

**conn.commit()**

**cursor.close()**

**conn.close()**

**return redirect(url\_for('list\_books', db=db))**

**return render\_template\_string(form\_template, base\_template=base\_template, db=db, action='Add', book=None)**

**@app.route('/edit/<db>/<int:book\_id>', methods=['GET', 'POST'])**

**def edit\_book(db, book\_id):**

**conn, table = get\_connection\_and\_table(db)**

**cursor = conn.cursor()**

**if request.method == 'POST':**

**title = request.form['title']**

**price = float(request.form['price'])**

**rating = float(request.form['rating'])**

**url = request.form['url']**

**cursor.execute(f"UPDATE {table} SET title=%s, price=%s, rating=%s, url=%s WHERE id=%s",**

**(title, price, rating, url, book\_id))**

**conn.commit()**

**cursor.close()**

**conn.close()**

**return redirect(url\_for('list\_books', db=db))**

**cursor.execute(f"SELECT \* FROM {table} WHERE id=%s", (book\_id,))**

**book = cursor.fetchone()**

**cursor.close()**

**conn.close()**

**return render\_template\_string(form\_template, base\_template=base\_template, db=db, action='Edit', book=book)**

**@app.route('/delete/<db>/<int:book\_id>')**

**def delete\_book(db, book\_id):**

**conn, table = get\_connection\_and\_table(db)**

**cursor = conn.cursor()**

**cursor.execute(f"DELETE FROM {table} WHERE id=%s", (book\_id,))**

**conn.commit()**

**cursor.close()**

**conn.close()**

**return redirect(url\_for('list\_books', db=db))**

**@app.route('/query/<db>', methods=['GET', 'POST'])**

**def query(db):**

**conn, table = get\_connection\_and\_table(db)**

**result = None**

**headers = None**

**error = None**

**if request.method == 'POST':**

**sql = request.form['query']**

**try:**

**cursor = conn.cursor()**

**cursor.execute(sql)**

**if sql.strip().lower().startswith("select"):**

**result = cursor.fetchall()**

**headers = [desc[0] for desc in cursor.description]**

**else:**

**conn.commit()**

**result = f"{cursor.rowcount} row(s) affected."**

**cursor.close()**

**except Exception as e:**

**error = str(e)**

**conn.close()**

**return render\_template\_string(query\_template, base\_template=base\_template, db=db, result=result, headers=headers, error=error)**

**if \_\_name\_\_ == '\_\_main\_\_':**

**app.run(debug=True)**