Advanced Programming with Python. Session 8

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Plan for today

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

Virtualenv

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

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
```

Virtualenv

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

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

https://heroku.com

Practice

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**)