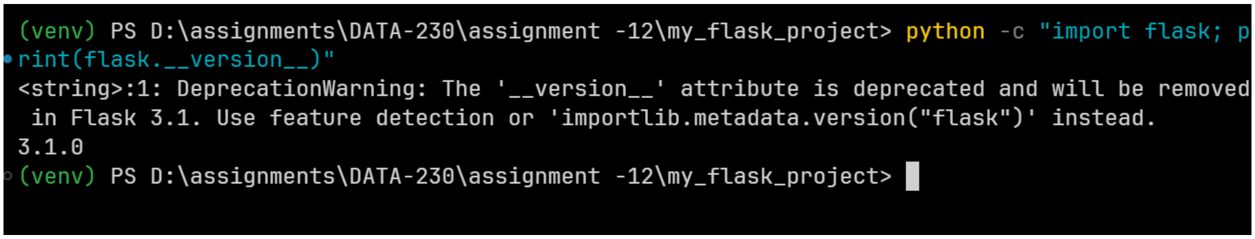
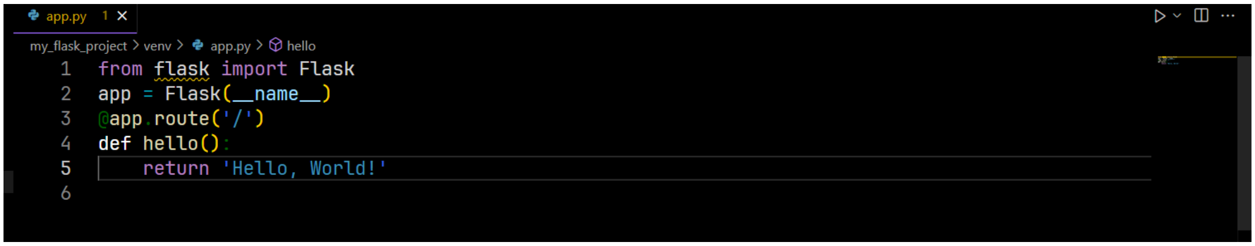
Step 1: Install Flask

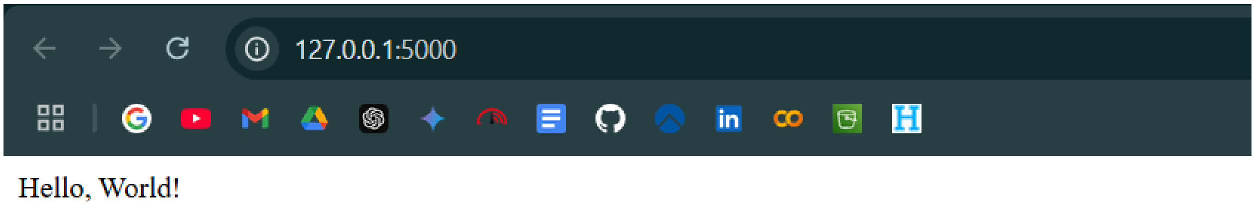


```
(venv) PS D:\assignments\DATA-230\assignment -12\my_flask_project> python -c "import flask; p
rint(flask.__version__)"
<string>:1: DeprecationWarning: The '__version__' attribute is deprecated and will be removed
 in Flask 3.1. Use feature detection or 'importlib.metadata.version("flask")' instead.
3.1.0
(venv) PS D:\assignments\DATA-230\assignment -12\my_flask_project>
```

Step 2: Creating a Base Application



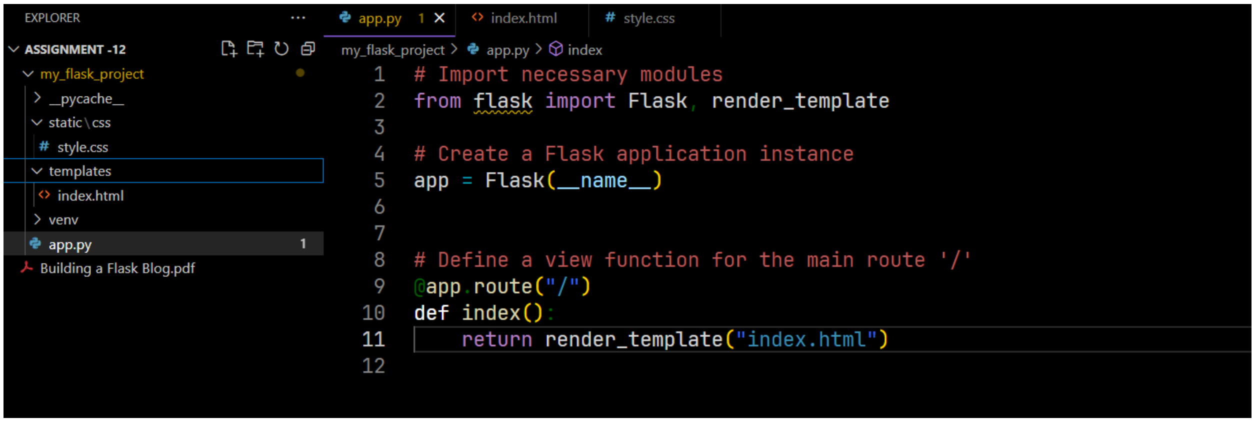
```python
from flask import Flask
app = Flask(__name__)
@app.route('/')
def hello():
    return 'Hello, World!'
```



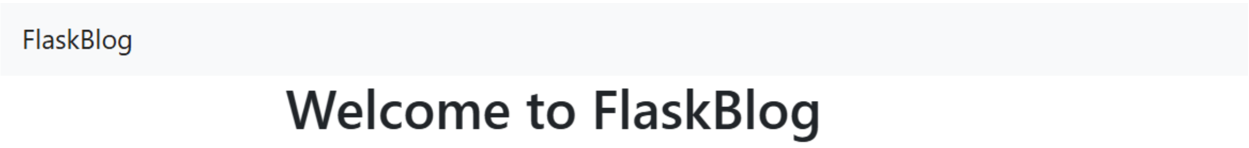
127.0.0.1:5000

Hello, World!

Step 3: Utilizing HTML Templates



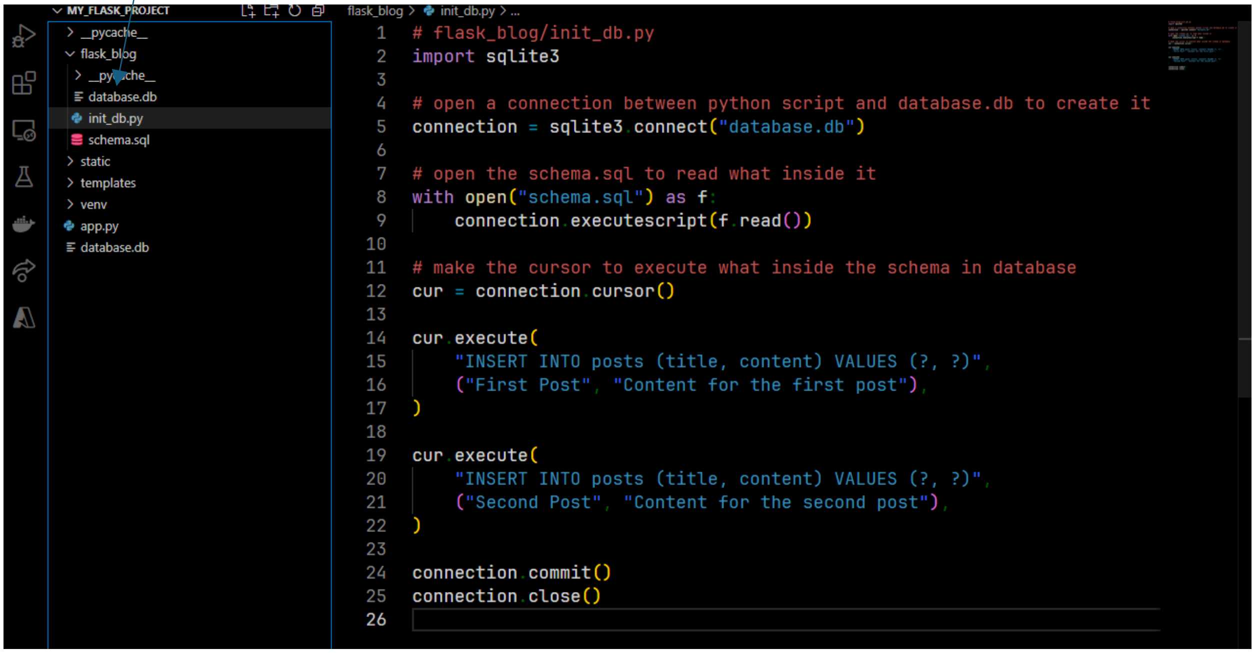
```python
# Import necessary modules
from flask import Flask, render_template

# Create a Flask application instance
app = Flask(__name__)


# Define a view function for the main route '/'
@app.route("/")
def index():
    return render_template("index.html")
```



FlaskBlog

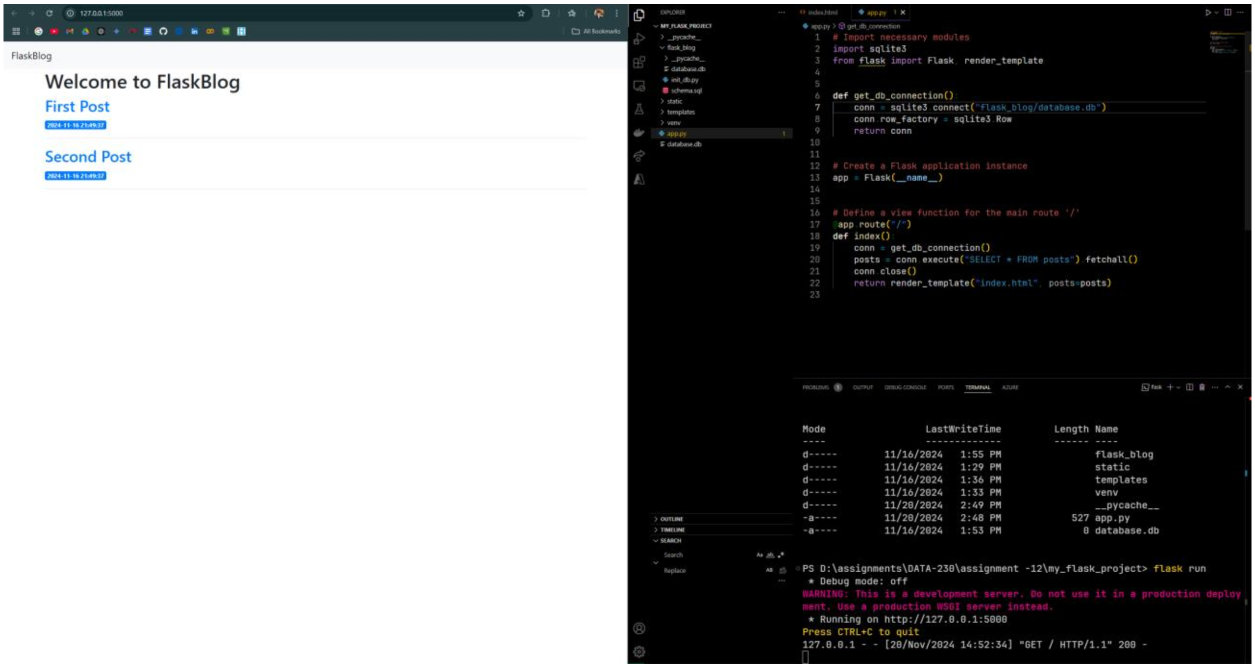
Welcome to FlaskBlog

Step 4: Setting up the Database



```python
# flask_blog/init_db.py
import sqlite3

# open a connection between python script and database.db to create it
connection = sqlite3.connect("database.db")

# open the schema.sql to read what inside it
with open("schema.sql") as f:
    connection.executescript(f.read())

# make the cursor to execute what inside the schema in database
cur = connection.cursor()

cur.execute(
    "INSERT INTO posts (title, content) VALUES (?, ?)",
    ("First Post", "Content for the first post"),
)

cur.execute(
    "INSERT INTO posts (title, content) VALUES (?, ?)",
    ("Second Post", "Content for the second post"),
)

connection.commit()
connection.close()
```

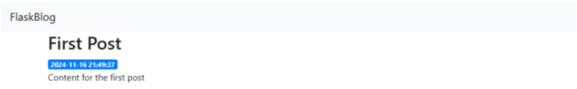
Step 5: Displaying All Posts



```python
# Import necessary modules
import sqlite3
from flask import Flask, render_template


def get_db_connection():
    conn = sqlite3.connect("flask_blog/database.db")
    conn.row_factory = sqlite3.Row
    return conn


# Create a Flask application instance
app = Flask(__name__)


# Define a view function for the main route '/'
@app.route("/")
def index():
    conn = get_db_connection()
    posts = conn.execute("SELECT * FROM posts").fetchall()
    conn.close()
    return render_template("index.html", posts=posts)
```

```
Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
d-----        11/16/2024   1:55 PM                flask_blog
d-----        11/16/2024   1:29 PM                static
d-----        11/16/2024   1:36 PM                templates
d-----        11/16/2024   1:33 PM                venv
d-----        11/20/2024   2:49 PM                __pycache__
-a----        11/20/2024   2:48 PM            527 app.py
-a----        11/16/2024   1:53 PM              0 database.db

PS D:\assignments\DATA-230\assignment -12\my_flask_project> flask run
 * Debug mode: off
WARNING: This is a development server. Do not use it in a production deploy
ment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [20/Nov/2024 14:52:34] "GET / HTTP/1.1" 200 -
```

Step 6: Displaying a Single Post

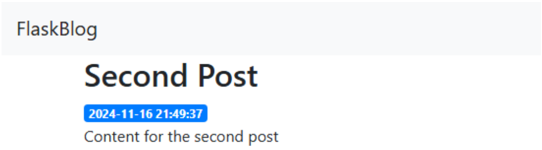

FlaskBlog

First Post

2024-11-16 21:49:37

Content for the first post

1.


FlaskBlog

Second Post

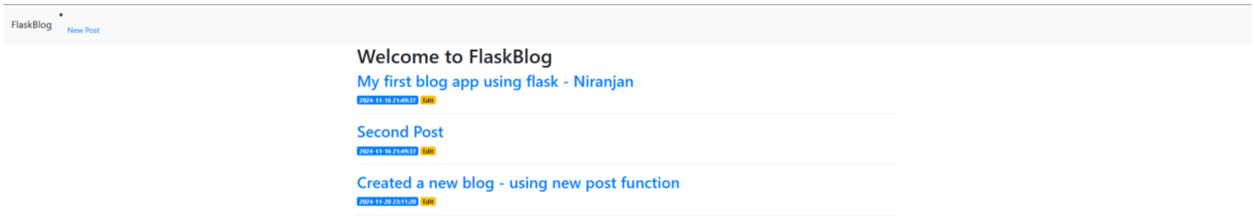
2024-11-16 21:49:37

Content for the second post

2.

Step 7: Editing, Creating, and Deleting Posts

1. Creating new blog



Welcome to FlaskBlog

My first blog app using flask - Niranjan

2024-11-16 21:49:37

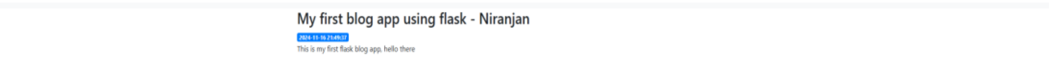
Second Post

2024-11-16 21:49:37

Created a new blog - using new post function

2024-11-20 23:11:20

2. Editing new blog

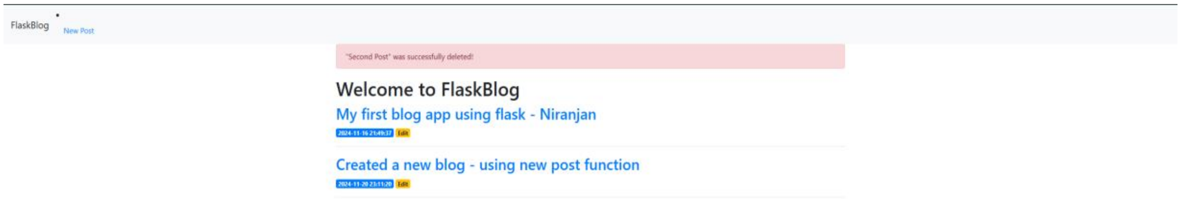


My first blog app using flask - Niranjan

2024-11-16 21:49:37

This is my first flask blog app, hello there

3. Deleting post



"Second Post" was successfully deleted!

Welcome to FlaskBlog

My first blog app using flask - Niranjan

2024-11-16 21:49:37

Created a new blog - using new post function

2024-11-20 23:11:20