

Django Tutorial in One Page

□ 1. Install Django

```
#Create virtual environment
python -m venv venv
# activate virtual environment (optional but recommended)
venv\Scripts\activate
#Install Django
pip install django
```

□ 2. Start a Project

```
django-admin startproject myproject
cd myproject
python manage.py runserver
```

Visit: <http://127.0.0.1:8000/>

□ 3. Create an App

```
python manage.py startapp myapp
```

Add 'myapp' to INSTALLED_APPS in myproject/settings.py.

□ 4. Define a Model

In myapp/models.py:

```
from django.db import models

class Item(models.Model):
    name = models.CharField(max_length=100)
    created_at = models.DateTimeField(auto_now_add=True)

    def __str__(self):
        return self.name
```

□ 5. Migrate DB

```
python manage.py makemigrations
python manage.py migrate
```

□ 6. Create Admin User

```
python manage.py createsuperuser
```

Then login at <http://127.0.0.1:8000/admin/>

□ 7. Register Model in Admin

In `myapp/admin.py`:

```
from .models import Item
admin.site.register(Item)
```

□ 8. Create a View

In `myapp/views.py`:

```
from django.shortcuts import render
from .models import Item

def home(request):
    items = Item.objects.all()
    return render(request, 'home.html', {'items': items})
```

□ 9. Map URL

In `myapp/urls.py`:

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

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

In `myproject/urls.py`, include the app's URLs:

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

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

□ 10. Create a Template

Create `templates/home.html` inside `myapp/`:

```
<!DOCTYPE html>
<html>
<body>
  <h1>Items</h1>
  <ul>
    {% for item in items %}
      <li>{{ item.name }} - {{ item.created_at }}</li>
    {% endfor %}
  </ul>
</body>
</html>
```

In `settings.py`, tell Django where to look for templates:

```
'DIRS': [BASE_DIR / 'myapp/templates'],
```