

Working with Django in Eclipse

Creating Hello World Web Page from Django

In our last tutorial we learnt to debug python in Eclipse.

In this tutorial we are trying to run Hello world web page from Django in Eclipse.

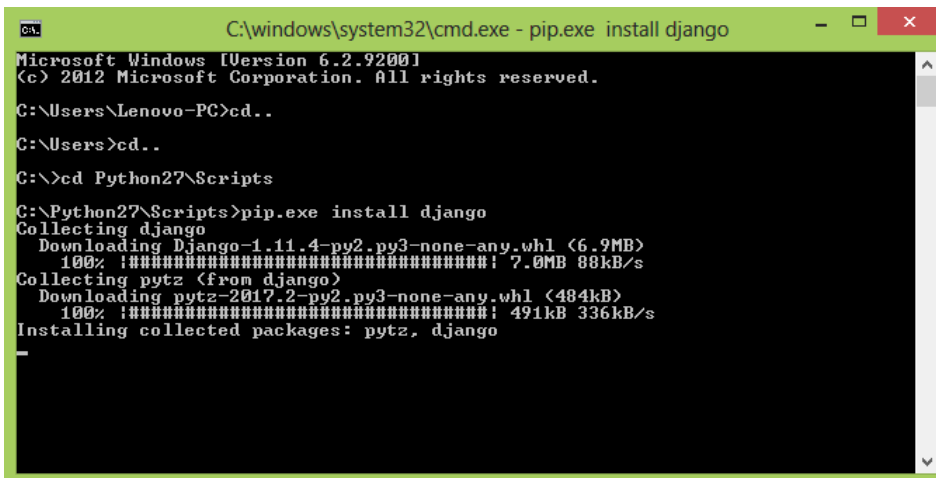
Requirements

In this tutorial you need to know

1. To create a python project in Eclipse.
2. Basic knowledge on Django.
3. Internet connection

Install Django into your system

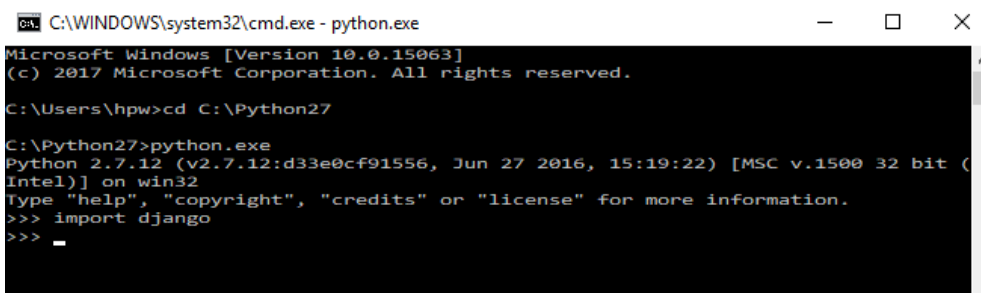
1. Open command prompt in your system.
2. Go to the location in which you have installed python and open Scripts Directory.
For example " cd C:\Python27\Scripts"
3. Enter the following command.
"pip.exe install django"



```
C:\windows\system32\cmd.exe - pip.exe install django
Microsoft Windows [Version 6.2.9200]
(c) 2012 Microsoft Corporation. All rights reserved.

C:\Users\Lenovo-PC>cd..
C:\Users>cd..
C:\>cd Python27\Scripts
C:\Python27\Scripts>pip.exe install django
Collecting django
  Downloading Django-1.11.4-py2.py3-none-any.whl (6.9MB)
    100% |#####| 7.0MB 88kB/s
Collecting pytz (from django)
  Downloading pytz-2017.2-py2.py3-none-any.whl (484kB)
    100% |#####| 491kB 336kB/s
Installing collected packages: pytz, django
```

4. To check if it is successfully installed in command prompt go to the location of python and type the following command.



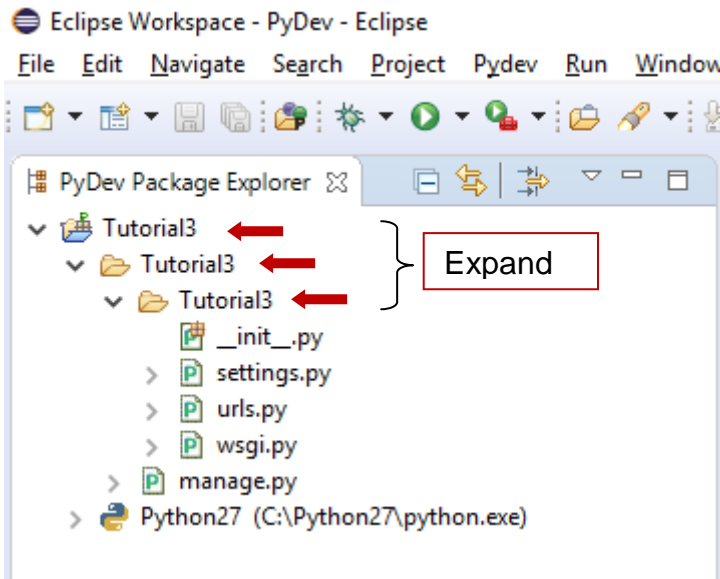
```
C:\WINDOWS\system32\cmd.exe - python.exe
Microsoft Windows [Version 10.0.15063]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\hpw>cd C:\Python27
C:\Python27>python.exe
Python 2.7.12 (v2.7.12:d33e0cf91556, Jun 27 2016, 15:19:22) [MSC v.1500 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import django
>>>
```

5. After import django if it gives >>> then it means that it is successfully installed.

Create Django project

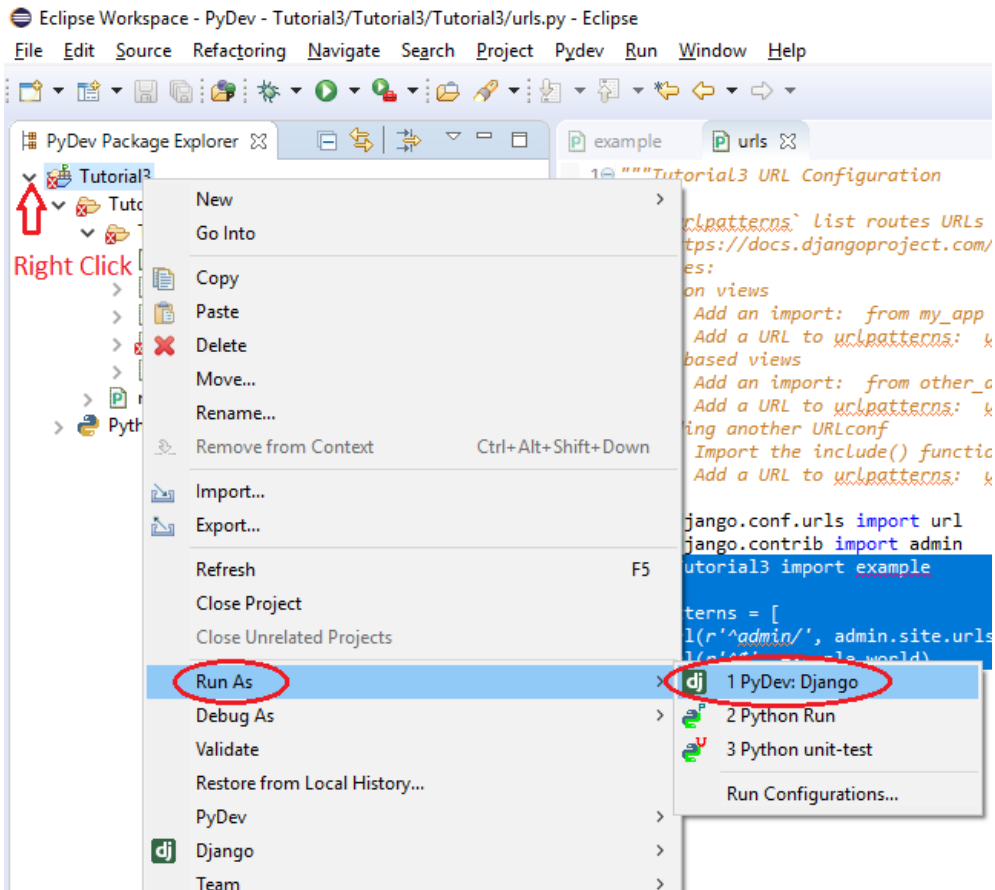
1. Select PyDev Django Project from menu. File > New > Other > PyDev > PyDev Django Project.
2. Give any name for the project for example Tutorial3 and click Next
3. A window for reference page will open unselect if any and click Next
4. A Django settings window will open click finish to create the project Tutorial3.
5. When you expand the project a folder with same name will be displayed expand it twice.



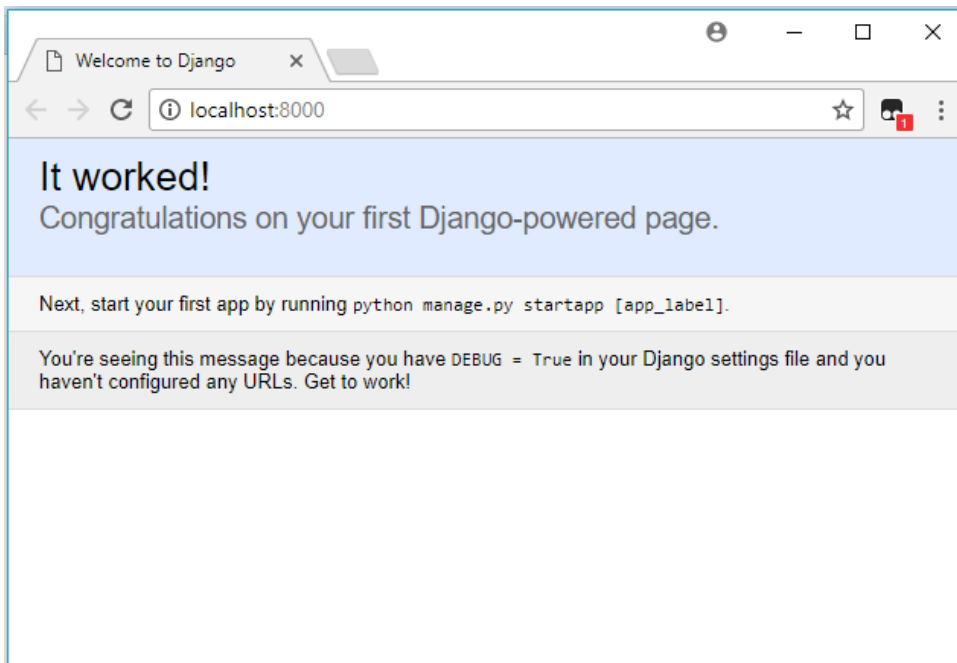
6. In this project you will find five .py files they are:

- **manage.py** :- This is the entry point from where your Django start application. It does two things a) It set our project to sys.path (b) it helps in adding our project setting files to DJANGO_SETTINGS_MODULE
- **_inti_.py** :- it is an empty file specifying that it is a Python Django project.
- **setting.py** :- This file is used for the configuration of project. It sets the modules which is required for Django to make the application run in web, modules such as database setting, wsgi application setting, template setting, base URL, default installed apps provided by Django like Frame work.
- **urls.py** :- This file is for routing the request to any individual page. Consider it as a file that sends the URL request to a particular method of Python.
- **wsgi.py** :- WSGI stands for web server gateway interface. This is the gateway or interface specified between Web server and Python application. It is an interface specification which is responsible for interaction between web server and python application.
<https://wsgi.readthedocs.io/en/latest/>

7. To check Django is working with eclipse, run the project as PyDev Django. Right click on the Tutorial3 project Run As > PyDev Django

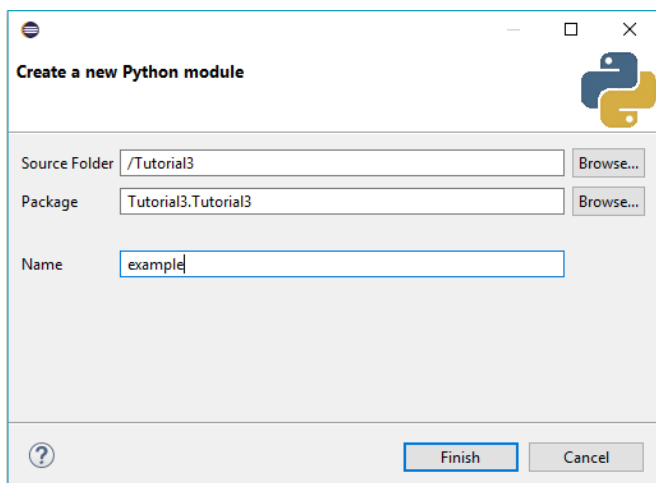
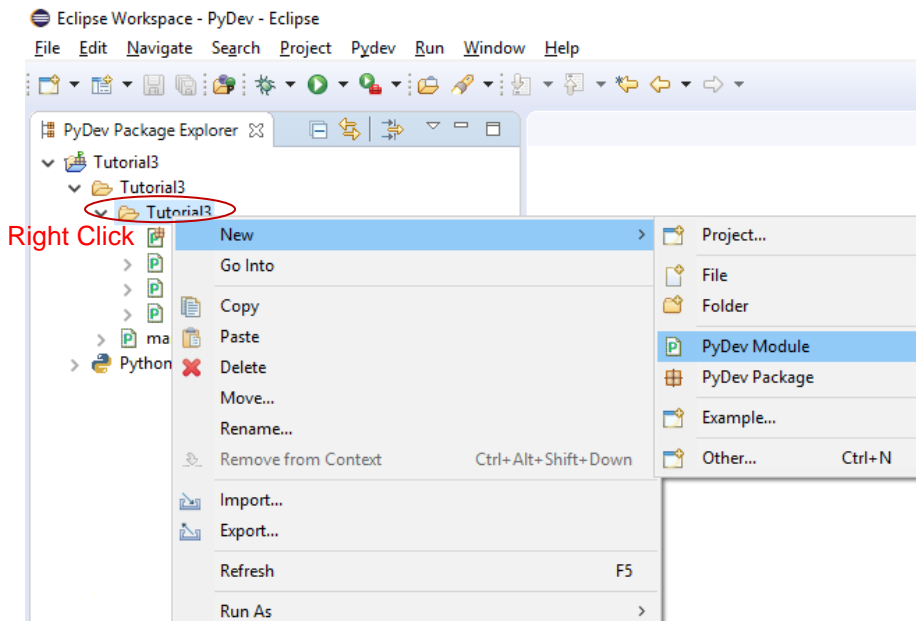


8. Open Browser and enter the URL as localhost:8000. Then it will give the following output.



Printing Hello World with Django

1. Right click on the Tutorial3 folder which contains init, urls and so select PyDev Module. New > PyDev Module. Write any name for the module Ex: Example.



2. In example.py write the following lines of code and save (Keep in mind of indentation).

```
from django.http import HttpResponse
def world(request):
    return HttpResponse("Hello World")
```

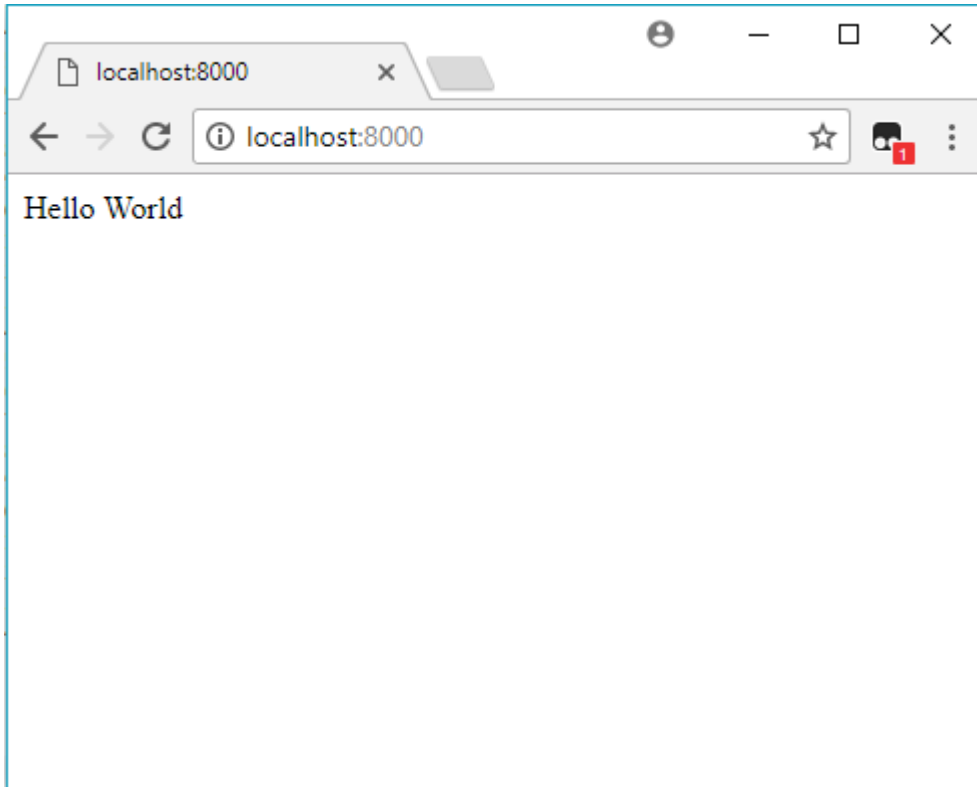
3. In urls.py append the following lines of code and save it:

```
from Tutorial3 import example
urlpatterns = [
    url(r'^admin/', admin.site.urls),
    url(r'^$', example.world),
]
```

10. Run the project as PyDev Django. Right click on the Tutorial3 project Run As > PyDev Django

Output

To see the output, open the browser and type localhost:8000.



We have successfully installed django and implemented a django project in eclipse. We have seen the output of our project in web browser in the link localhost:8000

Hope this tutorial was helpful with django.

ABOUT ANCIT:

ANCIT Consulting is an Eclipse Consulting Firm located in the "Silicon Valley of Outsourcing", Bangalore. Offers professional Eclipse Support and Training for various Eclipse based Frameworks including RCP, EMF, GEF, GMF. Contact us on annamalai@ancitconsulting.com to learn more about our services.