Cheatography

Python Virtual Environments Cheat Sheet

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What is a virtual environment?

A virtual environment is a Python tool for dependency management and project isolation. They allow Python site packages (third party libraries) to be installed locally in an isolated directory for a particular project.

Most Popular Virtual Environment Manager

virtualenv	The most popular and work with Python 2 and 3
venv	A standard library, similar to virtualenv shipped with Python 3
virtualenvwrapper	A set of extensions to virtualenv. Useful when using multiple virtualenv directories.
pipenv	Less popular, It automatically creates and manages a virtualenv for your projects by combining Pipfile, pip and virtualenv into one command on the command-line.
poetry	Similar to pipenv
conda	Included in all versions of Anaconda and Miniconda. Anaconda brings many of the tools used in data science and machine learning with just one install.

Using virtualenv and venv

Installing virtualenv	macOS and Linux	`python3 -m pip install --user virtualenv`
	Windows	`py -m pip install --user virtualenv`
Creating a virtual environment	macOS and Linux	`python3 -m virtualenv my-env`
	Windows	`py -m virtualenv my-env`
Activating a virtual environment	macOS and Linux	`source my-env /bi n/a ctivate`
	Windows	`.\my-e nv \Scr ipt s\a ctivate`
Leaving the virtual environment		`deactivate`
Installing packages		`pip install requests`

To use venv instead of virtualenv simply change virtualenv with venv while creating the virtual environment

Using Pipenv

Installing Pipenv	macOS and Linux	`python3 -m pip install --user pipenv`
	Windows	`py -m pip install --user pipenv`
Install packages from Pipfile	macOS and Linux	`python3 -m pipenv install`
	Windows	`py -m pipenv install`
Add a package	macOS and Linux	`python3 -m pipenv install requests`
	Windows	`py -m pipenv install requests`
Activating a virtual environment	macOS and Linux	`python3 -m pipenv shell`
	Windows	`py -m pipenv shell`
Leaving the virtual environment		exit

When installing a package for the first time a virtual environment will be created automatically and it will create a Pipfile for you in your project's directory. The Pipfile is used to track which dependencies your project needs in case you need to re-install them.

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