# CUE: ORM Y LA DEFINICIÓN DEL MODELO

Pablo Varas Salamanca

14 de noviembre de 2024, 11:17:00

[GitHub del proyecto](#)

## REBOUND EXERCISE: CONFIGURAR UNA BASE DE DATOS EN DJANGO

### EJERCICIO:

1. Cree una base de datos en postgres llamada `db_practica_orm`.

2. Cree el usuario de la bases de datos llamado `user_db`, y contraseña `user_db`.

3. Cree un proyecto en Django con el nombre de `practica_orm`, usando un ambiente virtual de nombre `practica_orm_django`.

4. Conecte la base de datos al proyecto de Django.

5. Verifique que funcionen las migraciones iniciales, y ejecute el servidor Web de Django.

### DESARROLLO:

- Iniciar sesión en PostgreSQL:

```
1  sudo -u postgres psql
```

- Crear la base de datos

```
1  CREATE DATABASE db_practica_orm;
```

```
postgres=# CREATE DATABASE DB_PRACTICA_ORM;
CREATE DATABASE
postgres=#
```

- Crear usuario

```
1  CREATE USER user_db WITH PASSWORD 'user_db';
```

```
postgres=# CREATE USER user_db WITH PASSWORD 'user_db';
CREATE ROLE
postgres=#
```

- Dar permisos de usuario

```
1    GRANT ALL PRIVILEGES ON DATABASE db_practica_orm TO user_db;
```

```
postgres=# GRANT ALL PRIVILEGES ON DATABASE db_practica_orm TO user_db;
GRANT
postgres=# █
```

- Creamos el entorno virtual

```
1    python3 -m venv .env
```

```
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$ python3 -m venv .env
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$
```

- Activar el entorno virtual

```
1    source .env/bin/activate
```

```
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$ source .env/bin/acti
vate
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$
```

- Instalamos el requirements.txt con los paquetes

asgiref==3.8.1
beautifulsoup4==4.12.3
crispy-bootstrap5==2024.10
django==4.2.16
django-bootstrap-v5==1.0.11
django-crispy-forms==2.3
psycopg2==2.9.10
soupsieve==2.4.1
sqlparse==0.5.1
tzdata==2024.2

```
1    pip install -r requirements.txt
```

```
 .
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$ pip install -r requi
rements.txt
Collecting asgiref==3.8.1
  Using cached asgiref-3.8.1-py3-none-any.whl (23 kB)
Collecting beautifulsoup4==4.12.3
  Using cached beautifulsoup4-4.12.3-py3-none-any.whl (147 kB)
Collecting crispy-bootstrap5==2024.10
  Using cached crispy_bootstrap5-2024.10-py3-none-any.whl (24 kB)
Collecting django==4.2.16
  Using cached Django-4.2.16-py3-none-any.whl (8.0 MB)
Collecting django-bootstrap-v5==1.0.11
  Using cached django_bootstrap_v5-1.0.11-py3-none-any.whl (24 kB)
Collecting django-crispy-forms==2.3
  Using cached django_crispy_forms-2.3-py3-none-any.whl (31 kB)
Collecting psycopg2==2.9.10
  Using cached psycopg2-2.9.10-cp311-cp311-linux_x86_64.whl
Collecting soupsieve==2.4.1
  Using cached soupsieve-2.4.1-py3-none-any.whl (36 kB)
Collecting sqlparse==0.5.1
  Using cached sqlparse-0.5.1-py3-none-any.whl (44 kB)
Collecting tzdata==2024.2
  Using cached tzdata-2024.2-py2.py3-none-any.whl (346 kB)
Installing collected packages: tzdata, sqlparse, soupsieve, psycopg2, asgiref, django, beautifulsoup4, django-cr
ispy-forms, django-bootstrap-v5, crispy-bootstrap5
Successfully installed asgiref-3.8.1 beautifulsoup4-4.12.3 crispy-bootstrap5-2024.10 django-4.2.16 django-bootst
rap-v5-1.0.11 django-crispy-forms-2.3 psycopg2-2.9.10 soupsieve-2.4.1 sqlparse-0.5.1 tzdata-2024.2
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$
```

- Creamos el proyecto Django

```
 .
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$ django-admin startpr
oject config
```

- Creamos la aplicación producto

```
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm$ cd config
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$ python manage
.py startapp producto
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$ █
```

- Configurar `settings.py` para la conexión a la base de datos

```
■
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.postgresql',
        'NAME': 'db_practica_orm',
        'USER': 'postgres',
        'PASSWORD': 'pablo',
        'HOST': 'localhost',
        'PORT': '5432',
    }
}
-:**-   settings.py     56% L75    (Django company ElDoc)
Welcome to GNU Emacs, one component of the GNU/Linux operating system.
To follow a link, click Mouse-1 on it, or move to it and type RET.
To quit a partially entered command, type Control-g.
U:%%-   *GNU Emacs*     Top L1     (Fundamental)
```

- Agregamos la aplicación en `settings.py`

```
# Application definition

INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'producto.apps.ProductoConfig',█
]
-:---   settings.py    25% L40    (Django company ElDoc)
```

- Realizar migraciones

```
1    python manage.py makemigrations
2    python manage.py migrate
```

```
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$ python manage
.py makemigrations
No changes detected
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$ python manage
.py migrate
Operations to perform:
  Apply all migrations: admin, auth, contenttypes, sessions
Running migrations:
  Applying contenttypes.0001_initial... OK
  Applying auth.0001_initial... OK
  Applying admin.0001_initial... OK
  Applying admin.0002_logentry_remove_auto_add... OK
  Applying admin.0003_logentry_add_action_flag_choices... OK
  Applying contenttypes.0002_remove_content_type_name... OK
  Applying auth.0002_alter_permission_name_max_length... OK
  Applying auth.0003_alter_user_email_max_length... OK
  Applying auth.0004_alter_user_username_opts... OK
  Applying auth.0005_alter_user_last_login_null... OK
  Applying auth.0006_require_contenttypes_0002... OK
  Applying auth.0007_alter_validators_add_error_messages... OK
  Applying auth.0008_alter_user_username_max_length... OK
  Applying auth.0009_alter_user_last_name_max_length... OK
  Applying auth.0010_alter_group_name_max_length... OK
  Applying auth.0011_update_proxy_permissions... OK
  Applying auth.0012_alter_user_first_name_max_length... OK
  Applying sessions.0001_initial... OK
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$ █
```

- Crear un superusuario para acceder al panel de administración

```
1    python manage.py createsuperuser
```

```
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$ python manage
.py createsuperuser
Username (leave blank to use 'pablo'): admin
Email address: admin@admin.com
Password:
Password (again):
The password is too similar to the username.
This password is too short. It must contain at least 8 characters.
This password is too common.
Bypass password validation and create user anyway? [y/N]: y
Superuser created successfully.
(.env) pablo@debian:/media/DATA/Descargas/BOOTCAMP/Bootcamp/VSC/S7/S3/rebound/practica_orm/config$
```

- Inciamos el servidor

```
1    python manage.py runserver
```

- Accedemos al panel del administrador