

# M015 Uf1 IoT



## Bot Mastodon versió1

**Curs:** 2019-20

**CFGs:** DAM2

**Alumne :** Arnau Subirós Puigarnau

**Data :** 20-01-2020

**Nom i Cognoms**

Arnau Subirós Puigarnau

**Data**

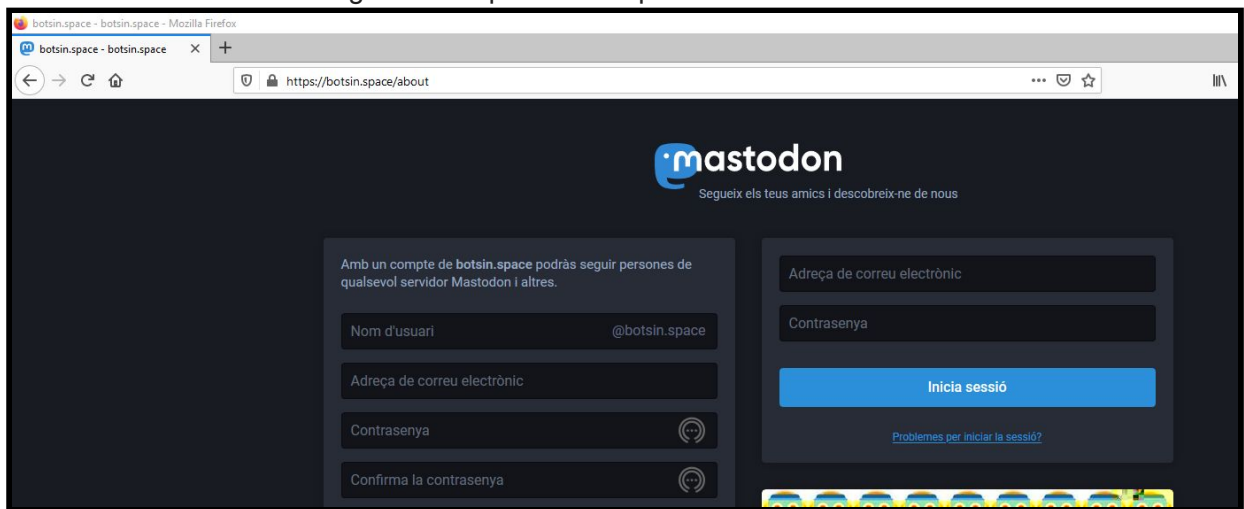
25-01-2020

## BOT Mastodon -versió 1

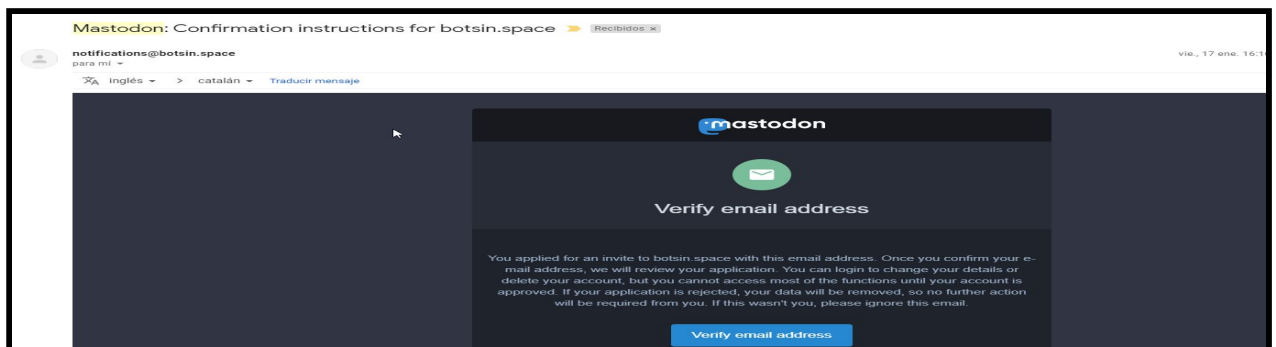
(font consultada [https://www.things.cat/index.php?title=P%C3%A0gina\\_principal#N.C3.BAvol](https://www.things.cat/index.php?title=P%C3%A0gina_principal#N.C3.BAvol) )

(NOTA: No totes les instàncies de Mastodon faciliten la instal·lació de bots. Per a fer les primeres passes es recomenava aquesta instància pensada per allotjar bots de Mastodon.)

- Primer de tot ens hem de registrar a <https://botsin.space/about>



- Rebrem un correu electrònic per validar-lo



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## Obtenint credencials per a l'API Mastodon amb Mastodon.py

- font consultada: <https://gist.github.com/aparrish/661fca5ce7b4882a8c6823db12d42d26>

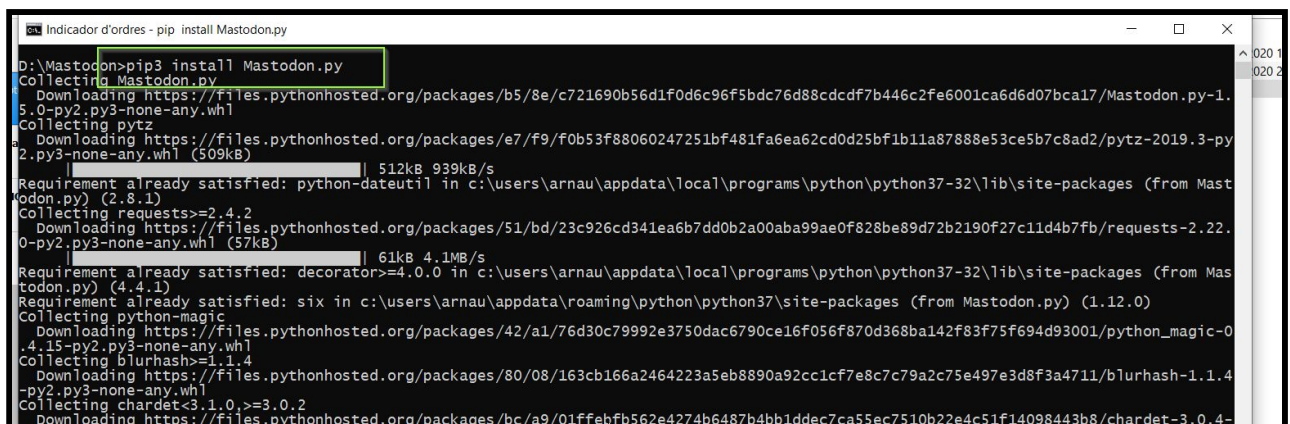
### Autenticación Mastodon.py

¡Acabo de comenzar a usarlo, pero parece que [Mastodon.py](#) es una biblioteca bastante buena para trabajar con la API Mastodon! Sin embargo, todos los ejemplos de autenticación usan archivos estáticos para almacenar credenciales, lo que no me gusta; me temo que los enviaré accidentalmente a Github. Me gusta mantener mi autenticación lo más cerca posible del comando real que ejecuta el programa, por lo que generalmente las paso *en la línea* de comandos al script que ejecuta mi bot. Para hacer esto, necesito obtener las credenciales apropiadas por su cuenta, como cadenas separadas que puedo cortar y pegar.

Antes de continuar, instale Mastodon.py con `pip` :

```
pip install Mastodon.py
```

- Creació de l'aplicació
  - Obrim el símbol del sistema(cmd) per instal·lar Mastodon.py



```
Indicador d'ordres - pip install Mastodon.py
D:\Mastodon>pip3 install Mastodon.py
Collecting Mastodon.py
  Downloading https://files.pythonhosted.org/packages/b5/8e/c721690b56d1f0d6c96f5bdc76d88cdcd7b446c2fe6001ca6d6d07bca17/Mastodon.py-1.5.0-py2.py3-none-any.whl
Collecting pytz
  Downloading https://files.pythonhosted.org/packages/e7/f9/f0b53f88060247251bf481fa6ea62cd0d25bf1b11a87888e53ce5b7c8ad2/pytz-2019.3-py2.py3-none-any.whl (509kB)
Requirement already satisfied: python-dateutil in c:\users\arnau\appdata\local\programs\python\python37-32\lib\site-packages (from Mastodon.py) (2.8.1)
Collecting requests>=2.4.2
  Downloading https://files.pythonhosted.org/packages/51/bd/23c926cd341ea6b7dd0b2a00aba99ae0f828be89d72b2190f27c11d4b7fb/requests-2.22.0-py2.py3-none-any.whl (57kB)
Requirement already satisfied: decorator>=4.0.0 in c:\users\arnau\appdata\local\programs\python\python37-32\lib\site-packages (from Mastodon.py) (4.4.1)
Requirement already satisfied: six in c:\users\arnau\appdata\roaming\python\python37\site-packages (from Mastodon.py) (1.12.0)
Collecting python-magic
  Downloading https://files.pythonhosted.org/packages/42/a1/76d30c79992e3750dac6790ce16f056f870d368ba142f83f75f694d93001/python_magic-0.4.15-py2.py3-none-any.whl
Collecting blurbhash>=1.1.4
  Downloading https://files.pythonhosted.org/packages/80/08/163cb166a2464223a5eb8890a92cc1cf7e8c7c79a2c75e497e3d8f3a4711/blurbhash-1.1.4-py2.py3-none-any.whl
Collecting chardet<3.1.0,>=3.0.2
  Downloading https://files.pythonhosted.org/packages/bc/a9/01ffebfb562e4274b6487b4bb1ddec7ca55ec7510b22e4c51f14098443b8/chardet-3.0.4-
```

**Nom i Cognoms****Data**

Arnau Subirós Puigarnau

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```
Indicador d'ordres - pip install Mastodon.py
Downloading https://files.pythonhosted.org/packages/e8/74/6e4f91745020f967d09332bb2b8b9b10090957334692eb88ea4afe91b77f/urllib3-1.25.8-py2.py3-none-any.whl (125kB)
100% |#####| 133kB 3.3MB/s
Collecting certifi>=2017.4.17
Downloading https://files.pythonhosted.org/packages/b9/63/df50cac98ea0d5b006c55a399c3bf1db9da7b5a24de7890bc9cfd5dd9e99/certifi-2019.11.28-py2.py3-none-any.whl (156kB)
100% |#####| 163kB 3.2MB/s
Installing collected packages: pytz, chardet, idna, urllib3, certifi, requests, python-magic, blurbhash, Mastodon.py
Successfully installed Mastodon.py-1.5.0 blurbhash-1.1.4 certifi-2019.11.28 chardet-3.0.4 idna-2.8 python-magic-0.4.15 pytz-2019.3 requests-2.22.0 urllib3-1.25.8
WARNING: You are using pip version 19.3.1; however, version 20.0.2 is available.
You should consider upgrading via the 'python -m pip install --upgrade pip' command.
D:\Mastodon>python -m pip install --upgrade pip
Collecting pip
Cache entry deserialization failed, entry ignored
Downloading https://files.pythonhosted.org/packages/54/0c/d01aa759fdc501a58f431eb594a17495f15b88da142ce14b5845662c13f3/pip-20.0.2-py2.py3-none-any.whl (1.4MB)
100% |#####| 1.4MB 787kB/s
Installing collected packages: pip
Found existing installation: pip 9.0.1
Uninstalling pip-9.0.1:
Successfully uninstalled pip-9.0.1
Successfully installed pip-20.0.2
D:\Mastodon>
```

- Obrim el terminal Python 3.7

```
>>> from mastodon import Mastodon
```

```
Python 3.7 (32-bit)
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> from mastodon import Mastodon
>>>
```

```
>>> Mastodon.create_app('ArnauSubiros', scopes=['read', 'write'], api_base_url="https://botsin.space")
```

```
Python 3.7 (32-bit)
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> from mastodon import Mastodon
>>> Mastodon.create_app('ArnauSubiros', scopes=['read', 'write'], api_base_url="https://botsin.space")
('U9AyZCJFdQnB0R-Uen3ytygoi544oendxdh7Enbno', 'GLyXZMWZ/1C4Ey0DFsI1800L3-hDHZTBRHTSGH/DA')
```

## Nom i Cognoms

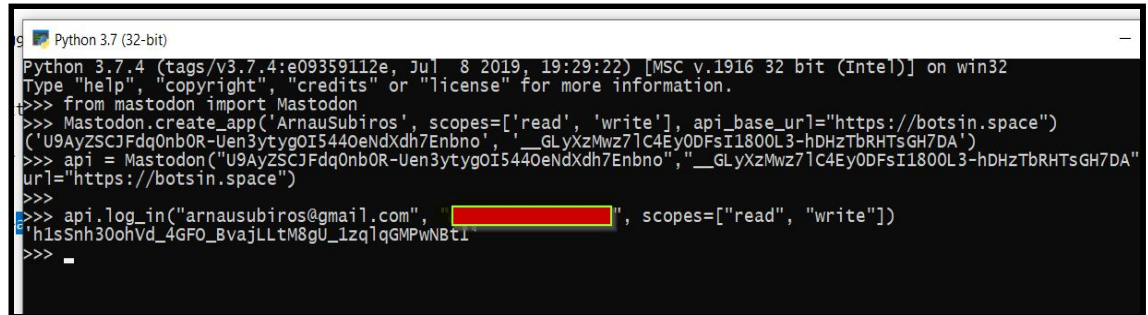
Arnau Subirós Puigarnau

## Data

25-01-2020

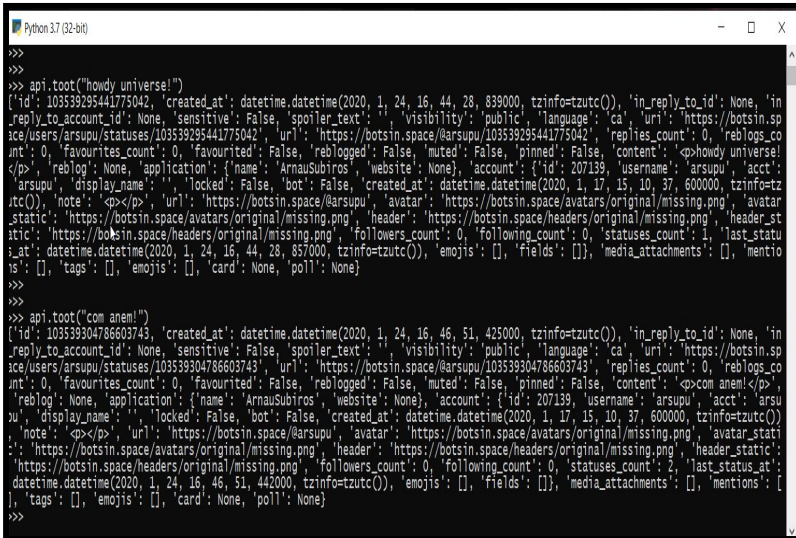
### • Creació del token d'accés

```
>>> api = Mastodon("U9AyZSCJFdq0nb0R-Uen3ytygOI544OeNdXdh7Enbno",
__GLyXzMwz7lC4Ey0DFsI1800L3-hDHZTbRHTsGH7DA",api_base_url="https://botsin.space")
>>>api.log_in("arnausubiros@gmail.com", "Ara-aldiynii3977", scopes=["read", "write"])
```

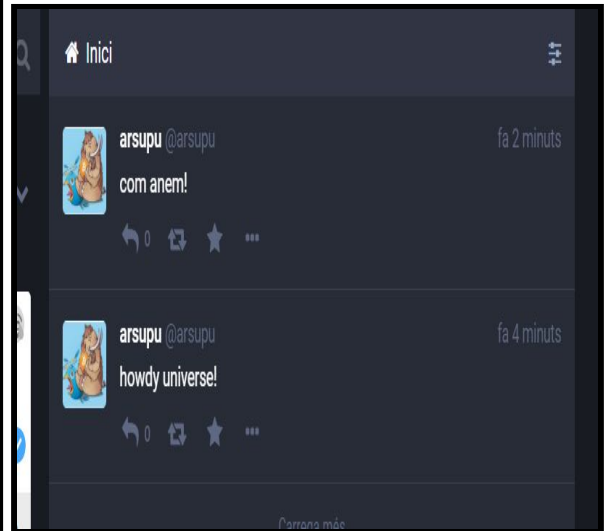


```
Python 3.7 (32-bit)
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> from mastodon import Mastodon
>>> Mastodon.create_app('ArnauSubiros', scopes=['read', 'write'], api_base_url='https://botsin.space')
('U9AyZSCJFdq0nb0R-Uen3ytygOI544OeNdXdh7Enbno', '__GLyXzMwz7lC4Ey0DFsI1800L3-hDHZTbRHTsGH7DA')
>>> api = Mastodon("U9AyZSCJFdq0nb0R-Uen3ytygOI544OeNdXdh7Enbno", "__GLyXzMwz7lC4Ey0DFsI1800L3-hDHZTbRHTsGH7DA",
url="https://botsin.space")
>>>
>>> api.log_in("arnausubiros@gmail.com", "Ara-aldiynii3977", scopes=["read", "write"])
{'hsShh30ohVd_4GFO_BvajLLtM8gu_1zqlqGMPwNBtI'}
```

### • Primer toot a Mastodon



```
Python 3.7 (32-bit)
>>>
>>> api.toot("howdy universe!")
{'id': 103539295441775042, 'created_at': datetime.datetime(2020, 1, 24, 16, 44, 28, 839000, tzinfo=tzutc()), 'in_reply_to_id': None, 'in_reply_to_account_id': None, 'sensitive': False, 'spoiler_text': '', 'visibility': 'public', 'language': 'ca', 'uri': 'https://botsin.space/users/arsupu/statuses/103539295441775042', 'url': 'https://botsin.space/arsupu/103539295441775042', 'replies_count': 0, 'reblogs_count': 0, 'favourites_count': 0, 'favourited': False, 'reblogged': False, 'muted': False, 'pinned': False, 'content': '<p>howdy universe!</p>', 'reblog': None, 'application': {'name': 'ArnauSubiros', 'website': None}, 'account': {'id': 207139, 'username': 'arsupu', 'acct': 'arsupu', 'display_name': '', 'locked': False, 'bot': False, 'created_at': datetime.datetime(2020, 1, 17, 15, 10, 37, 600000, tzinfo=tzutc()), 'note': '<p></p>', 'url': 'https://botsin.space/arsupu', 'avatar': 'https://botsin.space/avatars/original/missing.png', 'avatar_static': 'https://botsin.space/avatars/original/missing.png', 'header': 'https://botsin.space/headers/original/missing.png', 'header_static': 'https://botsin.space/headers/original/missing.png', 'followers_count': 0, 'following_count': 0, 'statuses_count': 1, 'last_status_at': datetime.datetime(2020, 1, 24, 16, 44, 28, 837000, tzinfo=tzutc()), 'emojis': [], 'fields': [], 'media_attachments': [], 'mentions': [], 'tags': [], 'emojis': [], 'card': None, 'poll': None}
>>>
>>> api.toot("com anem!")
{'id': 103539304786603743, 'created_at': datetime.datetime(2020, 1, 24, 16, 46, 51, 425000, tzinfo=tzutc()), 'in_reply_to_id': None, 'in_reply_to_account_id': None, 'sensitive': False, 'spoiler_text': '', 'visibility': 'public', 'language': 'ca', 'uri': 'https://botsin.space/users/arsupu/statuses/103539304786603743', 'url': 'https://botsin.space/arsupu/103539304786603743', 'replies_count': 0, 'reblogs_count': 0, 'favourites_count': 0, 'favourited': False, 'reblogged': False, 'muted': False, 'pinned': False, 'content': '<p>com anem!</p>', 'reblog': None, 'application': {'name': 'ArnauSubiros', 'website': None}, 'account': {'id': 207139, 'username': 'arsupu', 'acct': 'arsupu', 'display_name': '', 'locked': False, 'bot': False, 'created_at': datetime.datetime(2020, 1, 17, 15, 10, 37, 600000, tzinfo=tzutc()), 'note': '<p></p>', 'url': 'https://botsin.space/arsupu', 'avatar': 'https://botsin.space/avatars/original/missing.png', 'avatar_static': 'https://botsin.space/avatars/original/missing.png', 'header': 'https://botsin.space/headers/original/missing.png', 'header_static': 'https://botsin.space/headers/original/missing.png', 'followers_count': 0, 'following_count': 0, 'statuses_count': 2, 'last_status_at': datetime.datetime(2020, 1, 24, 16, 46, 51, 442000, tzinfo=tzutc()), 'emojis': [], 'fields': [], 'media_attachments': [], 'mentions': [], 'tags': [], 'emojis': [], 'card': None, 'poll': None}
>>>
```





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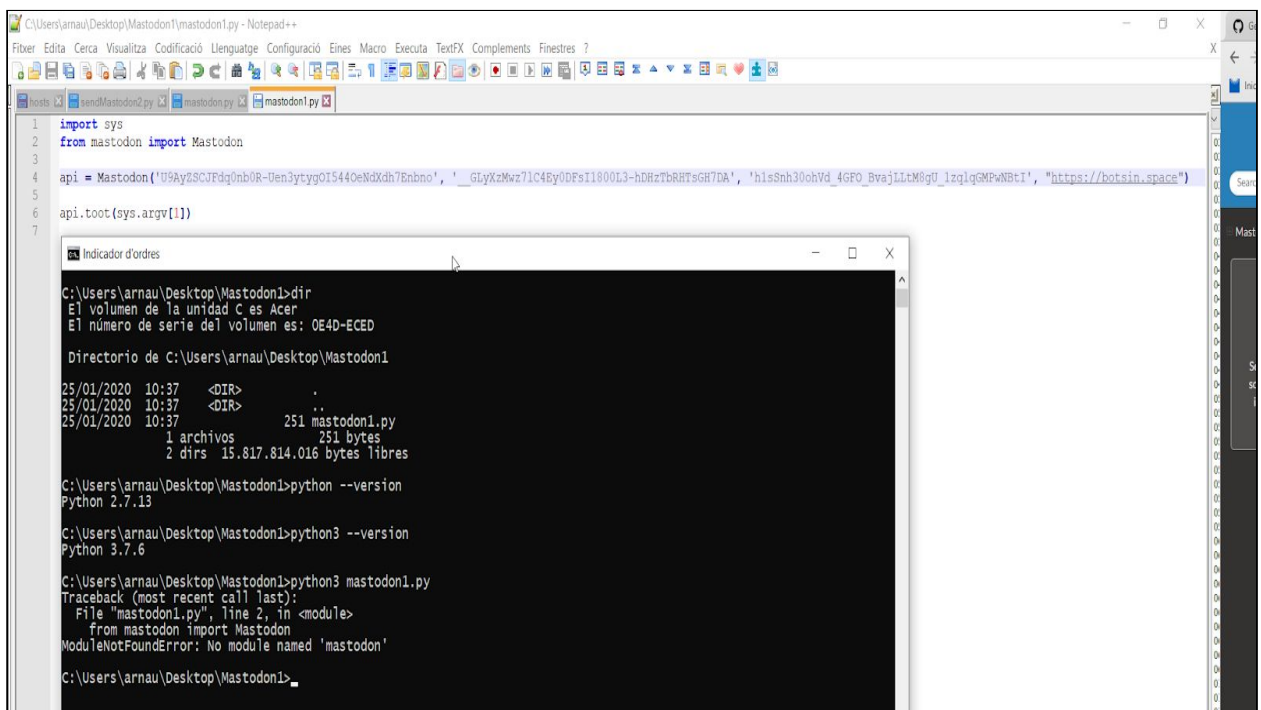
**Data**

25-01-2020

## ● NODE-RED (configurar els nodes per Mastodon)

NOTA: he tingut problemes, ja que el codi em donava error (node interpretava el codi amb python 2 no 3). Desde el terminal CMD ejecutava el codi ( no donava error, però no apareixia al Mastodon)

- .Primer he intentat que funcioni desde el terminal
- Després desde el CMD ( ja que abans utilitzava el terminal de Python) he volgut revisar la versió de Python.. He posat python3 --version i no em diu res. He decidit re-instal·lar Python 3 ( i posar en 1º opció respecte Python2 en les variables d'entorn). No he desinstal·lat Python 2 ja que Emscripten l'utilitza.
- He tornat a fer proves i al escriure python3 l'arxiu i l'argument em donava l'error com si estigues utilitzant python2 (no entenia el import de Mastodon). He fet una sèrie de verificacions
  - He reinstal·lat Python3
  - He tornat a instal·lar



```
1 import sys
2 from mastodon import Mastodon
3
4 api = Mastodon('U9Ay2SCJFdq0nb0R-Uen3ytcy0I544OeNdXdh7Embno', 'GIyXzWwz7lC4Ey0DFsI1800L3-hDHz7bRRTsGH7DA', 'hls5nh30chVd_4GFO_BvajLltM8gU_lzqlqGMPxNBtI', "https://kotsin.space")
5
6 api.toot(sys.argv[1])
7
```

```
C:\Users\arnau\Desktop\Mastodon1>dir
El volumen de la unidad C es Acer
El número de serie del volumen es: 0E4D-ECED

Directorio de C:\Users\arnau\Desktop\Mastodon1
25/01/2020 10:37 <DIR> .
25/01/2020 10:37 <DIR> ..
25/01/2020 10:37          251 mastodon1.py
                   1 archivos    251 bytes
                   2 dirs  15.817.814.016 bytes libres

C:\Users\arnau\Desktop\Mastodon1>python --version
Python 2.7.13

C:\Users\arnau\Desktop\Mastodon1>python3 --version
Python 3.7.6

C:\Users\arnau\Desktop\Mastodon1>python3 mastodon1.py
Traceback (most recent call last):
  File "mastodon1.py", line 2, in <module>
    from mastodon import Mastodon
ModuleNotFoundError: No module named 'mastodon'
```

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25-01-2020

```
Indicador d'ordres - pip uninstall Mastodon.py
ERROR: unknown command "uninstall" - maybe you meant "uninstall"

C:\Users\arnau\Desktop\Mastodon1>pip3 unistall Mastodon.py
ERROR: unknown command "unistall" - maybe you meant "uninstall"

C:\Users\arnau\Desktop\Mastodon1>pip uninstall Mastodon.py
Unknown or unsupported command 'uninstall'

C:\Users\arnau\Desktop\Mastodon1>pip3 uninstall Mastodon.py
Uninstalling Mastodon.py-1.5.0:
Would remove:
  c:\users\arnau\appdata\local\programs\python\python37-32\lib\site-packages\mastodon.py-1.5.0.dist-info\*
  c:\users\arnau\appdata\local\programs\python\python37-32\lib\site-packages\mastodon\*
Proceed (y/n)? y
Successfully uninstalled Mastodon.py-1.5.0

C:\Users\arnau\Desktop\Mastodon1>
```

```
Indicador d'ordres

C:\Users\arnau\Desktop\Mastodon1>python --version
Python 3.7.4

C:\Users\arnau\Desktop\Mastodon1>
```

```
mastodon1.py - Sin título (área de trabajo) - Visual Studio Code

1 import sys
2 from mastodon import Mastodon
3
4 api = Mastodon('U9AyZCJFdq0nb0R-Uen3ytyg0I5440eNdXdh7Enbno', '___GLyXzMwz7lC4Ey0DFsI1800L3-hDHZTbRHTsGH7DA', 'h1sSnh30ohVd_4GFO_BvajLLTM8gU_1zq1c
5
6 api.toot(s1ys.argv[1])
7
```

```
botsin.space/web/timelines/home

Inici | Fundació Jesu... | Fundació Jesuïtes E... | Gmail | CLOD COMPUTING | DAM2-2019-2020-v... | ESCOLA JESUITES C... | GITHUB | Online C Com

Cercar

@arsupu
Editar perfil

arsupu @arsupu
test002

Selecciónd'ordres

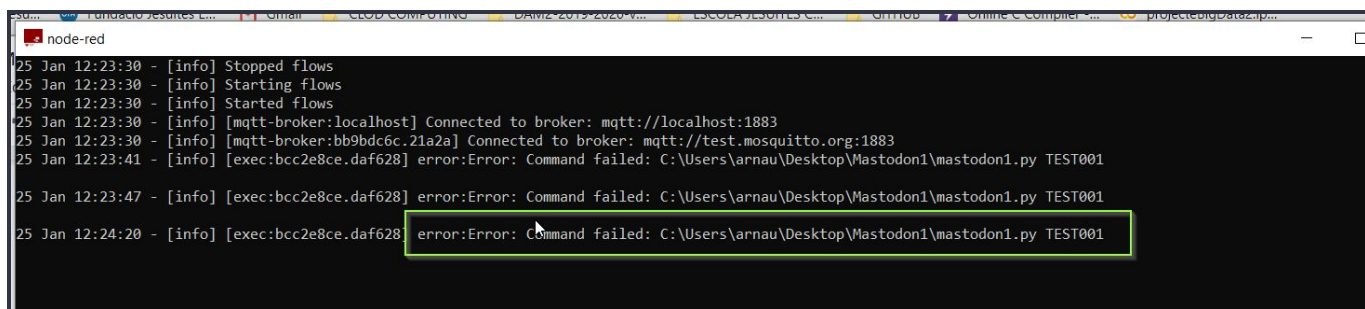
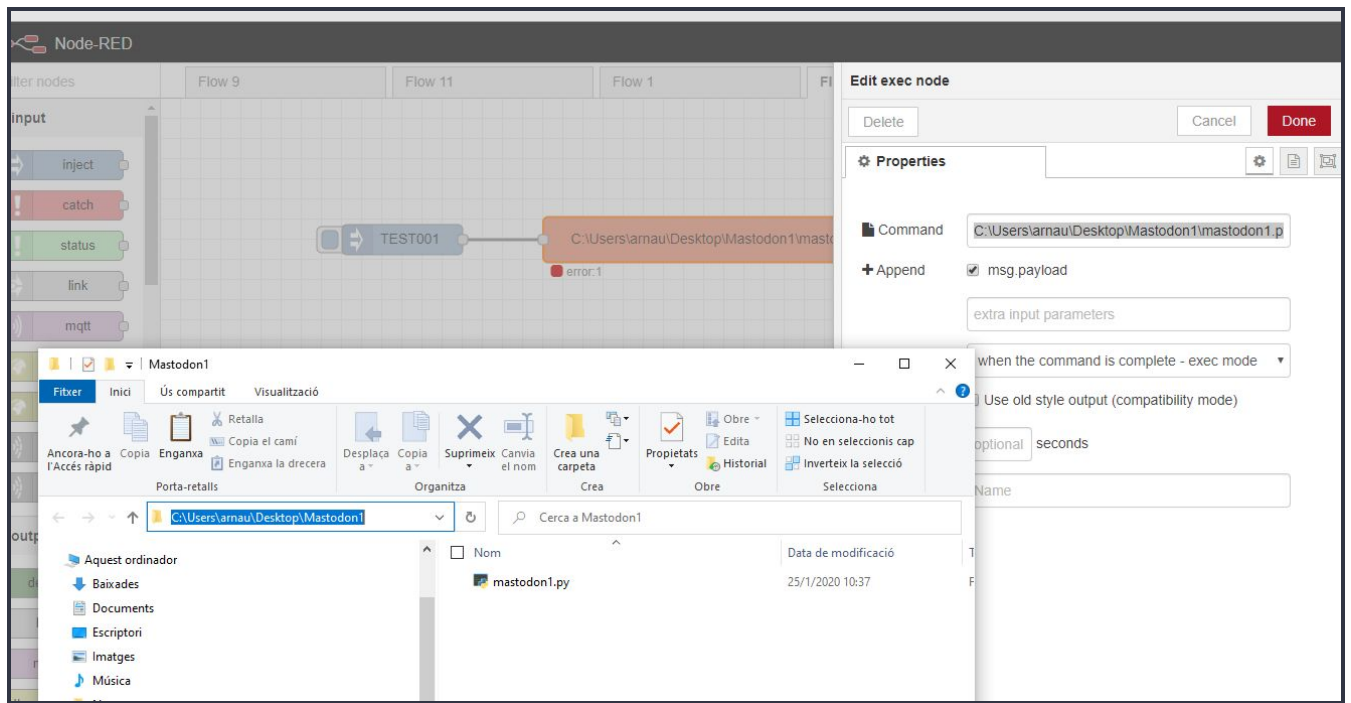
C:\Users\arnau\Desktop\Mastodon1>python mastodon1.py test002
C:\Users\arnau\Desktop\Mastodon1>
```

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- He fet múltiples proves sense èxit, em dona error a l'utilitzar el node exec. Com que desde el terminal em funciona, he aplicat el codi al node de exec ( fent-ho manualment, ja que desde el node inject no em funciona)

