

Build your portfolio site with Django

Getting started with Python's most famous web framework

- Part 1 - Django Overview
- Part 2 - Set up your Development Environment
- Part 3 - Build a Django application
- Part 4 - Showcase your Projects
- Part 5 - Display a single Project

PART 1 - DJANGO OVERVIEW

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- ▶ **1. About this section**
 - 2. About Web Frameworks and Django
 - 3. What you'll build and learn
 - 4. Apps in a Django project
 - 5. Files in a Django project
 - 6. Flow in a Django project
 - 7. Recap and Outlook

Relax and enjoy the ride!



Relax and enjoy the ride!

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Why use a web framework?

The web grew organically

The web grew organically



The web grew organically



The web grew organically





The web is a complex mess!!

Web frameworks reduce complexity

Web frameworks

- Automate repetitive web development tasks
- Abstract database interactions
- Handle URL requests and URL mapping
- Provide templating frameworks
- Help with security, caching, sessions...
- Generally make your life easier :)

django

Django is a Python web framework

Why Django?

- Fantastic community
- Time- and battle-tested
- Batteries included!
- Huge third-party package ecosystem
- Pluggable structure - reuse apps
- Django ORM for database interactions
- **And... It's in Python! :)**

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Your portfolio as a webapp!

What you'll learn in this course

- ✔ How to build a Django project from start to finish

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- ✔ Understand Django projects and file structure
- ✔ Understand how requests flow through Django apps

What you'll learn in this course

- ✓ Models, views, and templates

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- ✓ URL resolving and correctly using path converters and namespaces
- ✓ Using Bootstrap for style and mobile responsiveness

Let's get started!



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Apps in a Django project

PART 1 - DJANGO OVERVIEW

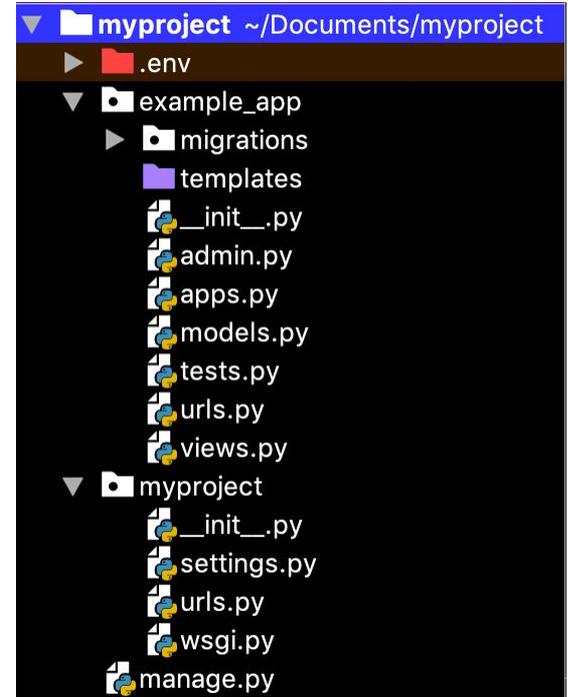
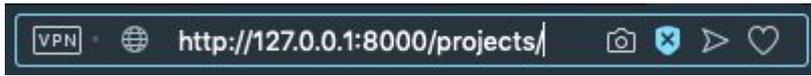
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Files in a Django project

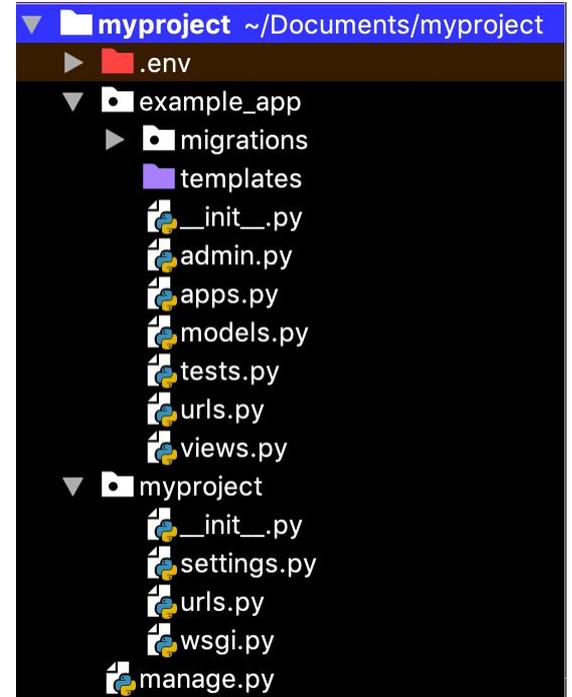
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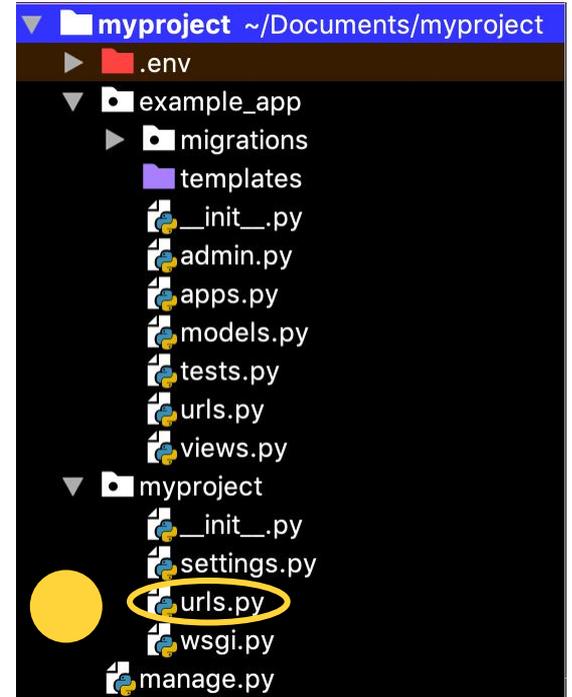
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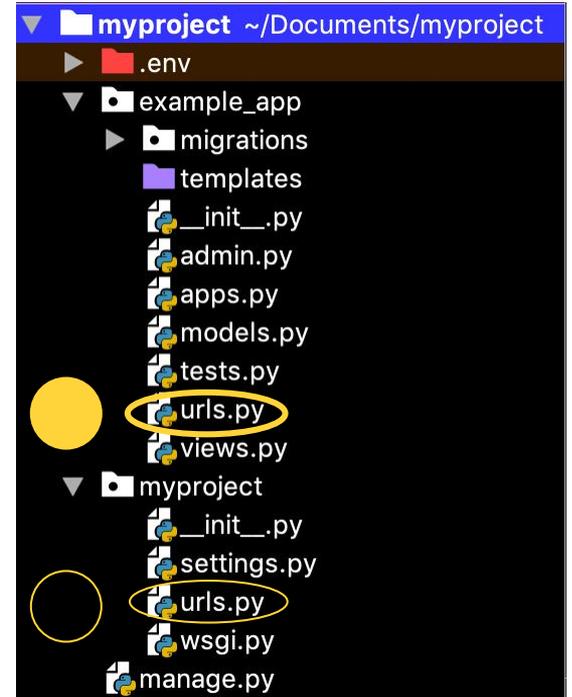
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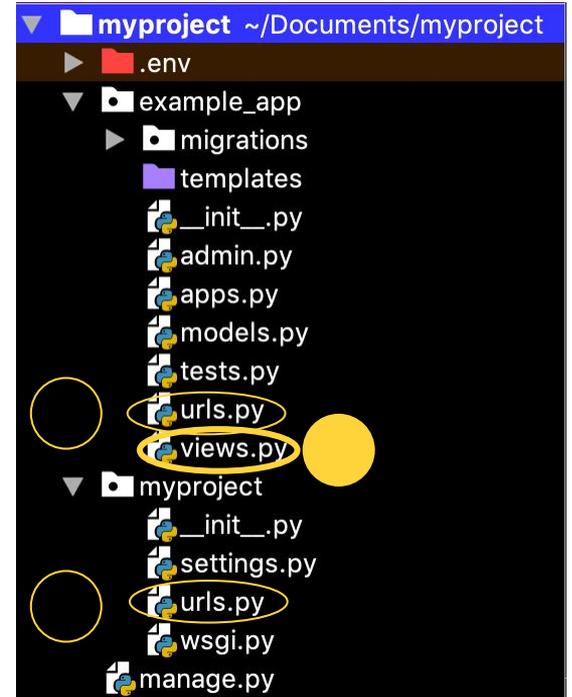
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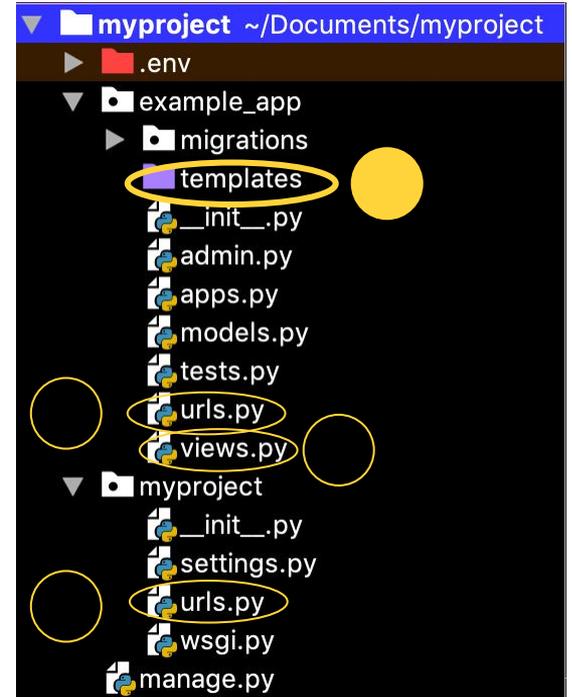
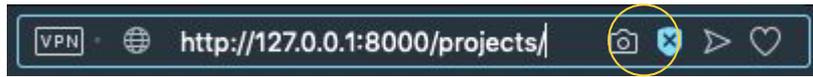
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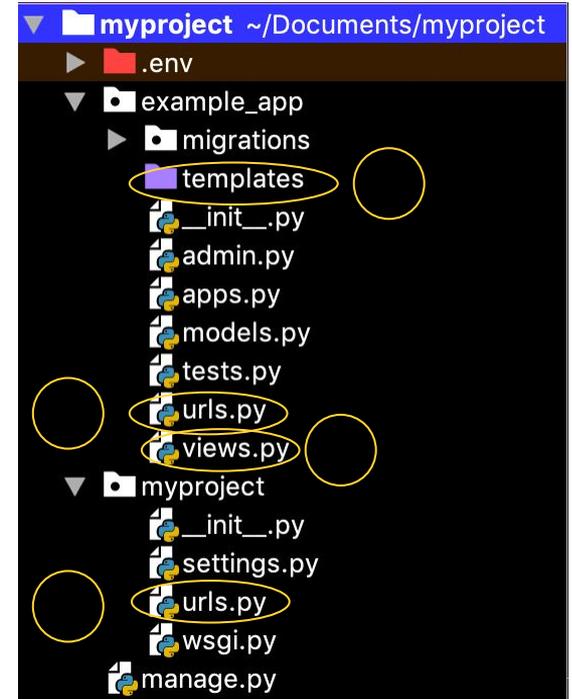
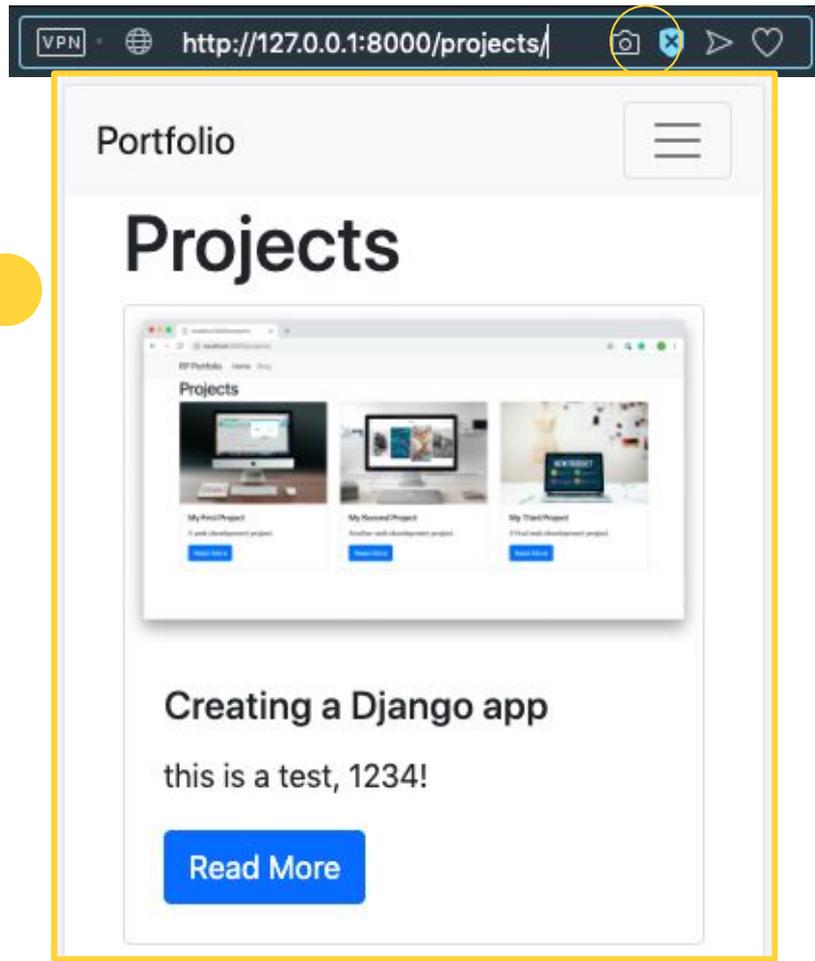
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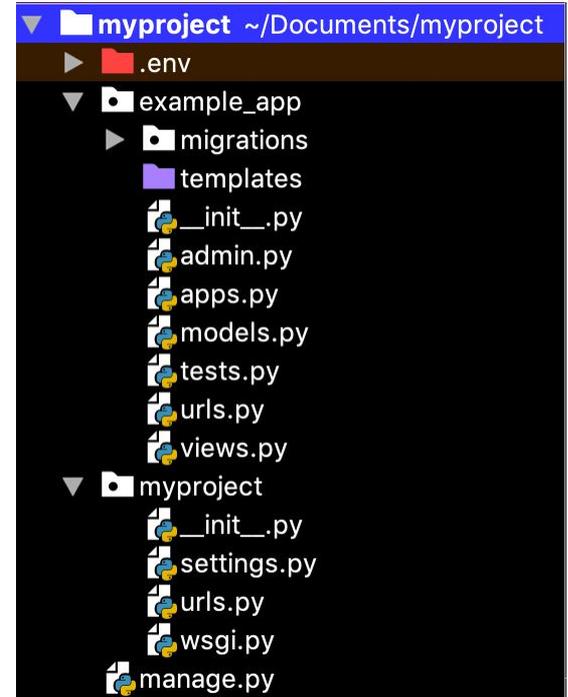
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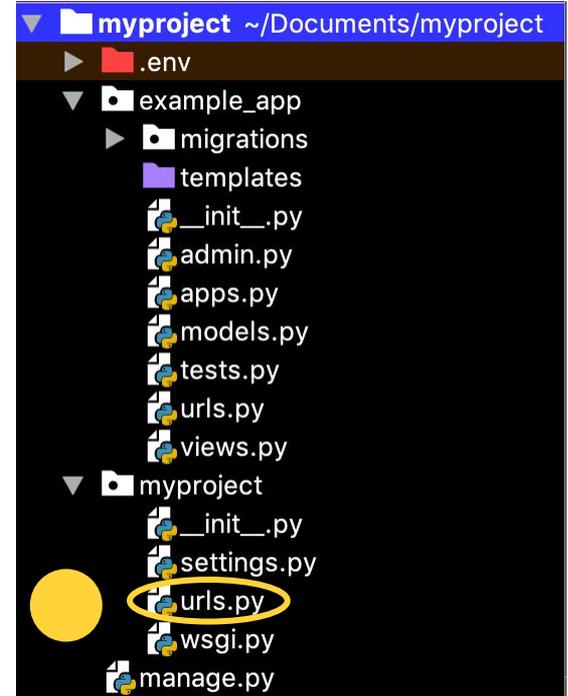
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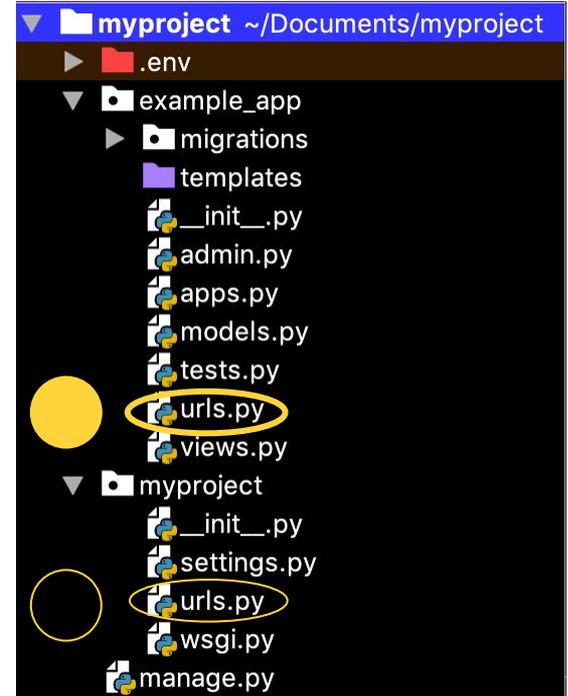
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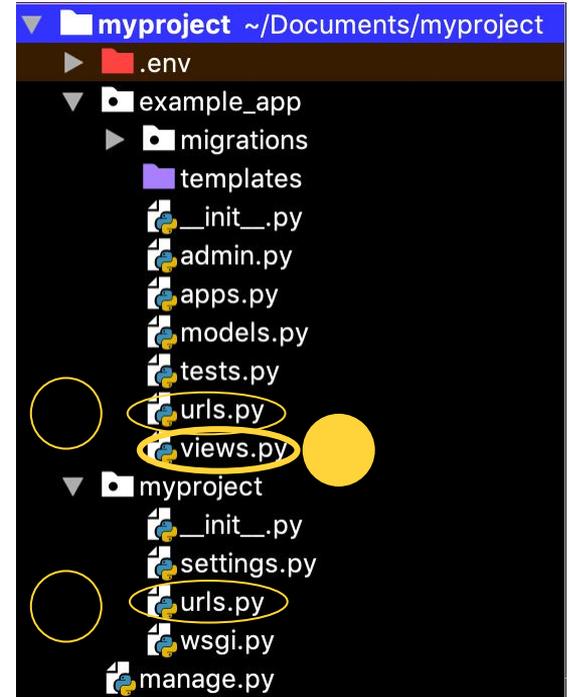
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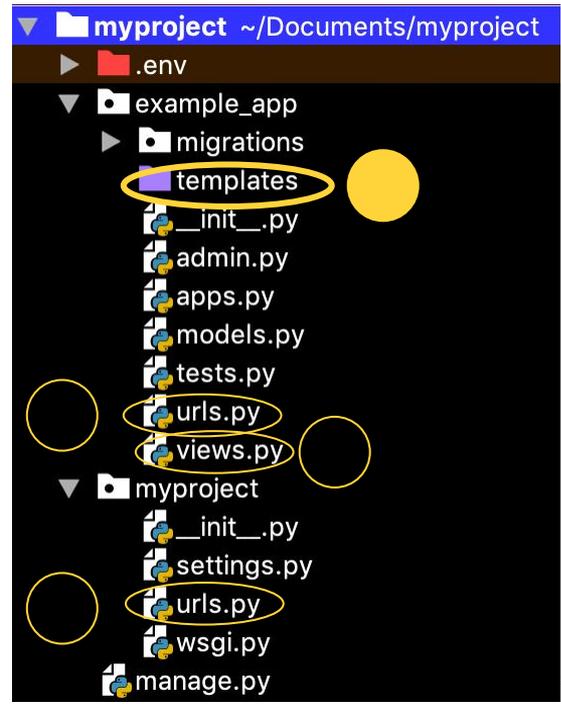
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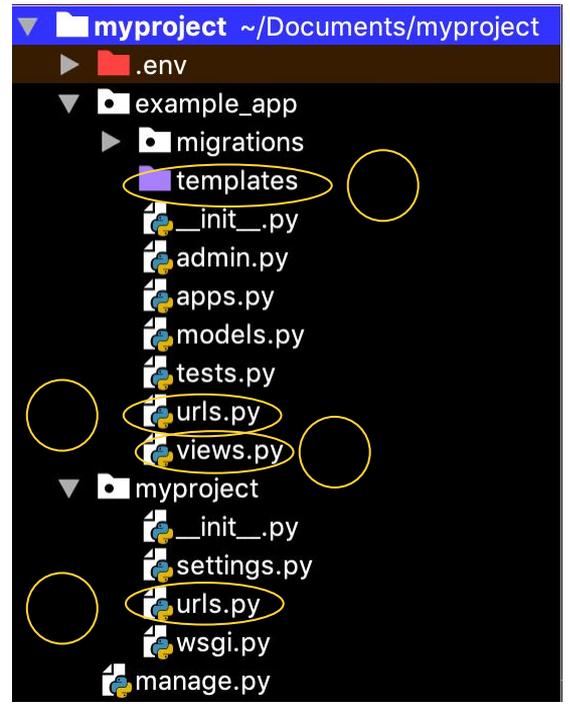
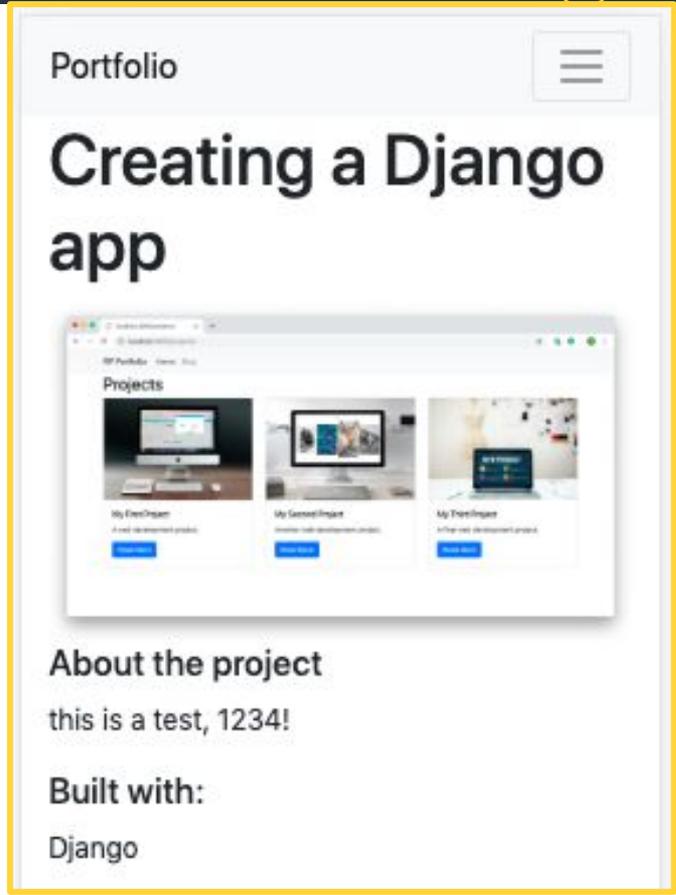
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What you did in this section



Got an overview of the upcoming video course content

What you did in this section

- ✔ Got an overview of the upcoming video course content
- ✔ Saw the file structure we'll be learning to understand

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- ✔ Understood the pluggable nature of Django apps in projects



PART 2 - SET UP YOUR DEVELOPMENT ENVIRONMENT

What you need to continue

- ✓ Python 3.x installed
- ✓ A text editor or an IDE (e.g. PyCharm)
- ✓ Beginner knowledge of using the CLI (Terminal)

PART 2 - SET UP YOUR DEV. ENVIRONMENT

- ▶ **1. About this section**
- 2. Set up your development environment
 - a. Using PyCharm
 - b. Creating a Virtual Environment
 - c. Installing Django
- 3. Create a Django project
- 4. Recap and Outlook

Create a Virtual Environment

Install Django using pip

PART 2 - SET UP YOUR DEV. ENVIRONMENT

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What you did in this section

- ✔ Created a Virtual Environment in the CLI

```
python3 -m venv .env
```

- ✔ Activated the venv

```
source .env/bin/activate
```

What you did in this section

- ✔ Installed Django inside the venv

```
(.env)$ pip install django
```

What you did in this section

- ✔ Created a Django project management app inside the existing folder

```
(.env)$ django-admin startproject portfolio .
```

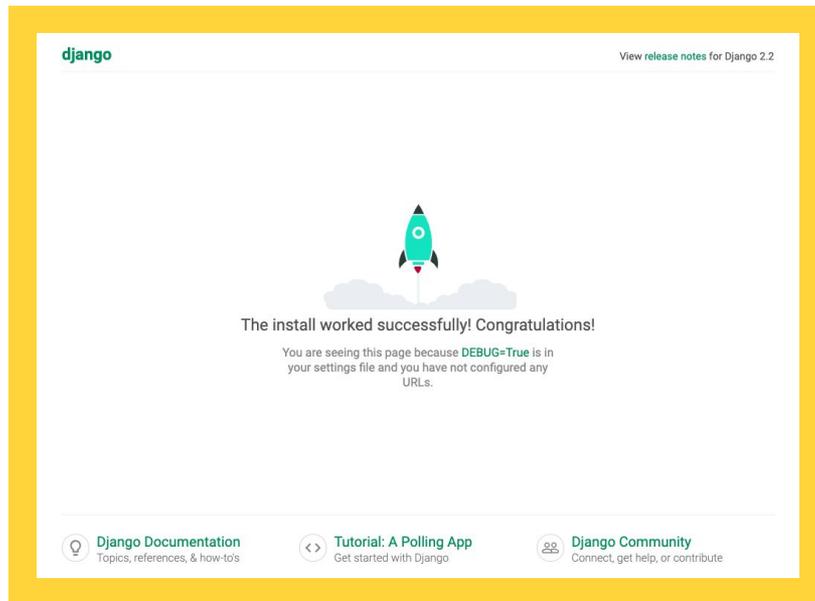


• The dot avoids extra folders!

What you did in this section



Visited the site at <http://localhost:8000>



PART 3 - BUILD A DJANGO APPLICATION

What you need to continue

- ✔ Set up: Python 3.x, Virtual Environment, Django, text editor
- ✔ Created a Django project called “portfolio”
- ✔ Motivation to build a webapp :)

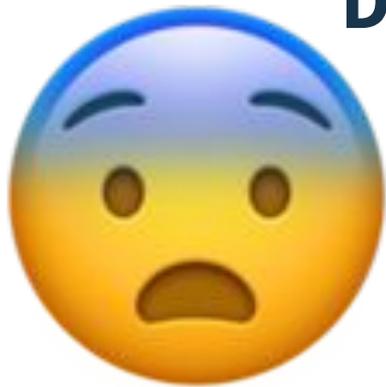
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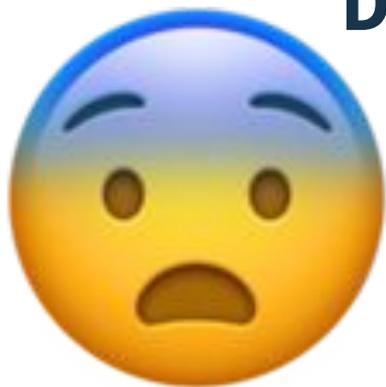
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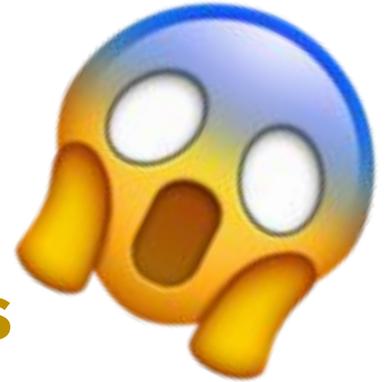


Developing by **error messages**

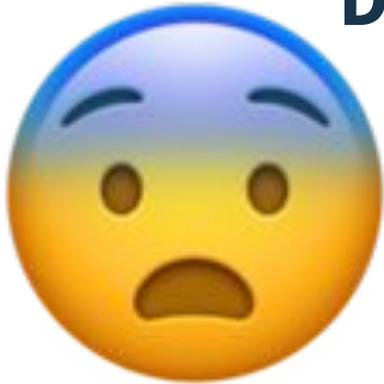


Developing by **error messages**





Developing by **error messages**

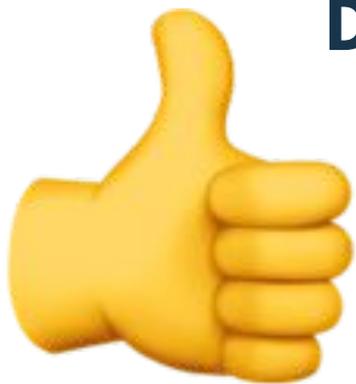


Developing by **error messages**



Error messages are your friends!





Developing by **error messages**

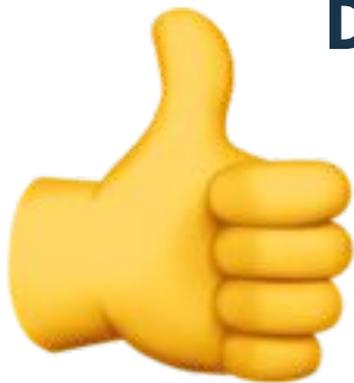


Developing by **error messages**





Developing by **error messages**



A Django error message



Error messages are your friends!



PART 3 - BUILD A DJANGO APPLICATION

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Django settings



Time to meet a new friend!



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Time to meet a new friend!



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Time to meet a new friend!





Sneaking...

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Flat folder structure

projects/templates



app2/templates



app3/templates



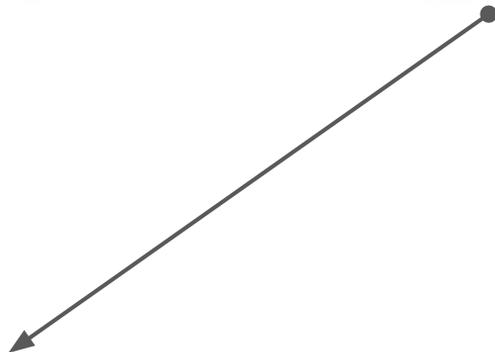
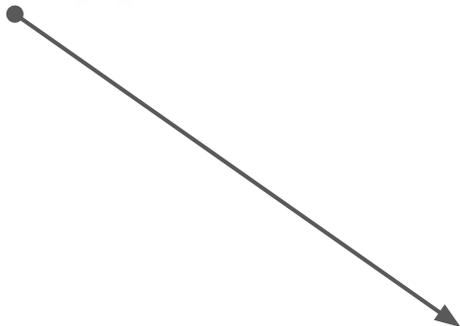
projects/templates



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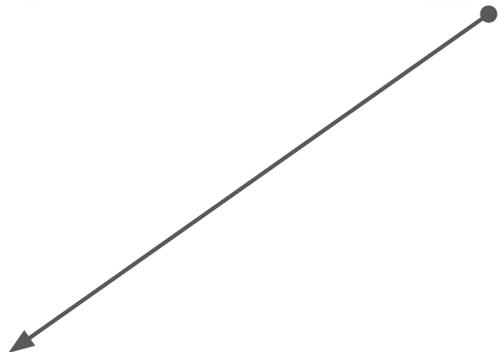
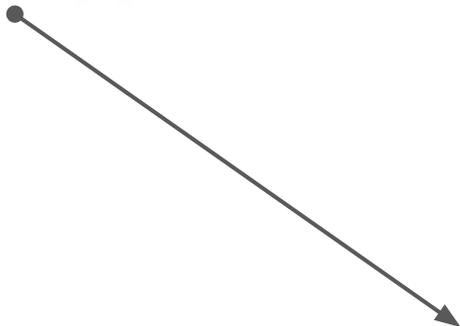
projects/templates



app2/templates



app3/templates



templates



Troubles with flat folder structure

projects/templates



app2/templates

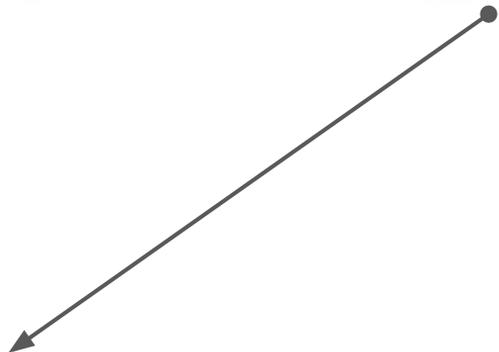
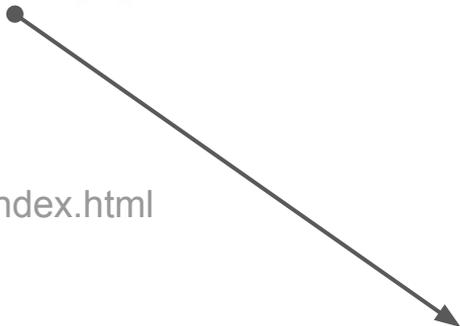


app3/templates



index.html

templates



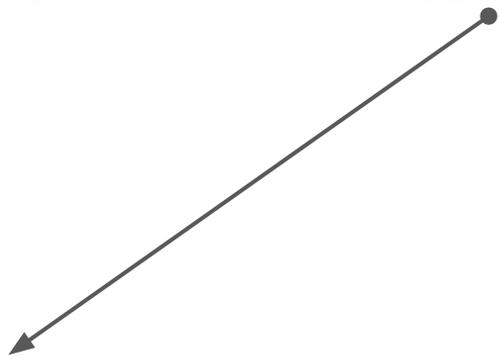
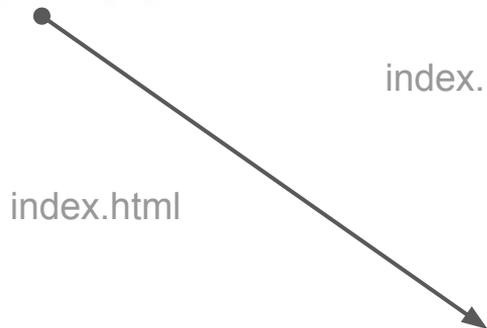
projects/templates



app2/templates



app3/templates



templates

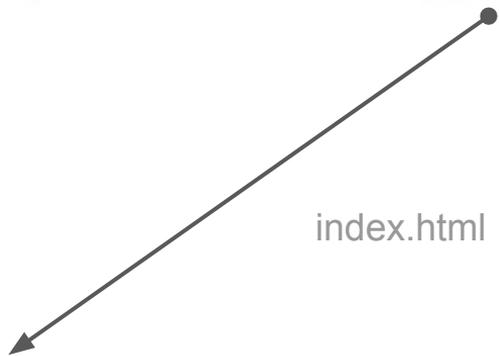
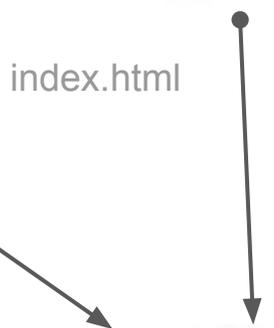
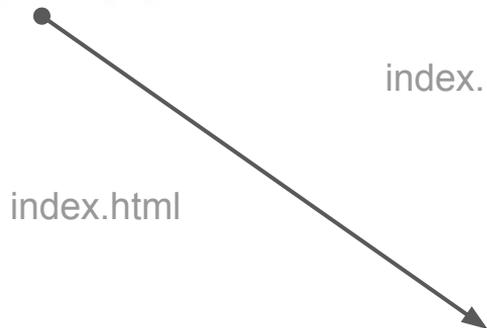
projects/templates



app2/templates



app3/templates



templates

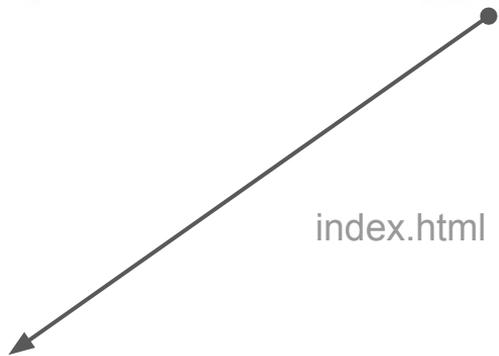
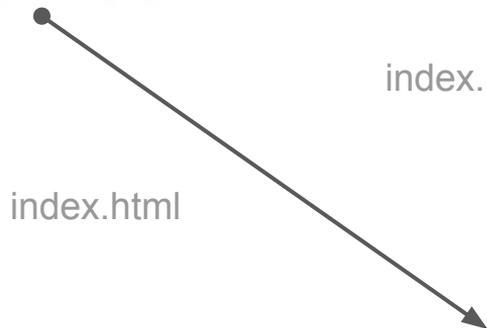
projects/templates



app2/templates



app3/templates



templates

Django's double-folder structure

projects/templates

app2/templates

app3/templates



app2/index.html



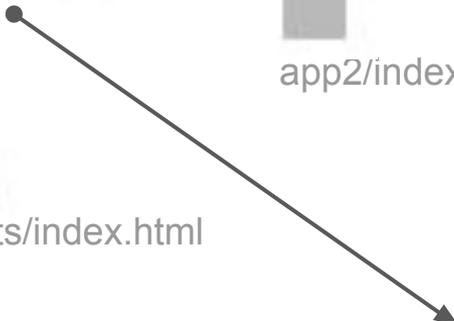
projects/index.html



app3/index.html



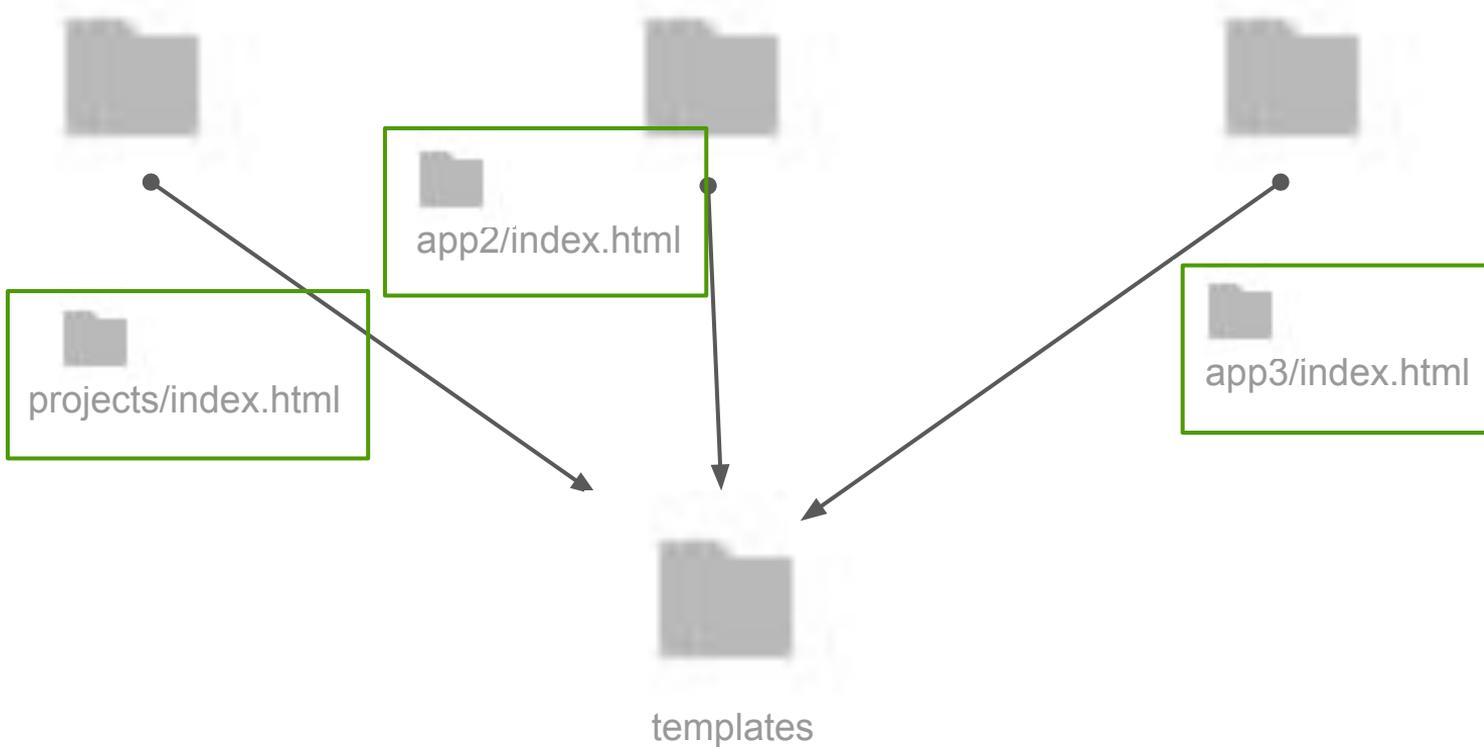
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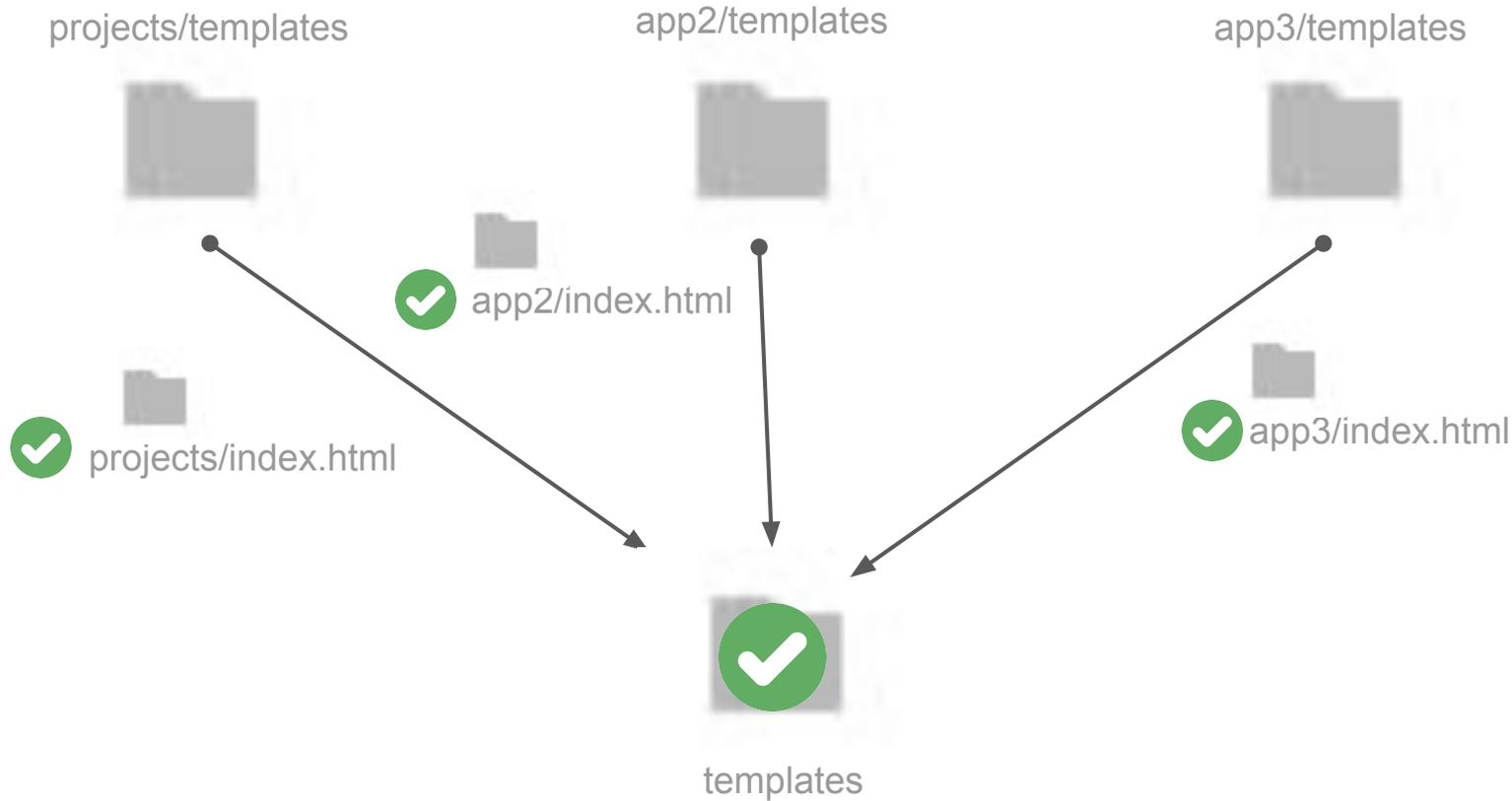


projects/templates

app2/templates

app3/templates





projects/templates

app2/templates

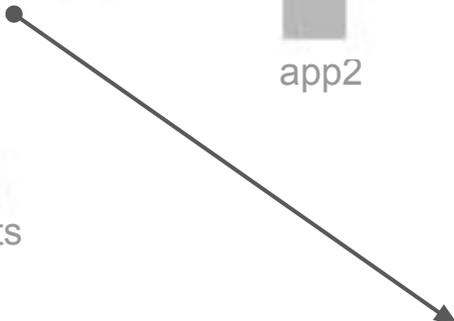
app3/templates



projects

app2

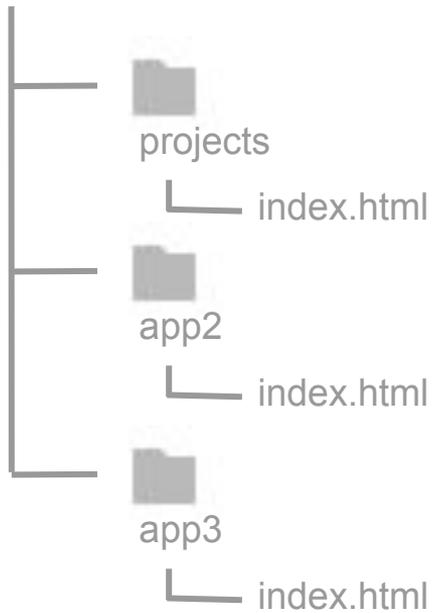
app3



templates



templates





Time to meet a new friend!



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 **8. Recap and Outlook**

What you did in this section

- ✔ Created a Django app called “projects”

```
(.env)$ python manage.py startapp projects
```

What you did in this section



Registered your app in settings.py

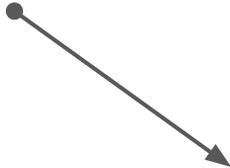
```
INSTALLED_APPS = [  
    # django apps  
    # my apps  
    "projects",  
]
```

What you did in this section



Dug your way through different URL configurations

 `http://127.0.0.1:8000/projects/`



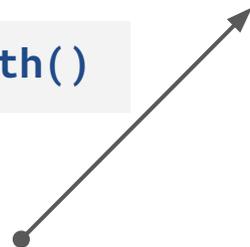
portfolio.urls



`include()`

projects.urls

`path()`



views.py

What you did in this section



Created a view function that returns a HttpResponse object

```
def project_list(request):  
    return HttpResponse("<h1>Aye!</h1>")
```

What you did in this section



Changed the view function to render a template instead

```
def project_list(request):  
    return render(request, "projects/index.html")
```

What you did in this section

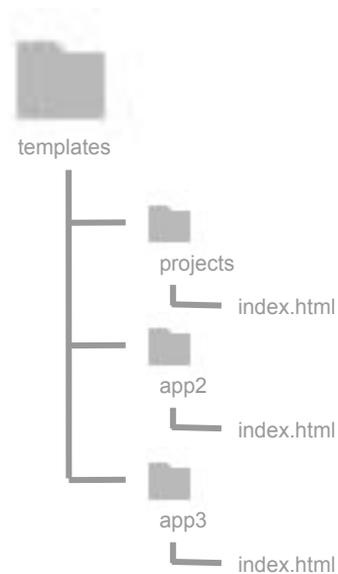


Created a Django template containing HTML code

```
<body>  
  <h1>Hello template!</h1>  
</body>
```

What you did in this section

- ✔ Understood the nested template folder structure in Django



What you did in this section



Registered your new template folder in settings.py

```
TEMPLATES = [  
    {  
        "DIRS": [os.path.join(BASE_DIR, "projects/templates"),]  
    }  
]
```

What you did in this section



Added Bootstrap styling to your app

```
<head>  
  <link rel="stylesheet" href="link-to-bootstrap-CDN/bootstrap.css">  
</head>
```

And... most importantly:

You made a lot of new friends!!!

- ✔ PageNotFound
- ✔ ModuleNotFoundError
- ✔ ImproperlyConfigured
- ✔ AttributeError
- ✔ ValueError
- ✔ TemplateDoesNotExist



What you did in this section

- ✓ Developing by error messages
- ✓ Getting familiar with **common Django error messages**
- ✓ Practiced to **read and follow helpful suggestions**
- ✓ Practiced to **debug** your code with the help of error messages



Error messages are your friends!



PART 4: SHOWCASE YOUR PROJECTS

What you need to continue

- ✓ Set up: Python 3.x, Virtual Environment, Django, text editor
- ✓ Django project called “portfolio”
- ✓ Django app called “projects”
- ✓ urls.py file in your “projects” app and correct routing
- ✓ double-templates folder setup

PART 4 - SHOWCASE YOUR PROJECTS

- ▶ **1. About this section**
- 2. Django Models
- 3. Migrations and your SQL Database
- 4. Add static files
- 5. Use the Django Shell
- 6. Build your routes
- 7. Create your views
- 8. Create your templates
- 9. Add some style!
- 10. Recap and Outlook



Seriously serious!

PREVIEW: Projects app

PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
- ▶ **2. Django Models**
3. Migrations and your SQL Database
4. Add static files
5. Use the Django Shell
6. Build your routes
7. Create your views
8. Create your templates
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Django ORM

Object- Relational Mapper

Object- **R**elational **M**apper



A (very) short intro to Relational DBs

That's a table!

Project table

id	title	description	technology	image
1	test	This is a test	Django	/img/t.png
2	daily	Write words	Django	/img/d.png
3	todo	What to do?	Tkinter	/img/td.png

That's a table!

Project table

id	title	description	technology	image
1	test	This is a test	Django	/img/t.png
2	daily	Write words	Django	/img/d.png
3	todo	What to do?	Tkinter	/img/td.png

Row

That's a table!

Project table

Column

id	title	description	technology	image
1	test	This is a test	Django	/img/t.png
2	daily	Write words	Django	/img/d.png
3	todo	What to do?	Tkinter	/img/td.png

```
class Project(models.Model):  
    title = models.CharField(max_length=100)  
    description = models.TextField()  
    technology = models.CharField(max_length=20)  
    image = models.FilePathField(path="/img")
```

```
class Project(models.Model):  
    title = models.CharField(max_length=100)  
    description = models.TextField()  
    technology = models.CharField(max_length=20)  
    image = models.FilePathField(path="/img")
```

projects_project	
id	integer
title	varchar(100)
description	text
technology	varchar(20)
image	varchar(100)

```
class Project(models.Model):
    title = models.CharField(max_length=100)
    description = models.TextField()
    technology = models.CharField(max_length=20)
    image = models.FilePathField(path="/img")
```

projects_project	
id	integer
title	varchar(100)
description	text
technology	varchar(20)
image	varchar(100)

	id	title	description	technology	image
1	1	Test Project	Test, test... This is a test. ...	Django	img/testproject.png
2	2	Daily Writing	Write 3 pages of your thoughts...	Django	img/daily.png
3	3	Todo App	Keep track of your tasks.	Django	img/todo.png

In our app...

PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
- ▶ **3. Migrations and your SQL Database**
4. Add static files
5. Use the Django Shell
6. Build your routes
7. Create your views
8. Create your templates
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10. Recap and Outlook

Migrations

Inside a SQLite file

PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
3. Migrations and your SQL Database
- ▶ **4. Add static files**
5. Use the Django Shell
6. Build your routes
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10. Recap and Outlook

Django's double-folder structure

projects/templates



projects

app2/templates



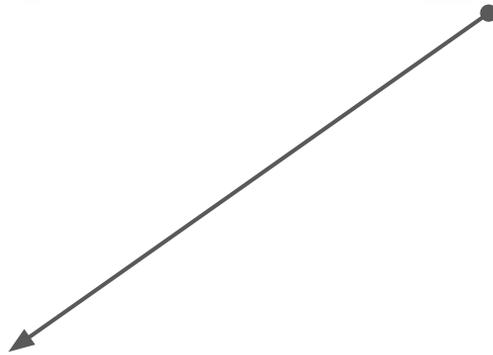
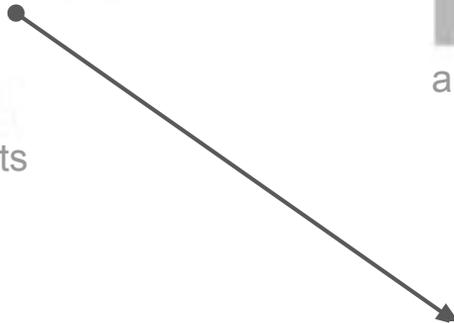
app2

app3/templates



app3

templates



projects/static



projects

app2/static



app2

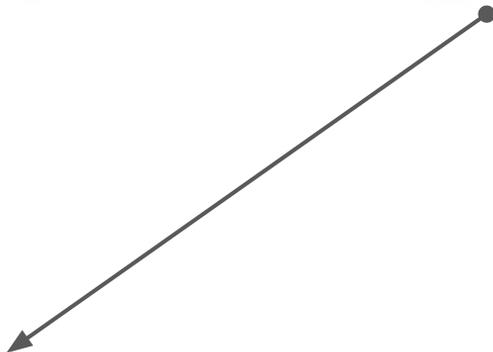
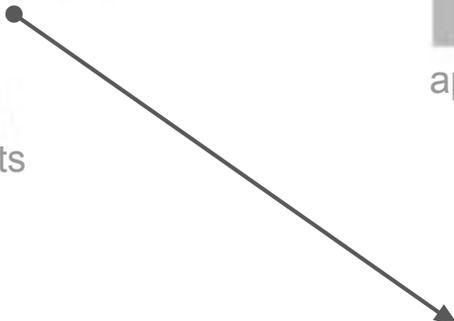
app3/static

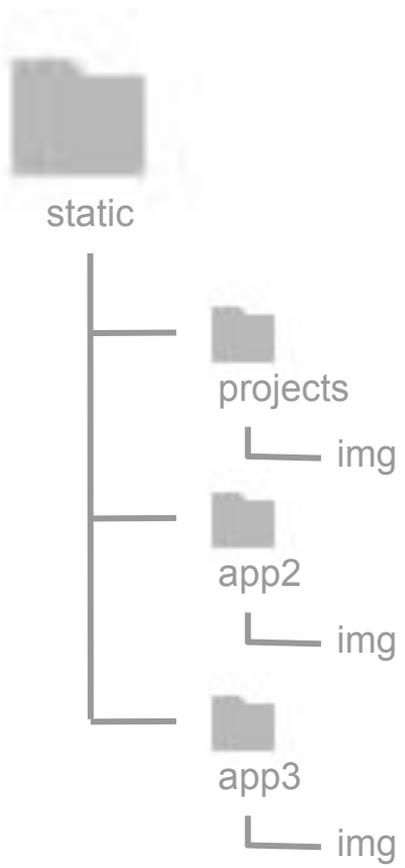


app3



static





Let's fix th0t!

Let's fix that!



Let's fix that!



Let's fix that!

PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
3. Migrations and your SQL Database
4. Add static files
- ▶ **5. Use the Django Shell**
6. Build your routes
7. Create your views
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PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
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- ▶ **6. Build your routes**
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Error messages are your friends!



PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
3. Migrations and your SQL Database
4. Add static files
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Error messages are your friends!



PART 4 - SHOWCASE YOUR PROJECTS

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Django Templating Language

{% code logic %}

{{ variables }}

Adding data through the Django Shell



Error messages are your friends!





bugging



debugging



Debugging



Debugging



Debugging



Debugging

Changing Models and the DB

1) makemigrations

2) migrate



Changing Column Datatypes



Error messages are your friends!



Template Inheritance

PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
3. Migrations and your SQL Database
4. Add static files
5. Use the Django Shell
6. Build your routes
7. Create your views
8. Create your templates
-  **9. Add some style!**
10. Recap and Outlook

PART 4 - SHOWCASE YOUR PROJECTS

1. About this section
2. Django Models
3. Migrations and your SQL Database
4. Add static files
5. Use the Django Shell
6. Build your routes
7. Create your views
8. Create your templates
9. Add some style!

▶ 10. **Recap and Outlook**

What you did in this section

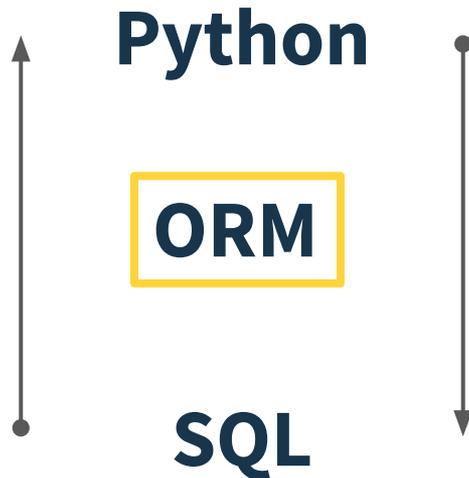


Created a Django Model

```
class Project(models.Model):  
    title = models.CharField(max_length=100)  
    description = models.TextField()  
    technology = models.CharField(max_length=20)  
    image = models.CharField(max_length=100)
```

What you did in this section

- ✔ Learned about ORMs (Object-Relational Mappers)



What you did in this section

- ✓ Learned about ORMs (Object-Relational Mappers)

```
class Project(models.Model):  
    title = models.CharField(max_length=100)  
    description = models.TextField()  
    technology = models.CharField(max_length=20)  
    image = models.CharField(max_length=100)
```

	id	title	description	technology	image
1	1	Test Project	Test, test... This is a test. ...	Django	img/testproject.png
2	2	Daily Writing	Write 3 pages of your thoughts...	Django	img/daily.png
3	3	Todo App	Keep track of your tasks.	Django	img/todo.png

What you did in this section



Learned about Relational Databases

Project table

Column

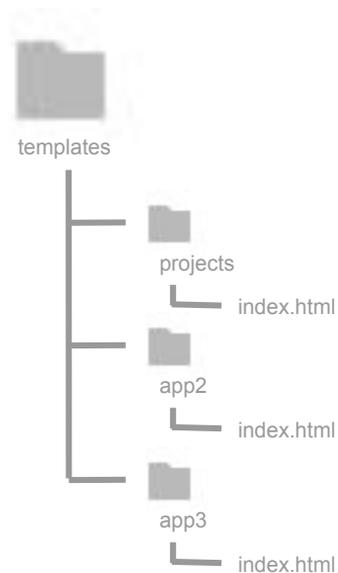
	id	title	description	technology	image
	1	test	This is a test	Django	/img/t.png
	2	daily	Write words	Django	/img/d.png
Row	3	todo	What to do?	Tkinter	/img/td.png

What you did in this section

- ✓ Peeked into a Django Migrations file
- ✓ Peeked into a SQLite Database File

What you did in this section

- ✔ Revisited the nested template folder structure in Django



What you did in this section

- ✓ Added static image files to your project
- ✓ Linked those image files correctly

{% load static %}

What you did in this section



Used the Django Shell to create and edit data in your DB

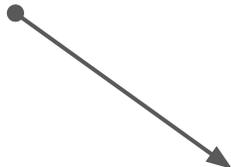
```
projects = Project.objects.all()
p1 = projects[0]
p1.image = "changed/path"
p1.save()
```

What you did in this section



Created new URL paths

 `http://127.0.0.1:8000/projects/`



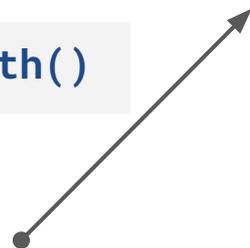
portfolio.urls



`include()`

projects.urls

`path()`



views.py

What you did in this section

- ✓ Queried the DB from your views
- ✓ Passed data on to your template files

```
return render(request, "template.html", {"projects": projects})
```

What you did in this section

- ✔ Used Django Templating Syntax

`{% code logic %}`

`{{ variables }}`

What you did in this section

- ✔ Applied more Bootstrap styling

What you did in this section

- ✔ Some serious **debugging!!!**



PART 5 - DISPLAY A SINGLE PROJECT

What you need to continue

- ✔ Set up: Python 3.x, Virtual Environment, Django, text editor
- ✔ Django project “portfolio” with app “projects”
- ✔ Projects in the Database
- ✔ Portfolio page listing all projects

PART 5 - DISPLAY A SINGLE PROJECT

- ▶ **1. About this section**
- 2. Django ORM: Accessing a single project
- 3. Variable arguments from URLs: routing and views
- 4. URL linking: app_name, path names, and arguments
- 5. Template Inheritance
- 6. Some more styling
- 7. Using the Django Admin Interface
- 8. Recap and Congrats!
- 9. Next Steps

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
- ▶ **2. Django ORM: Accessing a single project**
3. Variable arguments from URLs: routing and views
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9. Next Steps

Back into the Django Shell

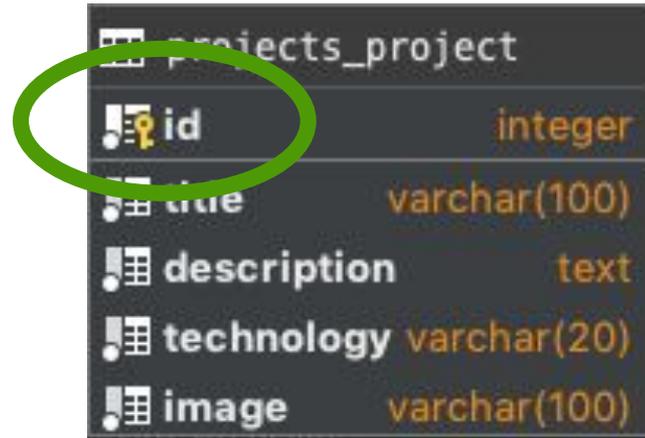
What's **pk**?

pk means “**p**primary **k**key”



projects_project	
 id	integer
 title	varchar(100)
 description	text
 technology	varchar(20)
 image	varchar(100)

pk means “**p**primary **k**key”



A screenshot of a database table schema for 'projects_project'. The table has five columns: 'id' (integer), 'title' (varchar(100)), 'description' (text), 'technology' (varchar(20)), and 'image' (varchar(100)). The 'id' column is highlighted with a green circle, indicating it is the primary key.

Field	Type
id	integer
title	varchar(100)
description	text
technology	varchar(20)
image	varchar(100)

In our project: **pk == id**

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
2. Django ORM: Accessing a single project
- ▶ **3. Variable arguments from URLs: routing and views**
4. URL linking: app_name, path names, and arguments
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6. Some more styling
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8. Recap and Congrats!
9. Next Steps

Capturing URL parts with <>

Capturing URL parts with `<>`



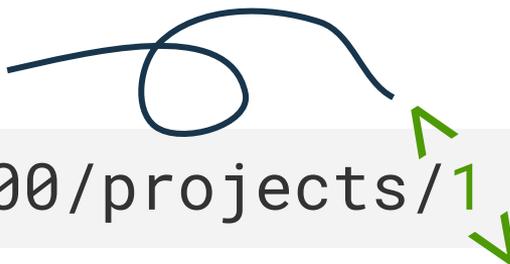
Capturing URL parts

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

```
http://localhost:8000/projects/1
```

Capturing URL parts

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```



```
http://localhost:8000/projects/1
```

Capturing URL parts

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```



```
http://localhost:8000/projects/1
```

Capturing URL parts

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```



```
http://localhost:8000/projects/1
```

Path converters - **int**:

What path converters do

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

What path converters do

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

`http://localhost:8000/projects/gimmeprojects`

What path converters do

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

http://localhost:8000/projects/gimm  ects

What path converters do

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

http://localhost:8000/projects/gimm~~ed~~jects

http://localhost:8000/projects/1

What path converters do

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

`http://localhost:8000/projects/gimm`  `jects`

`http://localhost:8000/projects/1` 

Views: the code logic

Resolving URLs

Browser

```
http://localhost:8000/projects/1
```

urls.py

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

views.py

```
def project_detail(request, pk):  
    project = Project.objects.get(pk=pk)  
    return render(request, "projects/detail.html", {"projects": project})
```

Resolving URLs

Browser

```
http://localhost:8000/projects/1
```

urls.py

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```



views.py

```
def project_detail(request, pk):  
    project = Project.objects.get(pk=pk)  
    return render(request, "projects/detail.html", {"projects": project})
```

Testing: Can we access a single resource?

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
2. Django ORM: Accessing a single project
3. Variable arguments from URLs: routing and views
- ▶ **4. URL linking: app_name, path names, and arguments**
5. Template Inheritance
6. Some more styling
7. Using the Django Admin Interface
8. Recap and Congrats!
9. Next Steps

Linking two templates



NoReverseMatch



Giving names to patterns

Giving names to patterns

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

Giving names to patterns

```
urlpatterns = [  
    path("<int:pk>", views.project_detail)  
]
```

```
<a href="{% url 'app_name:name' project.pk %}">Read More</a>
```

Giving names to patterns

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail)
]
```

```
<a href="{% url 'app_name:name' project.pk %}">Read More</a>
```

Giving names to patterns

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail)
]
```



```
<a href="{% url 'projects:name' project.pk %}">Read More</a>
```

Giving names to patterns

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail, name="project_detail")
]
```



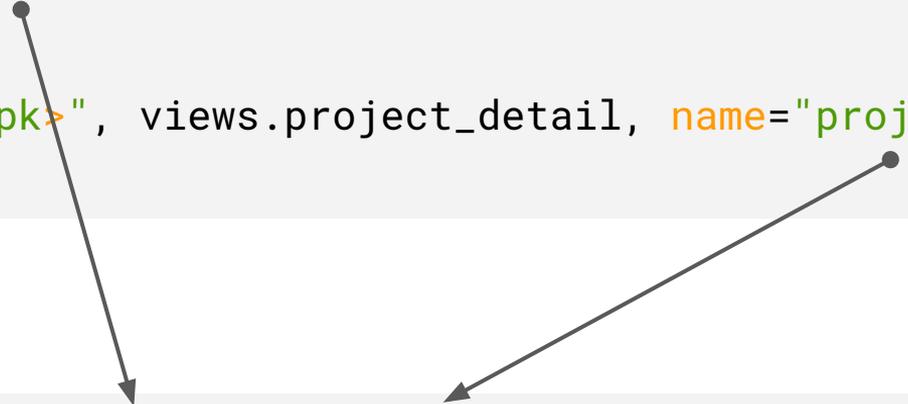
```
<a href="{% url 'projects:name' project.pk %}">Read More</a>
```

Giving names to patterns

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail, name="project_detail")
]
```

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```



Giving names to patterns

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail, name="project_detail")
]
```



Identifies Django view

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```



NoReverseMatch (but a different one)



Passing arguments for retrieving URLs

Passing arguments for retrieving URLs

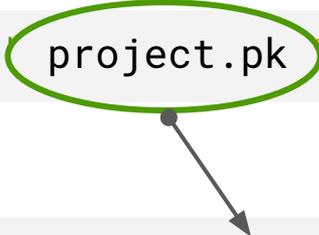
your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

Passing arguments for retrieving URLs

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```



Browser

```
http://localhost:8000/projects/1
```

Passing arguments for retrieving URLs

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```



Browser

```
http://localhost:8000/projects/1
```

views.py

```
def project_detail(request, pk):  
    project = Project.objects.get(pk=pk)  
    return render(request, "projects/detail.html", {"projects": project})
```



NoReverseMatch





Debugging

Check first in these places!

1) urls.py

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail, name="project_detail")
]
```

Check first in these places!

1) urls.py

```
app_name = "projects"
```

```
urlpatterns = [  
    path("<int:pk>", views.project_detail, name="project_detail")  
]
```

Check first in these places!

1) urls.py

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail, name="project_detail")
]
```

Check first in these places!

2) your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

Check first in these places!

2) your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

NoReverseMatch Debugging 1: Identify view

urls.py

```
app_name = "projects"  
  
urlpatterns = [  
    path("<int:pk>", views.project_detail, name="project_detail")  
]
```

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

Check first in these places!

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

Check first in these places!

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

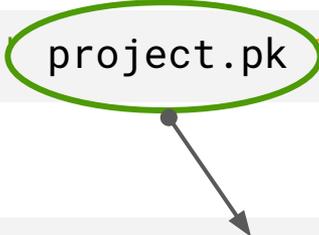
Browser

```
http://localhost:8000/projects/1
```

Check first in these places!

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```



Browser

```
http://localhost:8000/projects/1
```



views.py

```
def project_detail(request, pk):  
    project = Project.objects.get(pk=pk)  
    return render(request, "projects/detail.html", {"projects": project})
```

NoReverseMatch Debugging 2: Pass arguments

urls.py

```
app_name = "projects"

urlpatterns = [
    path("<int:pk>", views.project_detail, name="project_detail")
]
```

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

Debugging Summary



Debugging Summary



NoReverseMatch Debugging Summary

urls.py

```
app_name = "projects"  
  
urlpatterns = [  
    path("<int:pk>", views.project_detail, name="project_detail")  
]
```

2) Pass arguments

your_template.html

```
<a href="{% url 'projects:project_detail' project.pk %}">Read More</a>
```

1) Identify view

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
2. Django ORM: Accessing a single project
3. Variable arguments from URLs: routing and views
4. URL linking: app_name, path names, and arguments



5. Template Inheritance

6. Some more styling
7. Using the Django Admin Interface
8. Recap and Congrats!
9. Next Steps

DRY - don't repeat yourself

File 1: **base.html**

```
{% block content %}  
    {% endblock %}
```

{% block content %}

{% endblock %}

{% block content %}

{% endblock %}

{% block content %}

<div>My HTML content</div>

{% endblock %}

File 2: `your_template.html`

```
{% extends 'base.html' %}
```

```
{% block content %}
```

```
{% endblock %}
```

```
{% extends 'base.html' %}
```

```
{% block content %}
```

```
{% endblock %}
```

```
{% extends 'base.html' %}
```

```
{% block content %}
```

```
<div>My HTML content</div>
```

```
{% endblock %}
```

In practice!

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
2. Django ORM: Accessing a single project
3. Variable arguments from URLs: routing and views
4. URL linking: app_name, path names, and arguments
5. Template Inheritance
- ▶ **6. Some more styling**
7. Using the Django Admin Interface
8. Recap and Congrats!
9. Next Steps

Mobile responsive!

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
2. Django ORM: Accessing a single project
3. Variable arguments from URLs: routing and views
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6. Some more styling
- ▶ **7. Using the Django Admin Interface**
8. Recap and Congrats!
9. Next Steps

A convenient way of accessing your DB

Creating a superuser

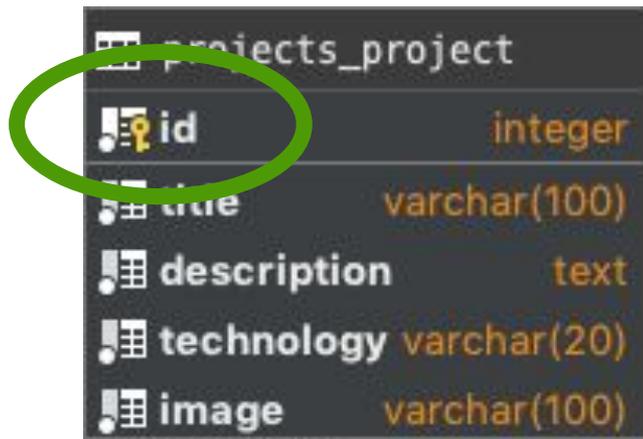
Registering your models

PART 5 - DISPLAY A SINGLE PROJECT

1. About this section
2. Django ORM: Accessing a single project
3. Variable arguments from URLs: routing and views
4. URL linking: app_name, path names, and arguments
5. Template Inheritance
6. Some more styling
7. Using the Django Admin Interface
-  **8. Recap and Congrats!**
9. Next Steps

What you did in this section

- ✓ Using the Django ORM in the shell and in views.py
- ✓ Learned about primary keys (pk)

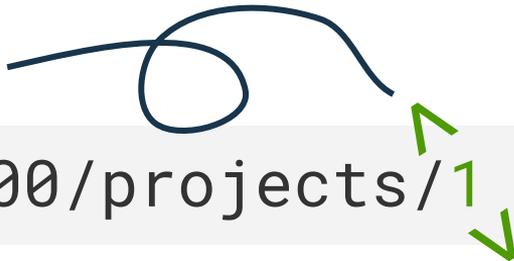


```
projects_project
id integer
title varchar(100)
description text
technology varchar(20)
image varchar(100)
```

The screenshot shows a Django model definition for 'projects_project'. The 'id' field is highlighted with a green circle, indicating it is the primary key. The other fields are 'title' (varchar(100)), 'description' (text), 'technology' (varchar(20)), and 'image' (varchar(100)).

What you did in this section

- ✔ Lasso-ed parts from URLs using angle brackets < >



```
http://localhost:8000/projects/1
```

What you did in this section

- ✔ Used an `int:` path converter to verify the URL path's datatype

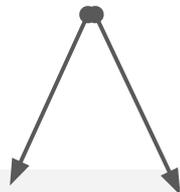
`http://localhost:8000/projects/gimm`  `ects`

`http://localhost:8000/projects/1` 

What you did in this section

- ✔ Defining proper namespaces for linking and reverse URL matching

urls.py



```
<a href="{% url 'app_name:name' %}">Read More</a>
```

What you did in this section

- ✔ Passing arguments inside of URL template tags

urls.py

```
path('<arg>', views.function_name, name='name')
```

```
<a href="{% url 'app_name:name' arg %}">Read More</a>
```

What you did in this section

- ✓ Debugging NoReverseMatch Error

urls.py

- Identify view
- Pass arguments

your_template.html

What you did in this section

- ✓ DRY - don't repeat yourself
- ✓ Template inheritance

```
{% extends 'base.html' %}
```

```
{% block content %}  
    {% endblock %}
```

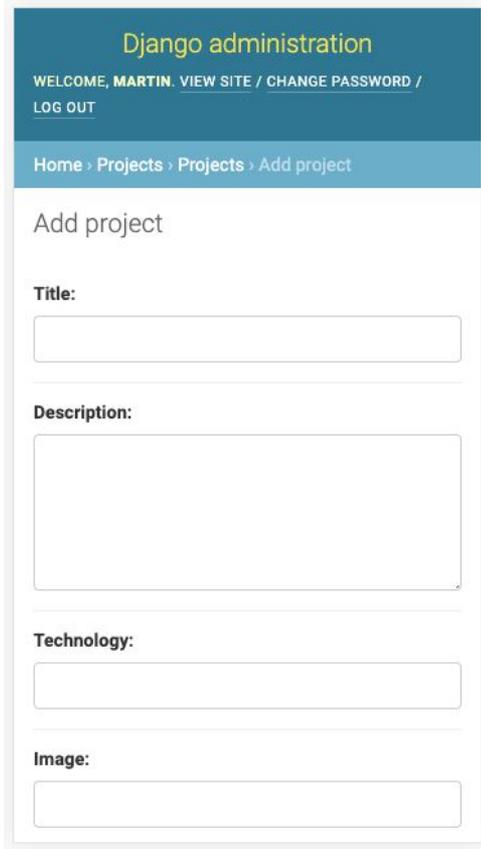
What you did in this section

- ✓ Bootstrap header
- ✓ Make the site mobile responsive

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

What you did in this section

- ✓ Create a superuser
- ✓ Register your models in Django admin
- ✓ Add/Edit/Delete DB entries conveniently



The screenshot displays the Django administration interface. At the top, a dark teal header contains the text "Django administration" in yellow, followed by "WELCOME, MARTIN. [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)". Below this is a light blue breadcrumb trail: "Home > Projects > Projects > Add project". The main content area is white and titled "Add project". It features four form fields, each with a label and a horizontal line below it: "Title:" with a text input field, "Description:" with a large text area, "Technology:" with a text input field, and "Image:" with a text input field.



CONGRATULATIONS!!



What you built

django

Share your knowledge with a Blog



Keep learning!

