



Uncle Engineer

django

STACKPYTHON

Django PostgreSQL (Special Class)



Feb 13, 2021, 8.00 pm.



Facebook Group: *django 50 hours by Uncle Engineer (Only members can access)*

Uncle Engineer-Django

Chapter 1

Connecting PostgreSQL to Django

Django's Official Relational Databases

- MySQL
- SQLite
- PostgreSQL
- MariaDB (Django 3.0)
- Oracle (Enterprise Grade)



PostgreSQL vs SQLite

SQLite

Advantages

- Lightweight
- Easy to use & set up
- Serverless
- Open Source

Disadvantages

- Not scalable
- Only 5 types support
BLOB, NULL, INTEGER, TEXT, REAL
- 500kb storage limited
- Less secure

PostgreSQL

Advantages

- Good for bigger projects
- Great for concurrency
- Secure
- Rich Data Types
- Open Source

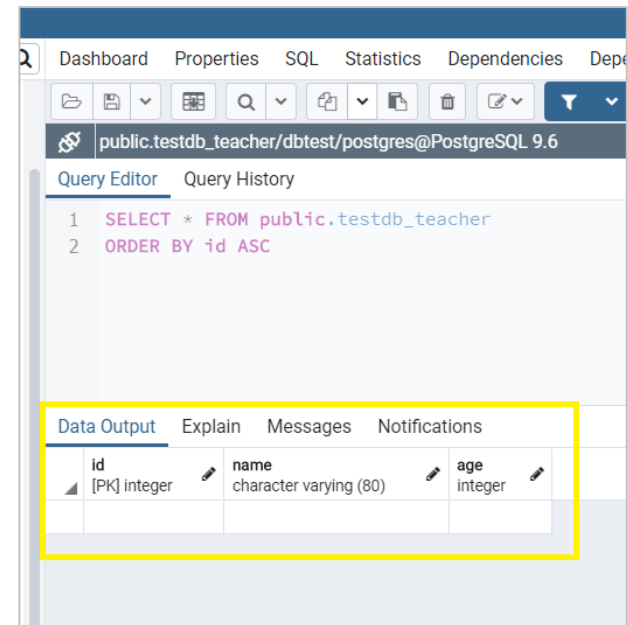
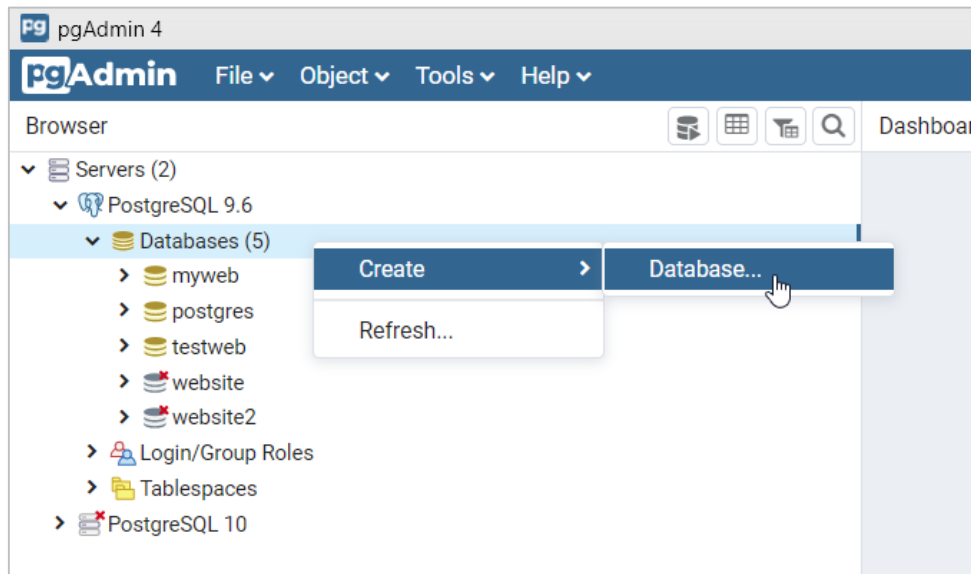
Disadvantages

- Not easy to config
- High learning curve required

The most recommended database for Django

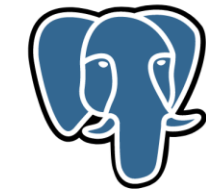
pgAdmin

A GUI management tool for PostgreSQL



Popular GUI management tools

- pgAdmin (PostgreSQL)
- phpMyAdmin (MySQL)
- DB Browser (SQLite)
- etc



pgAdmin



psql CLI (Command Line Interface)

A command line interface for PostgreSQL used to Create and access a database via terminal

```
SQL Shell (psql)
Server [localhost]:
Database [postgres]:
Port [5432]:
Username [postgres]:
psql (10.4)
WARNING: Console code page (437) differs
        8-bit characters might not work
        page "Notes for Windows users"
Type "help" for help.

postgres=# CREATE DATABASE guru99;
CREATE DATABASE
postgres=#
```

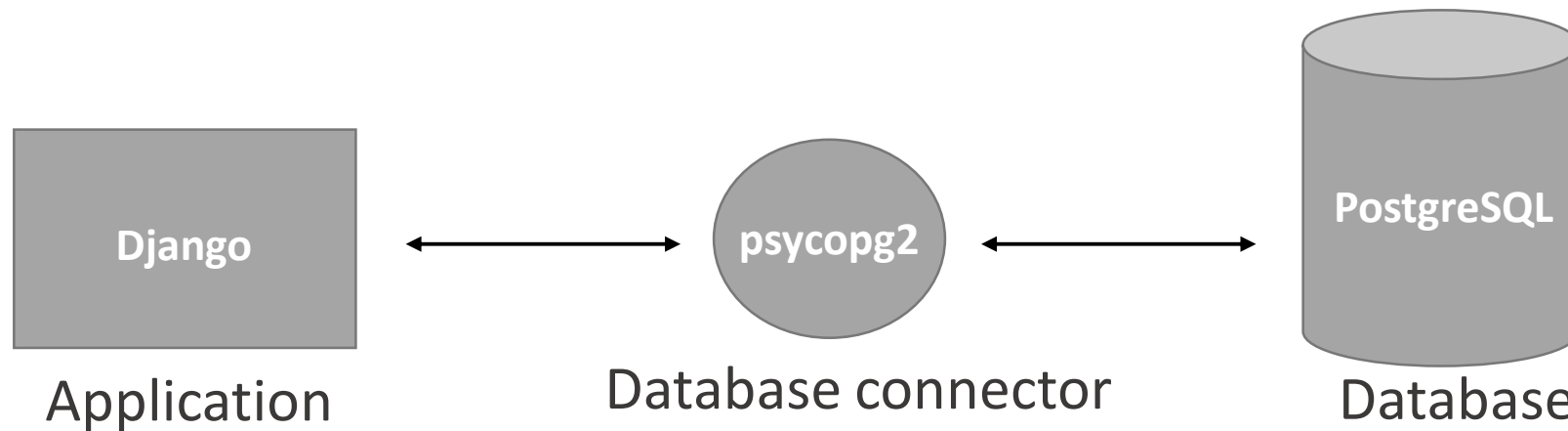
```
postgres=# \l
          List of databases
  Name      | Owner   | Encoding | Collate  | Ctype    | Access privileges
-----
guru99      | postgres | UTF8      | English_India.1252 | English_India.1252 |
postgres   | postgres | UTF8      | English_India.1252 | English_India.1252 |
template0   | postgres | UTF8      | English_India.1252 | English_India.1252 | =c/postgres, postgres=C
template1   | postgres | UTF8      | English_India.1252 | English_India.1252 | =c/postgres, postgres=C
(4 rows)

postgres=#
```

Photo: guru99.com

psycopg2

A **database connector** used to connect Django and PostgreSQL to talk to each other



pip install psycopg2 (Windows)

pip install psycopg2-binary (macOS)

Psycopg2 Installation

Windows

pip install psycopg2

macOS

pip install psycopg2-binary

Database Port

Databases	Default Ports
PostgreSQL	5432
MySQL	3306
MariaDB	3306
Oracle	1521
SQLite	None
MS SQL Server	1433

PostgreSQL

"The world's most advanced open source database"

postgresql.org

Chapter 2

WYSIWYG

WYSIWYG คืออะไร ?

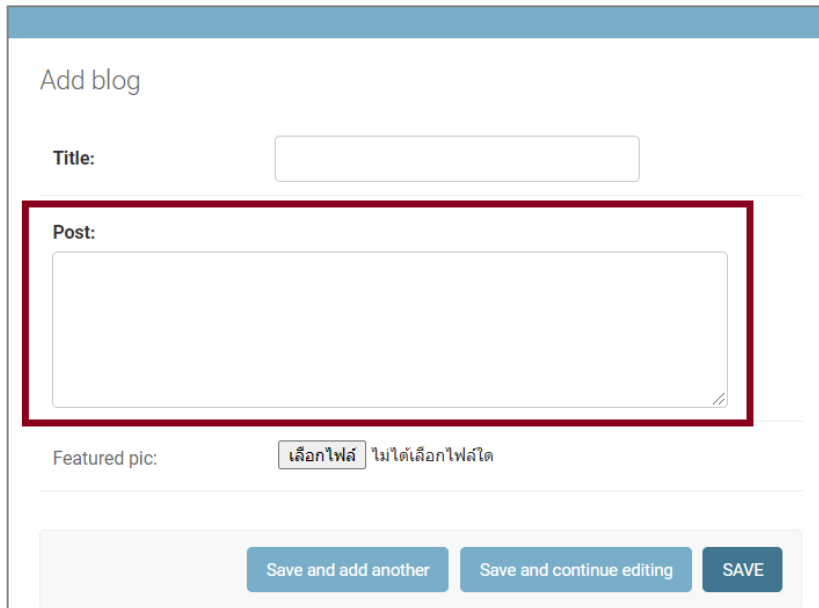
What You See Is What You Get, an editor to edit something e.g blog post, article

WYSIWYGs in the market now

- TinyMCE
- CKEditor
- Summernote
- etc

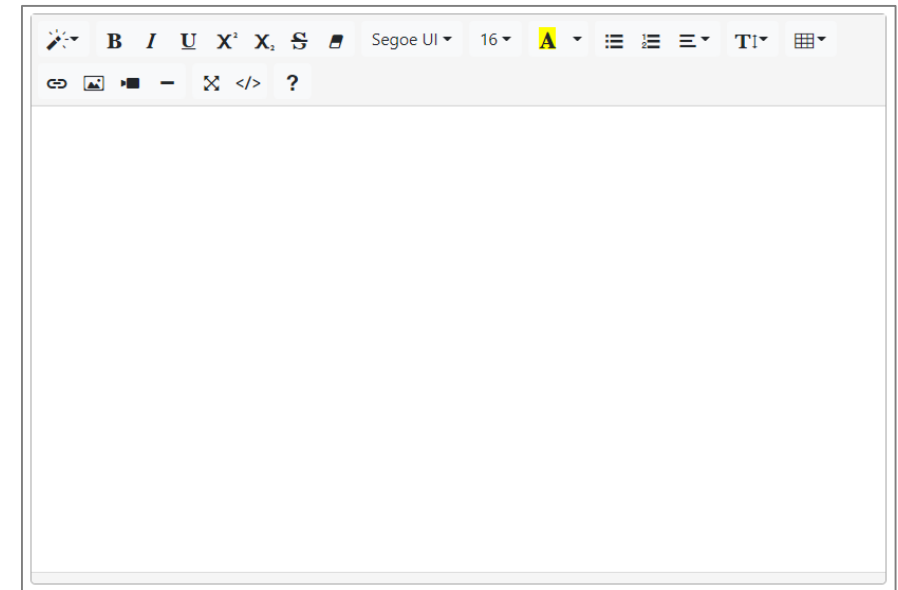
WYSIWYG Comparison

Without WYSIWYG



A screenshot of a web form titled "Add blog". It features a "Title:" label followed by a text input field. Below this is a "Post:" label followed by a large text area. The text area is highlighted with a red border. At the bottom of the form, there is a "Featured pic:" label, a file selection button labeled "เลือกไฟล์", and a text label "ไม่ได้เลือกไฟล์ใด". At the very bottom, there are three buttons: "Save and add another", "Save and continue editing", and "SAVE".

WYSIWYG

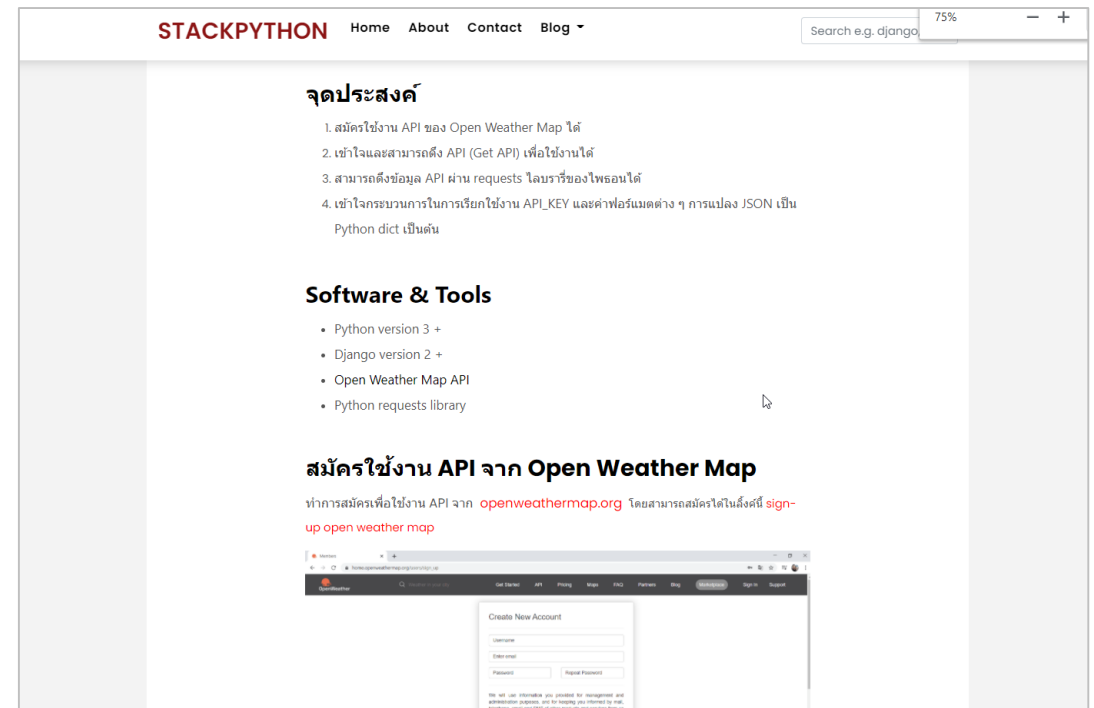


WYSIWYG Comparison (2)

Without WYSIWYG

applications for this kind of work is called Dreamweaver, and it's been around for years. Adobe GoLive and Microsoft FrontPage are also very popular, and if you start talking to Web designers, then you're likely to run into someone who uses one or more of these programs. There are quite a few other options, too. Most of them offer really convenient features, such as allowing you to flip back and forth between your actual HTML code and what the Web page will look like in a browser, the ability to create Web-based databases, nifty file management tools, code-coloring (that is, when you look at the HTML code of your page, different tags are colored differently, allowing you to find areas in your code easily), adding JavaScript functionalities like roll-over image swaps, etc.... On paper, it sounds like nothing but plusses. However, there are negative aspects to using WYSIWYG editors that you need to be aware of. Herewith, a list:

WYSIWYG



Why Django Summernote ?

- Easy
- Simple yet powerful
- Free

pip install django-summernote

Enjoy coding