

Forritunarmálið Python

Day 11

Pip and more

Hjalti Magnússon

11. desember 2017

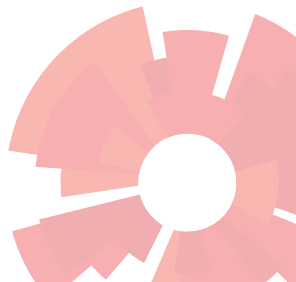


Logging



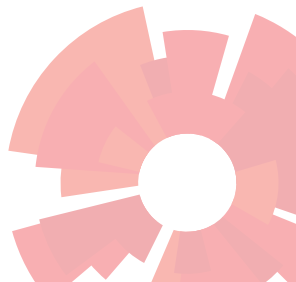
Logging

- Powerful preemptive debugging
- You will never log too much



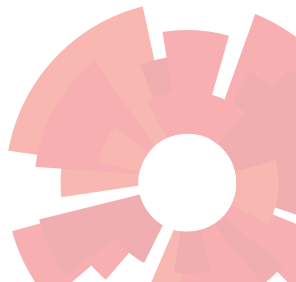
Basic setup

```
import logging
logging.debug('yay')
logging.error('yay')
```



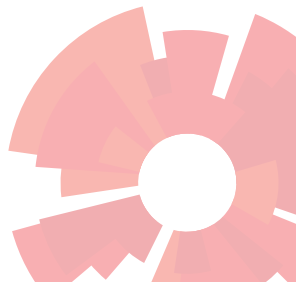
Logging to a file

```
logging.basicConfig(filename='debug.log', level=
    logging.DEBUG)
logging.debug('yay')
logging.error('yay')
```



Formatting messages

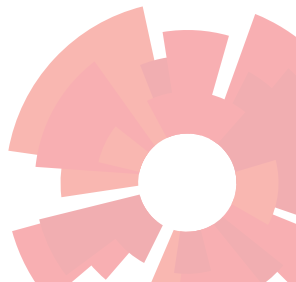
```
logging.basicConfig(format='% (asctime)s %(message)s  
' , datefmt='%m/%d/%Y %H:%M:%S')
```



Third party packages



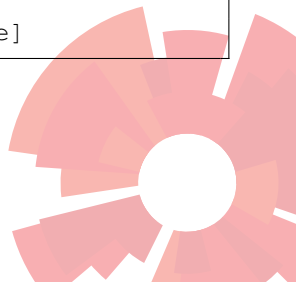
- The Python Package Index
 - A repository of software for Python



■ A Python module to install packages from PyPI

```
# Normally pip is installed as a program
$ pip3 install [package name]

# Can also be run like this
$ python3 -m pip install [package name]
```

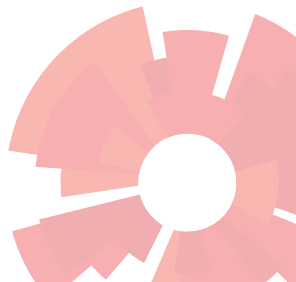


Requests



Requests

- A more powerful library to make HTTP requests

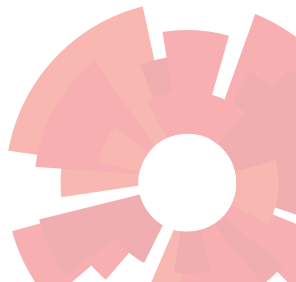


Example

```
>>> import requests
>>> r = requests.get('http://dyraklam.is')
>>> r.ok
True
>>> r.status_code
200
>>> r.encoding
'ISO-8859-1'
>>> r.text[:40]
'<html xmlns="http://www.w3.org/1999/xhtml'
```

Example

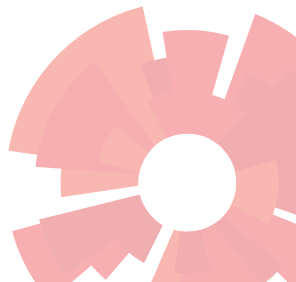
```
>>> r = requests.get('http://apis.is/ship',  
...                  params={'search': 'test'})  
>>> r.json()  
{'error': 'No ship found with the query test'}
```



BeautifulSoup



- An HTML and XML parser



Example

```
>>> from bs4 import BeautifulSoup
>>> r = requests.get('http://dyraklam.is')
>>> soup = BeautifulSoup(r.text, 'html.parser')
>>> soup.img

>>> len(soup('img'))
25
```