## **Python in Containers** Course Materials

## Section 2. "Integrating Containers with Host System"

Links:

https://github.com/pythonincontainers/myfirst

http://flask.pocoo.org/

```
Commands:
```

```
$ git clone https://github.com/pythonincontainers/myfirst
$ cd myfirst
$ atom .
$ docker create -it --name mypython python
$ docker cp --help
$ docker cp myfirst.py mypython:/tmp/myfirst.py
$ docker start -i mypython
>>>import os
>>>os.listdir('/tmp')
>>>exec(open('/tmp/myfirst.py').read())
$ docker cp myfirst.py mypython:/tmp/myfirst.v2.py
>>>exec(open('/tmp/myfirst.v2.py').read())
>>>exit()
$ docker run -it -v ${PWD}:/app python
>>>exec(open('/app/myfirst.py').read())
>>>exit()
$ docker run -it -v ${PWD}:/app --name myfirst python python
/app/myfirst.py
```

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```
$ docker start -i myfirst
$ docker run -it --name mysecond -v ${PWD}:/app python python
/app/mysecond.py
$ docker run -it --name mypython -v ${PWD}:/app python /bin/bash
# python mysecond.py
# pip install Flask
# export FLASK DEBUG=1
# export FLASK APP=mythird.py
# flask run --host=0
# exit
$ docker run -it --name mypython -v ${PWD}:/app -p 5001:5000
python /bin/bash
# pip install Flask
# export FLASK DEBUG=1
# export FLASK APP=mythird.py
# flask run --host=0
# exit
```