**HelloWorld Django Project**

This is a simple Django project that demonstrates a "Hello World" application with a single app called helloworld\_app.

**Prerequisites**

* Python (version 3.7 or higher)
* Django (version 3.x or higher)
* Virtual environment tool (optional but recommended)

**Setup Instructions**

Follow these steps to set up and run the Django "HelloWorld" project:

**1. Create and Activate a Virtual Environment (Optional but Recommended)**

It's a good practice to create a virtual environment for each project to manage dependencies.

1. **Create a virtual environment**:

*python -m venv venv*

1. **Activate the virtual environment:**

On Windows:

*venv\Scripts\activate*

On macOS/Linux:

*source venv/bin/activate*

**2. Install Django**

Once the virtual environment is active, install Django:

*pip install django*

**3. Check version**

Python 3

*python3 –version*

*python3 -m django –version*

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*python –version*

*python -m django --version*

**4. Create a Django Project**

To create a new Django project named helloworld:

*django-admin startproject helloworld*

**5. Navigate into the Project Directory**

*cd helloworld*

**6. Create a Django App**

Create an app named helloworld\_app:

*python manage.py startapp helloworld\_app*

**7. Configure the App in the Project**

Open helloworld/settings.py and add the newly created helloworld\_app to the INSTALLED\_APPS list:

*INSTALLED\_APPS = [*

*# Django default apps*

*'django.contrib.admin',*

*'django.contrib.auth',*

*'django.contrib.contenttypes',*

*'django.contrib.sessions',*

*'django.contrib.messages',*

*'django.contrib.staticfiles',*

*# Add your app here*

*'helloworld\_app',*

*]*

**8. Define the View in app**

In the helloworld\_app/views.py file, create a simple view to display "Hello, World!":

*from django.http import HttpResponse*

*def hello\_world(request):*

*return HttpResponse("Hello, Django!")*

**9. Define the URL Pattern in project**

Open helloworld/urls.py and add a URL route for the hello\_world view:

*from django.contrib import admin*

*from django.urls import path*

*from helloworld\_app.views import hello\_world #import app view into project*

*urlpatterns = [*

*path('admin/', admin.site.urls),*

*path('', hello\_world), # The root URL will now display "Hello, World!"*

*]*

**10. Run Database Migrations**

Before running the server, apply the initial migrations:

*python manage.py migrate*

**11. Run the Development Server**

Finally, start the Django development server:

*python manage.py runserver*

**12. Launch the Application and see the result**

Open your web browser and visit:

*http://127.0.0.1:8000/*

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**13. Deactivating the Virtual Environment**

To deactivate the virtual environment when you're done working:

*Deactivate*

**14. Common Issues**

If you encounter errors about missing modules, make sure you're in the virtual environment and all dependencies are installed via pip install django.

If port 8000 is in use, try running the server on a different port:

*python manage.py runserver 8080*