

# Advanced Programming with Python. Session 8

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<https://slides.com/pepegar/app-8/live>

# Plan for today

- Learn about virtualenv
- Learn about Heroku
- Deploy our first app to Heroku

So far, everytime we've needed to install a dependency we've done it globally.

In real world python projects we'll try to avoid that, and we'll use individual environments per project.

```
pip3 install virtualenv
```

# Virtualenv (conda)

We can only have **one virtualenv active** at a time. So, the first thing we'll need to do for deactivating anaconda's is just to call to **deactivate**

```
(base) pepe:session-8 $ deactivate  
pepe:session-8 $
```

**virtualenv** is used to manage dependencies per project.

There are two steps for using a virtualenv:

```
pepe:session-8 $ virtualenv venv # create a virtualenv named venv  
pepe:session-8 $ . venv/bin/activate # activate the virtualenv  
(venv) pepe:session-8 $ # the virtualenv name will appear in the prompt
```

It's not needed to have the virtualenv directory (in our case **venv**) checked into git, so we can ignore it:

```
pepe:session-8 $ echo "venv" > .gitignore
```

Heroku is a PAAS that we can use to run our applications in the cloud.

<https://heroku.com>



Creating an account in Heroku

# Using Heroku

We will be able to manage most of our heroku app using the webapp itself, but it will be handy to install the CLI tool as well

**<https://devcenter.heroku.com/articles/heroku-cli>**

# Practice

Setting up a simple heroku app.

- 1 clone session-8 repo
- 2 create a virtualenv for it (**virtualenv venv**)
- 3 install flask in the virtualenv
- 4 freeze dependencies in a **requirements.txt**
- 5 setup heroku (**heroku create**)
- 6 push to heroku (**git push heroku master**)