

## PostgreSQL

- traditional RDBMS
- supports huge amount of data.
- free (open source)
- supports MVCC feature

## SQLite3

- supports small amount of data
- standalone & does not connect to any server

## MVCC - Multi Version Concurrency Control

This feature provides a concurrent access to the database without locking the data.

Suppose there are 1000+ users & multiple users are accessing the same data same time, application is never stuck or hangup. This improves performance of system

PostgreSQL port 5432

password 2486

To access postgresql from cmd, add to Environment variables (bin path)

To connect to postgres

> psql -U postgres

postgres=# CREATE DATABASE test; // Creates database

postgres=# \c test

// connect to database

To configure postgres in django.

1. Create a database from pgAdmin name foodOnline\_db

2. In settings.py

DATABASES = {

'default': {

'ENGINE': 'django.db.backends.postgresql',

'NAME': 'foodOnline-db',

```
'USER': 'postgres',
'PASSWORD': '2486',
'HOST': 'localhost',
} }
```

3. Install the package psycopg2

```
pip install psycopg2
```

4. Now to get the django starter tables we run  
python manage.py migrate

5. Create superuser to access admin panel  
python manage.py createsuperuser

Credentials: djangoadmin  
pass : 2486

6. To make db password secret we use python decouple.

```
pip install python-decouple
```

To make passwords secret create .env and all the sensitive lines in it, all add .env in .gitignore file.

E.g. .env

```
SECRET='abcde-----'
```

store value in .env

settings.py

```
SECRET_KEY='abcdef-----'
```

SECRET\_KEY= config('SECRET')

use it in settings.py

from decouple import config.

Django signals:

signals are utilities that helps us connect event with actions. Actions can be modification or creation of a entry in database.

Eg: creating profile instance as soon as user is created

signals such as pre\_init, post\_init, pre\_save, post\_save, pre\_delete, post\_delete, m2m\_changed . . .  
after saving

### Template Inheritance.

In html, to includes another html file

```
{% include 'path to file' %}
```

To load content

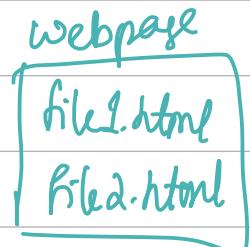
```
{% block content %}
```

```
{% endblock %}
```

Extend a html from another html

file2.html

```
{% extends 'file1.html' %}
```



field errors: Errors associated with model fields.

Eg: unique name for username

Non field errors: associated with form clean method

Custom validations from form level

Eg: confirm password → not a field of model

Messages: To create alerts in app.

django.contrib.messages

should be  
before this → django.contrib.sessions.middleware.SessionMiddleware  
(dependency) → django.contrib.message.middleware.MessageMiddleware

Content processor in template:

django.contrib.message.content\_processors.messages