

10. Gestionar entorno de ejecución

Wednesday, October 7, 2020 7:43 PM

Es recomendable aislar el proyecto a nivel de módulos y librerías instaladas, de lo que tenemos a nivel global.

Un entorno virtual en Python nos ofrece un espacio para ejecutar nuestros proyectos.

Si lo que buscamos es contar con un espacio totalmente aislado, debemos instalar una sandbox, de las cuales podemos recomendar [Sandboxie](#) para Windows.

VIRTUALENV

Es como una sandbox para poder instalar todas las dependencias del proyecto en el que se trabaja, al cual además se le pueden agregar funcionalidades empleando `virtualenvwrapper`.

Instalación de virtualenv y virtualenvwrapper

```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19041.508]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>pip install virtualenv
Collecting virtualenv
  Downloading virtualenv-20.0.33-py2.py3-none-any.whl (4.9 MB)
    |████████████████████| 4.9 MB 2.2 MB/s
Collecting distlib<1,>=0.3.1
  Downloading distlib-0.3.1-py2.py3-none-any.whl (335 kB)
    |████████████████████| 335 kB 6.4 MB/s
Requirement already satisfied: six<2,>=1.9.0 in c:\users\marle\appdata\roaming\python\python38\site-packages (from virtualenv) (1.15.0)
Collecting appdirs<2,>=1.4.3
  Downloading appdirs-1.4.4-py2.py3-none-any.whl (9.6 kB)
Collecting filelock<4,>=3.0.0
  Downloading filelock-3.0.12-py3-none-any.whl (7.6 kB)
Installing collected packages: distlib, appdirs, filelock, virtualenv
Successfully installed appdirs-1.4.4 distlib-0.3.1 filelock-3.0.12 virtualenv-20.0.33
```

```
Administrator: Command Prompt

C:\WINDOWS\system32>pip install virtualenvwrapper
Collecting virtualenvwrapper
  Downloading virtualenvwrapper-4.8.4.tar.gz (334 kB)
    |████████████████████| 334 kB 1.6 MB/s
Requirement already satisfied: virtualenv in c:\program files\python38\lib\site-packages (20.0.33)
Collecting virtualenv-clone
  Downloading virtualenv-clone-0.5.4-py2.py3-none-any.whl (6.6 kB)
Collecting stevedore
  Downloading stevedore-3.2.2-py3-none-any.whl (42 kB)
    |████████████████████| 42 kB 254 kB/s
Requirement already satisfied: appdirs<2,>=1.4.3 in c:\program files\python38\lib\site-packages (from virtualenv-clone) (1.4.4)
```

Crear un entorno en Linux/Mac

```
$ virtualenv env
$ source env/bin/activate
(env) $ pip install -r requirements.txt
```

Crear un entorno en Windows

```
> virtualenv env
```

```
Administrator: Command Prompt

C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1>virtualenv env
created virtual environment CPython3.8.5.final.0-64 in 6187ms
  creator CPython3Windows(dest=C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1\env, clear=False, global=False)
  seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy, app_data_dir=C:\Users\marle\AppData\Local\pip\Cache\virtualenv)
    added seed packages: pip==20.2.3, setuptools==50.3.0, wheel==0.35.1
  activators BashActivator,BatchActivator,FishActivator,PowerShellActivator,PythonActivator

C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1>dir
Volume in drive C is Local Disk
Volume Serial Number is EAC5-AF97

Directory of C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1

10/07/2020  07:58 PM    <DIR>          .
10/07/2020  07:58 PM    <DIR>          ..
10/07/2020  03:20 PM             637 check_ports_socket.py
```

```

10/07/2020 07:58 PM <DIR> env
10/05/2020 07:42 PM 2 requirements.txt
10/07/2020 03:47 PM 1,375 scanner_puertos.py
10/07/2020 03:44 PM <DIR> __pycache__
3 File(s) 2,014 bytes
4 Dir(s) 93,384,294,400 bytes free

```

Lo activamos

```

Administrator: Command Prompt

C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1>virtualenv env
created virtual environment CPython3.8.5.final.0-64 in 6187ms
creator CPython3Windows(dest=C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\
clear=False, global=False)
seeder FromAppData(download=False, pip=bundle, setuptools=bundle, wheel=bundle, via=copy,
rs\marle\AppData\Local\pypa\virtualenv)
added seed packages: pip==20.2.3, setuptools==50.3.0, wheel==0.35.1
activators BashActivator,BatchActivator,FishActivator,PowerShellActivator,PythonActivator

C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1>dir
Volume in drive C is Local Disk
Volume Serial Number is EAC5-AF97

Directory of C:\Users\marle\Downloads\book-attachment-3744\CODIGO_PYTHON\TEMA2\Ejemplo 1

10/07/2020 07:58 PM <DIR> .
10/07/2020 07:58 PM <DIR> ..
10/07/2020 03:20 PM 637 check_ports_socket.py
10/07/2020 07:58 PM <DIR> env
10/05/2020 07:42 PM 2 requirements.txt
10/07/2020 03:47 PM 1,375 scanner_puertos.py
10/07/2020 03:44 PM <DIR> __pycache__
3 File(s) 2,014 bytes
4 Dir(s) 93,384,294,400 bytes free

```

Con esto ya podemos instalar nuestros requerimientos:

```
pip install -r requirements.txt
```

Para desactivarlo solo requerimos:

```
deactivate
```