

WHAT IS DJANGO

Django is a very popular and widely used full stack web development framework for python. It is used by large companies like Instagram and pintrest!

The main advantage of django is that you program almost everything using only python.

The Django logo, featuring the word "django" in a bold, lowercase, sans-serif font. The background is split diagonally from the top-left to the bottom-right. The upper-left triangle is dark blue, and the lower-right triangle is black. The word "django" is positioned in the white triangular area in the center-right.

SETTING UP A PROJECT

The first thing we need to do when we want to start using django is setup a project. To do this we will need to create a directory somewhere to store our django project.

Once we've done that we will need to open our command prompt and change into that directory.

Now we will type the following into cmd or terminal: **"django-admin namePrject"**

Command Prompt

```
C:\Users\MarizzaMil>pip install django
```

```
C:\Users\MarizzaMil>cd PycharmProjects
```

```
C:\Users\MarizzaMil\PycharmProjects>django-admin startproject djangoProject
```


SETTING UP A PROJECT

Open Terminal in PyCharm

Next we will change directories again into the name of our project. Once we've done this we can test that our installation was successful by running the command "`python manage.py runserver`" and going to the highlighted url in our web browser.

If you are successfully able to connect to the url then you are all done setting up a django project!

```
Microsoft Windows [Version 10.0.19042.1348]
(c) Microsoft Corporation. All rights reserved.
C:\Users\MarizzaMil\PycharmProjects\mySite>python manage.py runserver
Watching for file changes with StatReloader
Performing system checks...
System check identified no issues (0 silenced).
You have 18 unapplied migration(s). Your project may not work properly until you
  apply the migrations for app(s): admin, auth, contenttypes, sessions.
Run 'python manage.py migrate' to apply them.
November 27, 2021 - 20:22:31
Django version 3.2.9, using settings 'mySite.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CTRL-BREAK.
```





The install worked successfully! Congratulations!

You are seeing this page because `DEBUG=True` is in your settings file and you have not configured any URLs.



Django Documentation

Topics, references, & how-to's



Tutorial: A Polling App

Get started with Django



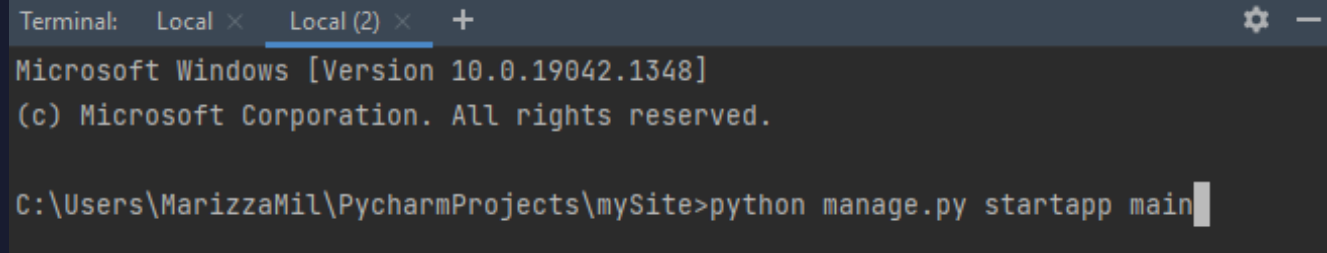
Django Community

Connect, get help, or contribute

CREATING AN APP

Now that we have created a django project we need to create a django app. An app is what will have pages and views and represent your site. Whereas the project is kind of an environment that runs your app! Note that you can multiple apps within one django project.

To create an app make sure you are in the same directory as the manage.py file and type the following: "python manage.py startapp nameApp"

A screenshot of a terminal window with a dark background. The title bar shows 'Terminal:' followed by two tabs: 'Local' and 'Local (2)'. The terminal content shows the Windows command prompt interface, including the version '10.0.19042.1348' and copyright notice. The current directory is 'C:\Users\MarizzaMil\PycharmProjects\mySite' and the command 'python manage.py startapp main' is being entered, with a cursor at the end of the line.

```
Terminal: Local × Local (2) × +
Microsoft Windows [Version 10.0.19042.1348]
(c) Microsoft Corporation. All rights reserved.

C:\Users\MarizzaMil\PycharmProjects\mySite>python manage.py startapp main
```

INSTALLING DJANGO

Django is a python module and can be installed via **pip**.
Simply open your command prompt or terminal and
type "pip install django".

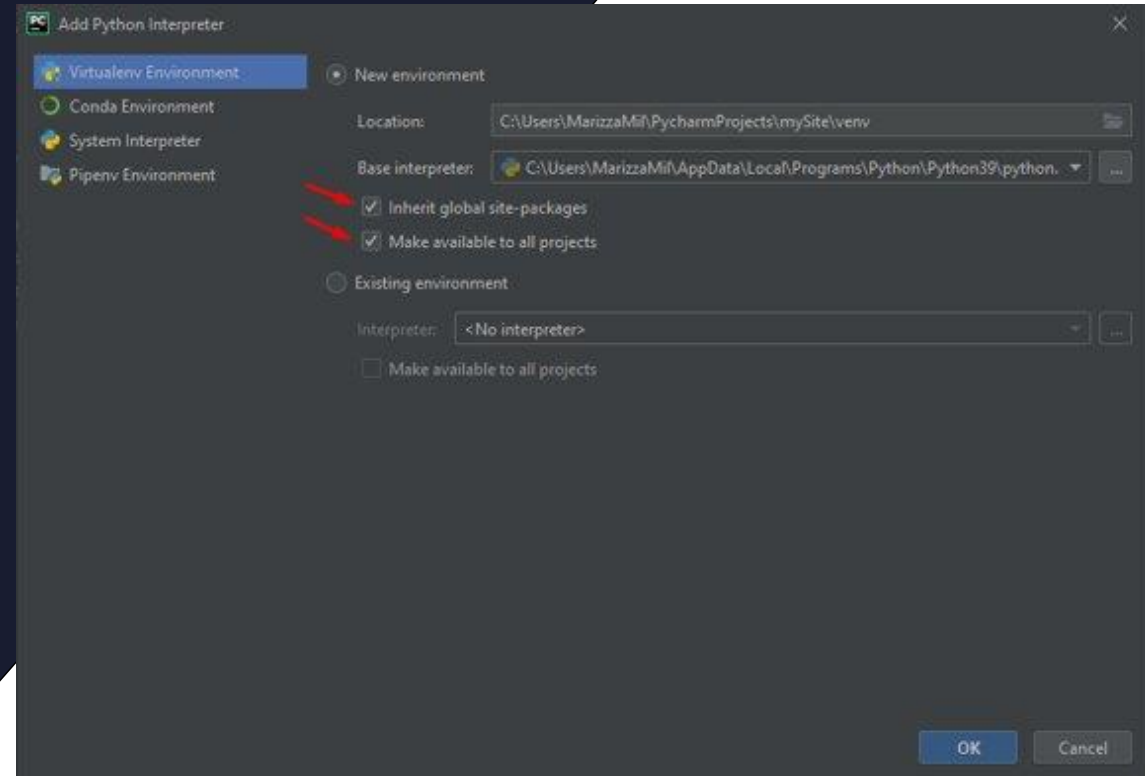
 Command Prompt

```
C:\Users\MarizzaMil>pip install django
```

INSTALLING DJANGO

1. Go to Settings -> Project: -> Project Interpreter
2. On right hand side click on settings icon > Add Local
3. Select correct Python version from Base Interpreter
4. Mark the checkbox against Inherit global site-packages and Make available to all projects
5. Click ok

Once this is done in Project Interpreter you will be able to see Django in the Package list.



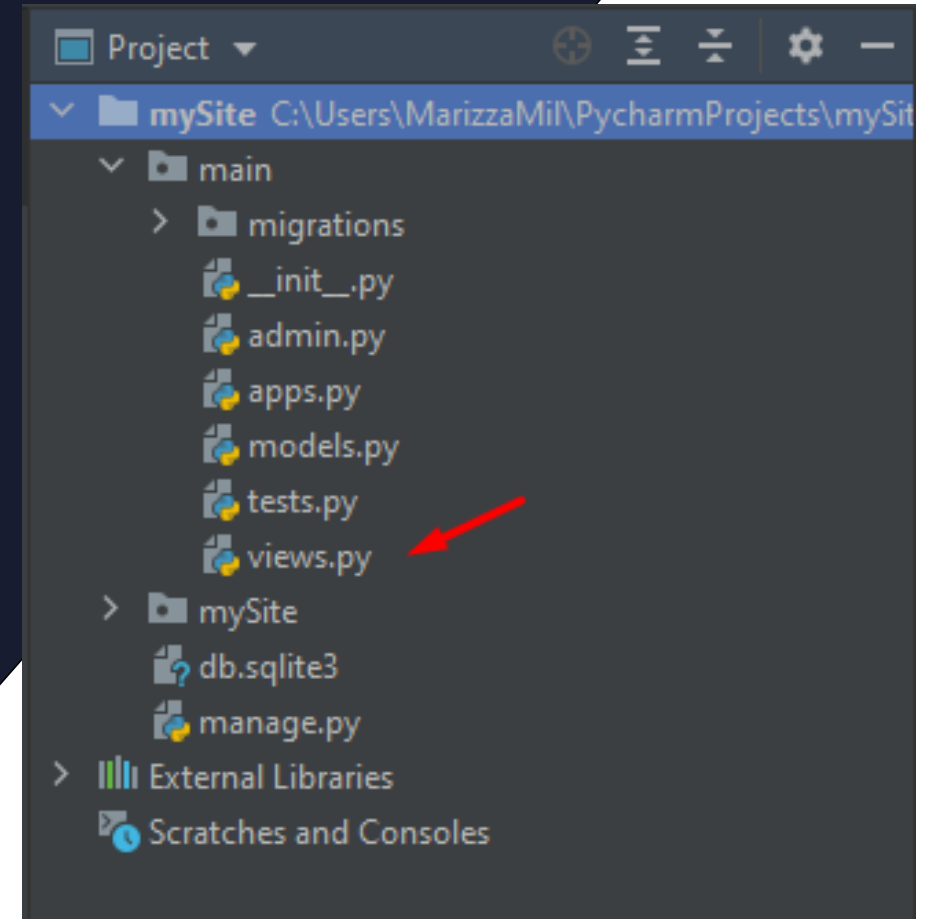
CREATING A VIEW

Now that we've created an app we can start modifying some files within our app to create our first web page (aka view).

To do this we will go into our apps root directory and modify the file called `views.py`.

main/views.py file

```
from django.http import HttpResponse  
  
def index(request):  
    return HttpResponse("Tech with Itay!")
```



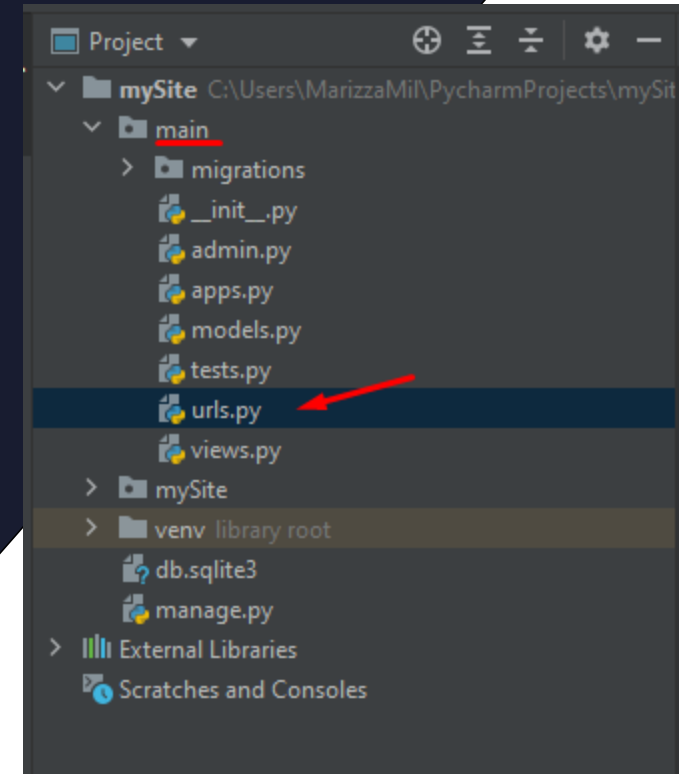
LINKING TO OUR VIEW

Now that we've created a view we need to create a url to link to it. To do this we need to **create a new python file called urls.py**. This file will be in root directory of our app (same place as views.py). It should contain the code shown below.

main/urls.py file

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

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



LINKING TO OUR VIEW

The last step is to exit this directory and go into the interior directory of our site name. Here we should see a file called `urls.py` (a different one that the one we just created). We need to modify it to be the following:

mySite/urls.py file

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

urlpatterns = [
    path('admin/', admin.site.urls),
    path('', include('main.urls')), # main will be the name of your app
]
```

Add code

Finally we can re run our server and see a web page that says Tech with Ytay!

