**Page Render Extended Django Project**

This project demonstrates a Django application with a landing page that includes branding, an image carousel, and basic navigation to inner pages. All pages extend from a base.html template to ensure a consistent layout. The project contains an app named base\_app with pages like **About**, **Services**, and **Contact**.

**Prerequisites**

* Python (version 3.7 or higher)
* Django (version 3.x or higher)
* Virtual environment tool (optional but recommended)
* Basic knowledge of HTML, CSS, JavaScript, and Bootstrap

**Setup Instructions**

Follow these steps to set up and run the Django "page\_render\_extend" 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 page\_render\_extend:

*django-admin startproject page\_render\_extend*

**5. Navigate into the Project Directory**

*cd page\_render\_extend*

**6. Create a Django App**

Create an app named base\_app:

*python manage.py startapp base\_app*

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

Open page\_render\_extend/settings.py, and add the newly created base\_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*

*'base\_app',*

*]*

add the following to configure static files:

*STATIC\_URL = 'static/'*

*STATICFILES\_DIRS = [BASE\_DIR / "static"]*

***Create the static/ directory in the project root***

***Inside the static/ directory, create subdirectories for css, js, and images:***

**8. Define the View in app**

In base\_app/views.py, create views for additional pages like **About**, **Services**, and **Contact**:

*from django.shortcuts import render*

*# Landing Page*

*def landing\_page(request):*

*return render(request, 'base\_app/landing.html')*

*# Inner Pages - About*

*def about\_page(request):*

*return render(request, 'base\_app/about.html')*

*# Inner Pages - Services*

*def services\_page(request):*

*return render(request, 'base\_app/services.html')*

*# Inner Pages - Contact*

*def contact\_page(request):*

*return render(request, 'base\_app/contact.html')*

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

In base\_app/urls.py, define URL patterns for the inner pages:

*from django.urls import path*

*from .views import landing\_page, about\_page, services\_page, contact\_page*

*urlpatterns = [*

*path('', landing\_page, name='landing\_page'),*

*path('home/', landing\_page, name='landing\_page'),*

*path('about/', about\_page, name='about'),*

*path('services/', services\_page, name='services'),*

*path('contact/', contact\_page, name='contact'),*

*]*

In page\_render\_extend/urls.py, include the base\_app URLs:

*from django.contrib import admin*

*from django.urls import path, include*

*urlpatterns = [*

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

*path('', include('base\_app.urls')), #include the base app urls*

*]*

**10. Create HTML Templates for the Pages**

1. Landing.html
2. About.html
3. Services.html
4. Contact.html

**11. Run Database Migrations**

Before running the server, apply the initial migrations:

*python manage.py migrate*

**12. Run the Development Server**

Finally, start the Django development server:

*python manage.py runserver*

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

Open your web browser and visit:

*http://127.0.0.1:8000/*

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**14. Deactivating the Virtual Environment**

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

*Deactivate*