

Django Project Creation — MyProject and MyApp

Step 1: Install Django

Use the following command to install Django:

- pip install django

To verify installation:

- django-admin --version

Step 2: Create a New Django Project

Run the following command to create a new project named MyProject:

- django-admin startproject MyProject

Then, move into the project directory:

- cd MyProject

Project structure:

```
MyProject/
├── manage.py
└── MyProject/
    ├── __init__.py
    ├── settings.py
    ├── urls.py
    ├── asgi.py
    └── wsgi.py
```

Step 3: Run the Development Server

Run the following command to start the server:

- python manage.py runserver

Visit <http://127.0.0.1:8000/> to verify the Django welcome page.

Step 4: Create a Django Application

Inside the MyProject directory, create an app named MyApp:

- `python manage.py startapp MyApp`

Directory structure after creating the app:

```
MyProject/
├── manage.py
└── MyProject/
    ├── settings.py
    ├── urls.py
    └── ...
└── MyApp/
    ├── admin.py
    ├── apps.py
    ├── models.py
    ├── views.py
    ├── tests.py
    └── migrations/
```

Step 5: Register the Application

Open `MyProject/settings.py` and add 'MyApp' to the `INSTALLED_APPS` list:

```
INSTALLED_APPS = [
    'django.contrib.admin',
    'django.contrib.auth',
    'django.contrib.contenttypes',
    'django.contrib.sessions',
    'django.contrib.messages',
    'django.contrib.staticfiles',
    'MyApp', # Register your app here
]
```

Step 6: Create a Simple View

In `MyApp/views.py`, define a simple view function:

```
from django.http import HttpResponse
```

```
def home(request):
    return HttpResponse("Welcome to MyApp!")
```

Step 7: Map the View to a URL

Create a new file `MyApp/urls.py` with the following content:

```
from django.urls import path
from . import views

urlpatterns = [
    path("", views.home, name='home'),
]
```

Include the `MyApp` URLs in `MyProject/urls.py`:

```
from django.contrib import admin
from django.urls import path, include

urlpatterns = [
    path('admin/', admin.site.urls),
    path("", include('MyApp.urls')),
]
```

Step 8: Run the Server Again

Start the server:

- `python manage.py runserver`

Visit `http://127.0.0.1:8000/` to see the message 'Welcome to MyApp!'.