

User Manual and Guide for E-commerce Project Setup with Django

Introduction

This guide will assist you in understanding and configuring the settings for an E-commerce project developed using Django. The project uses Django version 4.2.

Dependencies

Python 3.x

Django 4.2

Pandas

Scikit-Learn

“pip install Django”

“pip install pandas”

“pip install scikit-learn”

Configuration

Basic Settings

BASE_DIR: This variable holds the absolute path to the directory where your project is located.

SECRET_KEY: A secret key for cryptographic signing. It's crucial to keep this secret on a production environment.

DEBUG: This should be set to True during development so that you get detailed error pages. Set it to False in production.

ALLOWED_HOSTS: A list of strings representing the host/domain names that this Django site can serve. Leave it empty for development purposes. In production, include the domain names here.

Installed Apps

The **INSTALLED_APPS** configuration contains a list of all the applications that are enabled for this project. It includes various default apps provided by Django as well as custom apps. For example, main, jet, jet.dashboard, and paypal.standard.ipn.

Middleware

The **MIDDLEWARE** setting contains a list of middleware classes that are used by the project.

URL and WSGI Configuration

ROOT_URLCONF: A string representing the Python module where your URL configuration is defined.

WSGI_APPLICATION: A string pointing to the WSGI application object for your project. This is used by WSGI servers to forward requests to your Django application.

Templates

TEMPLATES: A list of configurations for template engines. The **BACKEND** option specifies the template engine to use. `django.template.backends.django.DjangoTemplates` is the default engine used by Django.

Database

DATABASES: A dictionary containing the settings for all databases to be used with the project. The default uses SQLite as the database backend.

Password Validation

AUTH_PASSWORD_VALIDATORS: A list of validators that are used to check the strength of user's passwords.

Internationalization

Language and timezone settings are defined by **LANGUAGE_CODE** and **TIME_ZONE**.

USE_I18N: A boolean that specifies if Django's internationalization framework is activated.

USE_TZ: A boolean that specifies if time zones support is enabled.

Static and Media Files

STATIC_ROOT, STATIC_URL, STATICFILES_DIRS: Settings related to the handling of static files (CSS, JavaScript, Images).

MEDIA_URL, MEDIA_ROOT: Settings for user-uploaded media.

Login and Logout Redirects

LOGIN_REDIRECT_URL: The URL where the user will be redirected after login.

LOGOUT_REDIRECT_URL: The URL where the user will be redirected after logout.

PayPal Configuration

PAYPAL_RECEIVER_EMAIL: The email of the PayPal account where the payments should be sent.

PAYPAL_TEST: Boolean value. If set to True, the system will use PayPal's sandbox environment.

JET Configuration

JET_SIDE_MENU_COMPACT: Boolean value. If set to True, the side menu of the Jet admin interface will be compact.

Running the Project

Navigate to the project directory.

Run the migrations:

“python manage.py migrate”

Run the development server:

“python manage.py runserver”

Access the site at <http://127.0.0.1:8000>.

Note

Make sure to change the SECRET_KEY and the DEBUG setting for production environments.

Set appropriate ALLOWED_HOSTS for production environments.

It is highly recommended to use a different database (such as PostgreSQL) in production.

Ensure proper file permissions for media and static directories.

Troubleshooting

If you encounter any issues:

Ensure that all dependencies are installed.

Make sure you have run the migrations.

Check the Django documentation for any setting you might have configured incorrectly.