

Atividade – 26/11/2025

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Prática 07 - Cloud AWS - Docker

```
ec2-user@ip-172-31-18-150:~$ 
Verifying      : docker-25.0.13-1.amzn2023.0.2.x86_64          3/11
Verifying      : iptables-libc-1.8.8-3.amzn2023.0.2.x86_64        4/11
Verifying      : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64        5/11
Verifying      : libcgroup-3.0-1.amzn2023.0.1.x86_64          6/11
Verifying      : libnftnlfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64    7/11
Verifying      : libnftnl-1.0.1-19.amzn2023.0.2.x86_64          8/11
Verifying      : libnftnl-1.2.2-2.amzn2023.0.2.x86_64          9/11
Verifying      : pigz-2.5-1.amzn2023.0.3.x86_64          10/11
Verifying      : runc-1.3.3-2.amzn2023.0.1.x86_64          11/11

installed:
container-selinux-4:2.242.0-1.amzn2023.noarch
docker-25.0.13-1.amzn2023.0.2.x86_64
iptables-nft-1.8.8-3.amzn2023.0.2.x86_64
libnftnlfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64
libnftnl-1.2.2-2.amzn2023.0.2.x86_64
runc-1.3.3-2.amzn2023.0.1.x86_64

containerd-2.1.4-1.amzn2023.0.2.x86_64
iptables-libc-1.8.8-3.amzn2023.0.2.x86_64
libcgroup-3.0-1.amzn2023.0.1.x86_64
libnftnl-1.0.1-19.amzn2023.0.2.x86_64
pigz-2.5-1.amzn2023.0.3.x86_64

complete!
ec2-user@ip-172-31-18-150 ~]$ sudo service docker start
Redirecting to /bin/systemctl start docker.service
ec2-user@ip-172-31-18-150 ~]$ sudo docker info
Client:
Version:  25.0.13
Context:   default
Debug Mode: false
Plugins:
  buildx: Docker Buildx (Docker Inc.)
    Version:  0.12.1
    Path:     /usr/libexec/docker/cli-plugins/docker-buildx

ec2-user@ip-172-31-18-150:~$ 
Downloaded: click-8.1.8-py3-none-any.whl (98 kB)
|██████████| 98 kB 12.4 MB/s
Collecting zipp>=3.2.0
  Downloading zipp-3.23.0-py3-none-any.whl (10 kB)
Installing collected packages: zipp, markupsafe, werkzeug, jinja2, itsdangerous, importlib-metadata, click, blinker, flask
  Attempting uninstall: markupsafe
    Found existing installation: MarkupSafe 1.1.1
    Uninstalling MarkupSafe-1.1.1:
      Successfully uninstalled MarkupSafe-1.1.1
  Attempting uninstall: jinja2
    Found existing installation: Jinja2 2.11.3
    Uninstalling Jinja2-2.11.3:
      Successfully uninstalled Jinja2-2.11.3
Successfully installed blinker-1.9.0 click-8.1.8 flask-3.1.2 importlib-metadata-8.7.0 itsdangerous-2.2.0 jinja2-3.1.6 markupsafe-3.0.3 werkzeug-3.1.3 zipp-3.23.0
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv
ec2-user@ip-172-31-18-150 ~]$ sudo pip3 install gunicorn
Collecting gunicorn
  Downloading gunicorn-23.0.0-py3-none-any.whl (85 kB)
|██████████| 85 kB 5.9 MB/s
Collecting packaging
  Downloading packaging-25.0-py3-none-any.whl (66 kB)
|██████████| 66 kB 6.1 MB/s
Installing collected packages: packaging, gunicorn
Successfully installed gunicorn-23.0.0 packaging-25.0
WARNING: Running pip as the 'root' user can result in broken permissions and conflicting behaviour with the system package manager. It is recommended to use a virtual environment instead: https://pip.pypa.io/warnings/venv
```

```
[ec2-user@ip-172-31-18-150 ~]$ mkdir projetos
[ec2-user@ip-172-31-18-150 ~]$ cd projetos
[ec2-user@ip-172-31-18-150 projetos]$ mkdir api
[ec2-user@ip-172-31-18-150 projetos]$ cd api
[ec2-user@ip-172-31-18-150 api]$
```

The screenshot shows a terminal window with three tabs open. The first tab contains the command-line history for creating a directory structure. The second tab, titled 'main.py', displays the code for a simple Flask application. The third tab, titled 'requirements.txt', lists the dependencies required for the project.

```
GNU nano 8.3                               main.py
from flask import Flask
app = Flask(__name__)
@app.route('/api', methods=['GET'])
def handler():
    return 'Esta é a nossa API', 200
if __name__ == "__main__":
    app.run(host="0.0.0.0", port=int("5000"), debug=True)
```

```
:file Name to Write: main.py
[G Help      M-D DOS Format      M-A Append      M-B Backup File
[C Cancel   M-M Mac Format     M-P Prepend     M-T Browse
[  Selecionar ec2-user@ip-172-31-18-150:~/projetos/api
GNU nano 8.3                               requirements.txt
click==8.1.8
idocutils==0.16
flask==3.1.2
gunicorn==23.0.0
importlib_metadata==8.7.0
itsdangerous==2.2.0
jinja2==3.1.6
lockfile==0.12.2
MarkupSafe==3.0.3
PySocks==1.7.1
python-daemon==2.3.0
werkzeug==3.1.3
tipp==3.23.0
```

```
[G Help      ^O Write Out   ^F Where Is      ^K Cut        ^T Execute      ^C Location      M-U Undo      M-A Set Mark
[X Exit     ^R Read File  ^H Replace     ^U Paste     ^J Justify     ^/ Go To Line  M-E Redo      M-G Copy
```

```
ec2-user@ip-172-31-18-150:~/projetos/api dockerfile Modified
GNU nano 8.3
FROM python:3
COPY . /work
WORKDIR /work
EXPOSE 5000
RUN pip3 install --no-cache-dir -r requirements.txt
CMD gunicorn --workers 2 --bind 0.0.0.0:5000 main:app

^G Help      ^O Write Out   ^F Where Is    ^K Cut        ^T Execute     ^C Location   M-U Undo   M-A Set Mark
^X Exit      ^R Read File   ^V Replace    ^U Paste      ^J Justify     ^I Go To Line M-E Redo   M-G Copy
```

```
[ec2-user@api ip-172-31-18-150 api]$ sudo docker run --name main -p 5000:5000 my-api
[2025-11-21 16:45:01 +0000] [7] [INFO] Starting gunicorn 23.0.0
[2025-11-21 16:45:01 +0000] [7] [INFO] Listening at: http://0.0.0.0:5000 (7)
[2025-11-21 16:45:01 +0000] [7] [INFO] Using worker: sync
[2025-11-21 16:45:01 +0000] [8] [INFO] Booting worker with pid: 8
[2025-11-21 16:45:01 +0000] [9] [INFO] Booting worker with pid: 9
```