

Django Project Structure

Setting up a Django project and understanding its structure is fundamental to developing applications effectively. Let's go through the steps to create a new Django project and app, and then explore the directory structure and the purpose of key files.

1. Create a New Django Project

Overview: A Django project is a collection of settings and configurations for an instance of Django, including database configuration, Django-specific options, and application-specific settings.

Esay Steps

1. Open a terminal.
2. Navigate to the directory where you want to create your project.
3. Run the `django-admin startproject` command:
 - Command: `django-admin startproject projectname` (replace `projectname` with your desired project name).

Example (Project)

```
django-admin startproject myproject
```

This command creates a new directory named `myproject` with the following structure:

```
myproject/  
  manage.py  
  myproject/  
    __init__.py  
    settings.py  
    urls.py  
    wsgi.py  
    asgi.py
```


3. Explore the Directory Structure and Files Created by Django

Project Directory (`myproject/`)

- `manage.py`: A command-line utility that lets you interact with this Django project. You can use it to start the development server, apply migrations, create apps, etc.

- **myproject/** directory:
 - **__init__.py** : An empty file that indicates to Python that this directory should be considered a package.
 - **settings.py** : Contains all the settings/configuration for your project. This includes database configurations, installed apps, middleware, templates, and more.
 - **urls.py** : The URL configuration file for the project. It routes URLs to views.
 - **wsgi.py** : Entry point for WSGI-compatible web servers to serve your project. Used for deployment.
 - **asgi.py** : Entry point for ASGI-compatible web servers to serve your project. Used for deployment with asynchronous capabilities.

Summary

By the end of this lesson. You should have a solid understanding of the auto-generated django project structure