Assignment 1

1. Pip is the package manager

su@SUs-MacBook-Pro ~ % python3 –version// check version

Python 3.8.5

su@SUs-MacBook-Pro ~ % pip3 list // list of packages

Package Version

---------- -------

appdirs 1.4.4

distlib 0.3.1

filelock 3.0.12

pip 20.1.1

setuptools 47.1.0

six 1.15.0

virtualenv 20.0.31

1. Pipenv: virtual environment 虚拟环境

su@SUs-MacBook-Pro ~ % brew install pipenv

Basic Usage of Pipenv: <https://pipenvfork.readthedocs.io/en/latest/basics.html#:~:text=%24%20pipenv%20lock%20is%20used%20to,and%20most%20importantly%20deterministic%2C%20builds>.

**Example Pipfile**

[[source]]

url = "https://pypi.python.org/simple" //baseline

verify\_ssl = true

name = "pypi"

[packages]

requests = "\*" // http client library

[dev-packages]

pytest = "\*"

python request: <https://requests.readthedocs.io/en/master/>

su@SUs-MacBook-Pro lab0 % pipenv install

Creating a virtualenv for this project...

Pipfile: /Users/su/Desktop/Fall 2020/273/Assignment 1/lab0/Pipfile

Using /Library/Frameworks/Python.framework/Versions/3.8/bin/python3.8 (3.8.5) to create virtualenv...

⠹ Creating virtual environment...created virtual environment CPython3.8.5.final.0-64 in 601ms

creator CPython3Posix(dest=/Users/su/.local/share/virtualenvs/lab0-nhOepgj1, clear=False, global=False)

seeder FromAppData(download=False, pip=bundle, wheel=bundle, setuptools=bundle, via=copy, app\_data\_dir=/Users/su/Library/Application Support/virtualenv)

added seed packages: pip==20.2.2, setuptools==49.6.0, wheel==0.35.1

activators PythonActivator,FishActivator,XonshActivator,CShellActivator,PowerShellActivator,BashActivator

✔ Successfully created virtual environment!

Virtualenv location: /Users/su/.local/share/virtualenvs/lab0-nhOepgj1

// lab0-nhOepgj1: edit ths part if needed

Creating a Pipfile for this project...

Pipfile.lock not found, creating...

Locking [dev-packages] dependencies...

Locking [packages] dependencies...

Updated Pipfile.lock (db4242)!

Installing dependencies from Pipfile.lock (db4242)...

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To activate this project's virtualenv, run pipenv shell.

Alternatively, run a command inside the virtualenv with pipenv run.

su@SUs-MacBook-Pro lab0 % ls

Pipfile Pipfile.lock

This will create a Pipfile if one doesn’t exist. If one does exist, it will automatically be edited with the new package you provided.

Open new terminal tab // in case anything mess up

su@SUs-MacBook-Pro lab0 % pipenv shell// list all package with dependencies

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % python --version

Python 3.8.5

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % pip

Usage:

pip <command> [options]

Commands:

install Install packages.

download Download packages.

uninstall Uninstall packages.

freeze Output installed packages in requirements format.

list List installed packages.

show Show information about installed packages.

check Verify installed packages have compatible dependencies.

config Manage local and global configuration.

search Search PyPI for packages.

cache Inspect and manage pip's wheel cache.

wheel Build wheels from your requirements.

hash Compute hashes of package archives.

completion A helper command used for command completion.

debug Show information useful for debugging.

help Show help for commands.

General Options:

-h, --help Show help.

--isolated Run pip in an isolated mode, ignoring

environment variables and user configuration.

-v, --verbose Give more output. Option is additive, and can be

used up to 3 times.

-V, --version Show version and exit.

-q, --quiet Give less output. Option is additive, and can be

used up to 3 times (corresponding to WARNING,

ERROR, and CRITICAL logging levels).

--log <path> Path to a verbose appending log.

--no-input Disable prompting for input.

--proxy <proxy> Specify a proxy in the form

[user:passwd@]proxy.server:port.

--retries <retries> Maximum number of retries each connection should

attempt (default 5 times).

--timeout <sec> Set the socket timeout (default 15 seconds).

--exists-action <action> Default action when a path already exists:

(s)witch, (i)gnore, (w)ipe, (b)ackup, (a)bort.

--trusted-host <hostname> Mark this host or host:port pair as trusted,

even though it does not have valid or any HTTPS.

--cert <path> Path to alternate CA bundle.

--client-cert <path> Path to SSL client certificate, a single file

containing the private key and the certificate

in PEM format.

--cache-dir <dir> Store the cache data in <dir>.

--no-cache-dir Disable the cache.

--disable-pip-version-check

Don't periodically check PyPI to determine

whether a new version of pip is available for

download. Implied with --no-index.

--no-color Suppress colored output

--no-python-version-warning

Silence deprecation warnings for upcoming

unsupported Pythons.

--use-feature <feature> Enable new functionality, that may be backward

incompatible.

--use-deprecated <feature> Enable deprecated functionality, that will be

removed in the future.

(lab0) su@SUs-MacBook-Pro lab0 % pip list // default one under source in pipfile

Package Version

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pip 20.2.2

setuptools 49.6.0

wheel 0.35.1

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv install

Pipfile.lock (db4242) out of date, updating to (b2667d)...

Locking [dev-packages] dependencies...

Building requirements...

Resolving dependencies...

✔ Success!

Locking [packages] dependencies...

Building requirements...

Resolving dependencies...

✔ Success!

Updated Pipfile.lock (b2667d)!

Installing dependencies from Pipfile.lock (b2667d)...

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To activate this project's virtualenv, run pipenv shell.

Alternatively, run a command inside the virtualenv with pipenv run.

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % python --version

Python 3.8.5

(lab0) su@SUs-MacBook-Pro lab0 % pip list

Package Version

---------- ---------

certifi 2020.6.20

chardet 3.0.4

idna 2.10

pip 20.2.2

requests 2.24.0

setuptools 49.6.0

urllib3 1.25.10

wheel 0.35.1

flask tutorial: <https://flask.palletsprojects.com/en/1.1.x/tutorial/>

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % pip install Flask

Requirement already satisfied: Flask in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (1.1.2)

Requirement already satisfied: Jinja2>=2.10.1 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask) (2.11.2)

Requirement already satisfied: click>=5.1 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask) (7.1.2)

Requirement already satisfied: itsdangerous>=0.24 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask) (1.1.0)

Requirement already satisfied: Werkzeug>=0.15 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask) (1.0.1)

Requirement already satisfied: MarkupSafe>=0.23 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Jinja2>=2.10.1->Flask) (1.1.1)

(lab0) su@SUs-MacBook-Pro lab0 % pip uninstall Flask

Found existing installation: Flask 1.1.2

Uninstalling Flask-1.1.2:

Would remove:

/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/flask

/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/Flask-1.1.2.dist-info/\*

/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/flask/\*

Proceed (y/n)? y

Successfully uninstalled Flask-1.1.2

(lab0) su@SUs-MacBook-Pro lab0 % pip install Flask==1.1.1

Collecting Flask==1.1.1

Using cached Flask-1.1.1-py2.py3-none-any.whl (94 kB)

Requirement already satisfied: itsdangerous>=0.24 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask==1.1.1) (1.1.0)

Requirement already satisfied: click>=5.1 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask==1.1.1) (7.1.2)

Requirement already satisfied: Werkzeug>=0.15 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask==1.1.1) (1.0.1)

Requirement already satisfied: Jinja2>=2.10.1 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Flask==1.1.1) (2.11.2)

Requirement already satisfied: MarkupSafe>=0.23 in /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages (from Jinja2>=2.10.1->Flask==1.1.1) (1.1.1)

Installing collected packages: Flask

Successfully installed Flask-1.1.1

(lab0) su@SUs-MacBook-Pro lab0 % pip list

Package Version

------------ ---------

certifi 2020.6.20

chardet 3.0.4

click 7.1.2

Flask 1.1.1

idna 2.10

itsdangerous 1.1.0

Jinja2 2.11.2

MarkupSafe 1.1.1

pip 20.2.2

requests 2.24.0

setuptools 49.6.0

urllib3 1.25.10

Werkzeug 1.0.1

wheel 0.35.1

(lab0) su@SUs-MacBook-Pro lab0 % pip uninstall Flask

Found existing installation: Flask 1.1.1

Uninstalling Flask-1.1.1:

Would remove:

/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/flask

/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/Flask-1.1.1.dist-info/\*

/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/flask/\*

Proceed (y/n)? y

Successfully uninstalled Flask-1.1.1

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv install Flask==1.1.1

Installing Flask==1.1.1...

Adding Flask to Pipfile's [packages]...

✔ Installation Succeeded

Pipfile.lock (b2667d) out of date, updating to (2be1c8)...

Locking [dev-packages] dependencies...

Building requirements...

Resolving dependencies...

✔ Success!

Locking [packages] dependencies...

Building requirements...

Resolving dependencies...

✔ Success!

Updated Pipfile.lock (2be1c8)!

Installing dependencies from Pipfile.lock (2be1c8)...

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To activate this project's virtualenv, run pipenv shell.

Alternatively, run a command inside the virtualenv with pipenv run.

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % pip list

Package Version

------------ ---------

certifi 2020.6.20

chardet 3.0.4

click 7.1.2

Flask 1.1.1

idna 2.10

itsdangerous 1.1.0

Jinja2 2.11.2

MarkupSafe 1.1.1

pip 20.2.2

requests 2.24.0

setuptools 49.6.0

urllib3 1.25.10

Werkzeug 1.0.1

wheel 0.35.1

(lab0) su@SUs-MacBook-Pro lab0 %

Hello.py

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/')

def hello():

return 'Hello, World!'

(lab0) su@SUs-MacBook-Pro lab0 % export FLASK\_APP=hello.py

(lab0) su@SUs-MacBook-Pro lab0 % flask run

\* Serving Flask app "hello.py"

\* Environment: production

WARNING: This is a development server. Do not use it in a production deployment.

Use a production WSGI server instead.

\* Debug mode: off

\* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

//Not in shell

su@SUs-MacBook-Pro lab0 % curl -i http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 19:54:46 GMT

Hello, World!%

su@SUs-MacBook-Pro lab0 % curl -i -X HEAD http://127.0.0.1:5000/

Warning: Setting custom HTTP method to HEAD with -X/--request may not work the

Warning: way you want. Consider using -I/--head instead.

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:01:24 GMT

curl: (18) transfer closed with 13 bytes remaining to read

// in shell the debug mode is off

(lab0) su@SUs-MacBook-Pro lab0 % export FLASK\_ENV=development

(lab0) su@SUs-MacBook-Pro lab0 % flask run

\* Serving Flask app "hello.py" (lazy loading)

\* Environment: development

\* Debug mode: on

\* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

\* Restarting with stat

\* Debugger is active!

\* Debugger PIN: 213-181-784

NOT SHELL

su@SUs-MacBook-Pro lab0 % curl -I -X HEAD http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:13:05 GMT

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/', methods=['GET', 'HEAD'])

def hello():

print ("calling hello")

return 'Hello, World!'

su@SUs-MacBook-Pro lab0 % curl -I -X HEAD <http://127.0.0.1:5000/>

shell:

\* Detected change in '/Users/su/Desktop/Fall 2020/273/Assignment 1/lab0/hello.py', reloading

\* Restarting with stat

\* Debugger is active!

\* Debugger PIN: 213-181-784

calling hello

127.0.0.1 - - [19/Sep/2020 13:19:05] "HEAD / HTTP/1.1" 200 -

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/', methods=['GET', 'OPTION'])

def hello():

print ("calling hello")

return 'Hello, World!'

su@SUs-MacBook-Pro lab0 % curl -I -X OPTION http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:22:55 GMT

\* Detected change in '/Users/su/Desktop/Fall 2020/273/Assignment 1/lab0/hello.py', reloading

\* Restarting with stat

\* Debugger is active!

\* Debugger PIN: 213-181-784

calling hello

127.0.0.1 - - [19/Sep/2020 13:22:55] "OPTION / HTTP/1.1" 200 –

su@SUs-MacBook-Pro lab0 % curl -i -X PATCH http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:27:33 GMT

Hello, World!%

su@SUs-MacBook-Pro lab0 % curl -i -X PATCH http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:27:33 GMT

Hello, World!% su@SUs-MacBook-Pro lab0 % curl -i -X HEAD http://127.0.0.1:5000/

Warning: Setting custom HTTP method to HEAD with -X/--request may not work the

Warning: way you want. Consider using -I/--head instead.

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:28:34 GMT

curl: (18) transfer closed with 13 bytes remaining to read

su@SUs-MacBook-Pro lab0 % curl -i -X GET http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 13

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:39:41 GMT

Hello, World!%

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/', methods=['GET', 'PATCH'])

def hello():

return '<html><strong>hello</strong></html>'

//hello will be strong on the browser

su@SUs-MacBook-Pro lab0 % curl -i -X PATCH http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: text/html; charset=utf-8

Content-Length: 35

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:43:46 GMT

<html><strong>hello</strong></html>%

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/', methods=['GET', 'PATCH'])

def hello():

return {

"data":"hello"

}

su@SUs-MacBook-Pro lab0 % curl -i -X PATCH http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: application/json

Content-Length: 22

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:45:29 GMT

{

"data": "hello"

}

su@SUs-MacBook-Pro lab0 % curl -i -X GET http://127.0.0.1:5000/

HTTP/1.0 200 OK

Content-Type: application/json

Content-Length: 22

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 20:46:32 GMT

{

"data": "hello"

}

Assignment1:

<https://blog.miguelgrinberg.com/post/the-flask-mega-tutorial-part-i-hello-world>

<https://pypi.org/project/sqlitedict/>

from flask import Flask

app = Flask(\_\_name\_\_)

@app.route('/')

def hello():

return {

"data":"hello"

}

@app.route('/api/bookmarks')

def get\_bookmark():

return {

"data":"hello"

}

Not shell

su@SUs-MacBook-Pro lab0 % curl -i -X GET http://127.0.0.1:5000/api/bookmarks

HTTP/1.0 200 OK

Content-Type: application/json

Content-Length: 22

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Sat, 19 Sep 2020 22:37:09 GMT

{

"data": "hello"

}

su@SUs-MacBook-Pro lab0 % pip install -U sqlitedict

su@SUs-MacBook-Pro lab0 % pip install nose

su@SUs-MacBook-Pro lab0 % pip install coverage

su@SUs-MacBook-Pro lab0 % make test-all

make: \*\*\* No rule to make target `test-all'. Stop.

su@SUs-MacBook-Pro lab0 % make test-all-with-coverage

make: \*\*\* No rule to make target `test-all-with-coverage'. Stop

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv install qrcode

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % export FLASK\_ENV=development

(lab0) su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % export FLASK\_ENV=development

(lab0) su@SUs-MacBook-Pro lab0 % flask run

\* Environment: development

\* Debug mode: on

\* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

\* Restarting with stat

\* Debugger is active!

\* Debugger PIN: 213-181-784

^C% (lab0) su@SUs-MacBook-Pro lab0 % pip list

Package Version

------------ ---------

certifi 2020.6.20

chardet 3.0.4

click 7.1.2

Flask 1.1.1

idna 2.10

itsdangerous 1.1.0

Jinja2 2.11.2

MarkupSafe 1.1.1

pip 20.2.2

qrcode 6.1

requests 2.24.0

setuptools 49.6.0

six 1.15.0

urllib3 1.25.10

Werkzeug 1.0.1

wheel 0.35.1

(lab0) su@SUs-MacBook-Pro lab0 % python qrcode\_gen.py

Traceback (most recent call last):

File "/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/qrcode/image/pil.py", line 6, in <module>

from PIL import Image, ImageDraw

ModuleNotFoundError: No module named 'PIL'

During handling of the above exception, another exception occurred:

Traceback (most recent call last):

File "qrcode\_gen.py", line 7, in <module>

img = qrcode.make(data)

File "/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/qrcode/main.py", line 11, in make

return qr.make\_image()

File "/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/qrcode/main.py", line 289, in make\_image

from qrcode.image.pil import PilImage

File "/Users/su/.local/share/virtualenvs/lab0-nhOepgj1/lib/python3.8/site-packages/qrcode/image/pil.py", line 8, in <module>

import Image

ModuleNotFoundError: No module named 'Image'

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pipenv install pillow

Installing pillow...

Adding pillow to Pipfile's [packages]...

✔ Installation Succeeded

Pipfile.lock (058bac) out of date, updating to (322f3f)...

Locking [dev-packages] dependencies...

Building requirements...

Resolving dependencies...

✔ Success!

Locking [packages] dependencies...

Building requirements...

Resolving dependencies...

✔ Success!

Updated Pipfile.lock (322f3f)!

Installing dependencies from Pipfile.lock (322f3f)...

🐍 ▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉▉ 0/0 — 00:00:00

To activate this project's virtualenv, run pipenv shell.

Alternatively, run a command inside the virtualenv with pipenv run.

su@SUs-MacBook-Pro lab0 % m

su@SUs-MacBook-Pro lab0 % open bookmakr.png

su@SUs-MacBook-Pro lab0 %

//run this one should get the qrcode

su@SUs-MacBook-Pro lab0 % curl -i -X GET <http://127.0.0.1:5000/api/bookmarks/abc123/qrcode>

### //GET /api/bookmarks/{id}/stats

Last login: Fri Sep 18 03:22:46 on ttys001

su@SUs-MacBook-Pro lab0 % ls

Pipfile Pipfile.lock bookmakr.png hello.py qrcode\_gen.py

su@SUs-MacBook-Pro lab0 % pipenv install flask-api-stats

(lab0) su@SUs-MacBook-Pro lab0 % export Flask\_APP=hello.py

(lab0) su@SUs-MacBook-Pro lab0 % flask run

\* Environment: production

WARNING: This is a development server. Do not use it in a production deployment.

Use a production WSGI server instead.

\* Debug mode: off

Usage: flask run [OPTIONS]

Error: Could not locate a Flask application. You did not provide the "FLASK\_APP" environment variable, and a "wsgi.py" or "app.py" module was not found in the current directory.

(lab0) su@SUs-MacBook-Pro lab0 % exit

su@SUs-MacBook-Pro lab0 % pip install sqlalchemy

DEPRECATION: Python 2.7 reached the end of its life on January 1st, 2020. Please upgrade your Python as Python 2.7 is no longer maintained. pip 21.0 will drop support for Python 2.7 in January 2021. More details about Python 2 support in pip can be found at https://pip.pypa.io/en/latest/development/release-process/#python-2-support

Defaulting to user installation because normal site-packages is not writeable

Collecting sqlalchemy

Downloading SQLAlchemy-1.3.19-cp27-cp27m-macosx\_10\_14\_x86\_64.whl (1.2 MB)

|████████████████████████████████| 1.2 MB 3.5 MB/s

Installing collected packages: sqlalchemy

Successfully installed sqlalchemy-1.3.19

su@SUs-MacBook-Pro lab0 % pipenv shell

Launching subshell in virtual environment...

. /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

su@SUs-MacBook-Pro lab0 % . /Users/su/.local/share/virtualenvs/lab0-nhOepgj1/bin/activate

(lab0) su@SUs-MacBook-Pro lab0 %

https://github.com/flask-dashboard/Flask-MonitoringDashboard

su@SUs-MacBook-Pro lab0 % pipenv install flask\_monitoringdashboard

(lab0) su@SUs-MacBook-Pro lab0 % export FLASK\_APP=hello.py

(lab0) su@SUs-MacBook-Pro lab0 % flask run

\* Serving Flask app "hello.py" (lazy loading)

\* Environment: development

\* Debug mode: on

\* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

\* Restarting with stat

\* Debugger is active!

\* Debugger PIN: 213-181-784

Go to <http://127.0.0.1:5000/dashboard>, we can get this

A screenshot of a cell phone

Description automatically generated

admin admin

# su@SUs-MacBook-Pro lab0 % curl -H "Content-Type: application/json" -d '{"url":"pin"}' -X POST http://127.0.0.1:5000/api/bookmarks

(lab0) su@SUs-MacBook-Pro lab0 % export FLASK\_APP=hello.py

### (lab0) su@SUs-MacBook-Pro lab0 % flask run

### POST /api/bookmarks

Post <http://127.0.0.1:5000/api/bookmarks>

{

"name": "youtube",

"url": "https://www.youtube.com/",

"description": "youtube"

}

//id will be created

{

"id": "5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821"

}

127.0.0.1 - - [22/Sep/2020 01:14:34] "POST /api/bookmarks HTTP/1.1" 201

// id is existed

{

"reason": "The given URL already existed in the system."

}

127.0.0.1 - - [22/Sep/2020 01:15:49] "POST /api/bookmarks HTTP/1.1" 400 -

### #GET /api/bookmarks/abc123

GET http://127.0.0.1:5000/api/bookmarks/5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821

{

"description": "youtube",

"id": "5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821",

"name": "youtube",

"url": "https://www.youtube.com/"

}

127.0.0.1 - - [22/Sep/2020 01:18:45] "GET /api/bookmarks/5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821 HTTP/1.1" 200 –

GET <http://127.0.0.1:5000/api/bookmarks/suyuan>

Not found

127.0.0.1 - - [22/Sep/2020 01:21:35] "GET /api/bookmarks/suyuan HTTP/1.1" 404 -

-

Delete <http://127.0.0.1:5000/api/bookmarks/5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821>

127.0.0.1 - - [22/Sep/2020 01:47:28] "DELETE /api/bookmarks/5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821 HTTP/1.1" 204 -

su@SUs-MacBook-Pro lab0 % pipenv install pillow

su@SUs-MacBook-Pro lab0 % pipenv run python hello.py

Scheduler started

su@SUs-MacBook-Pro lab0 % open bookmakr.png

su@SUs-MacBook-Pro lab0 % curl -i -X GET http://127.0.0.1:5000/api/bookmarks/5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821/qrcode

HTTP/1.0 200 OK

Content-Type: image/gif

Cache-Control: public, max-age=43200

Expires: Tue, 22 Sep 2020 22:01:26 GMT

Connection: close

Server: Werkzeug/1.0.1 Python/3.8.5

Date: Tue, 22 Sep 2020 10:01:26 GMT

127.0.0.1 - - [22/Sep/2020 03:01:26] "GET /api/bookmarks/5ea57306bf4c70c268e31872de5c75020ab098294ecff1a041ec4821/qrcode HTTP/1.1" 200 –

//bookmakr.png I got

A picture containing drawing

Description automatically generated

A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

