CEMES

# FemtoUP 2021
# Install Party

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# Setting up a python environment

On your computer :

**py35env**


- Environment related to python 3.5
- For a specific use

**py27env**


Environment related to python 2.7 old packages

**py38env**


- Environment related to python 3.9
- For latest features testing

Various python installed :

- Some are system wide
- Located within programs (e.g. InkScape…)
- Some versions required for specific programs (v2.7 for old ones, 32bits version, specific packages not compatible...)

Solution : using an environment manager

# Using conda as environment manager

**py38env**

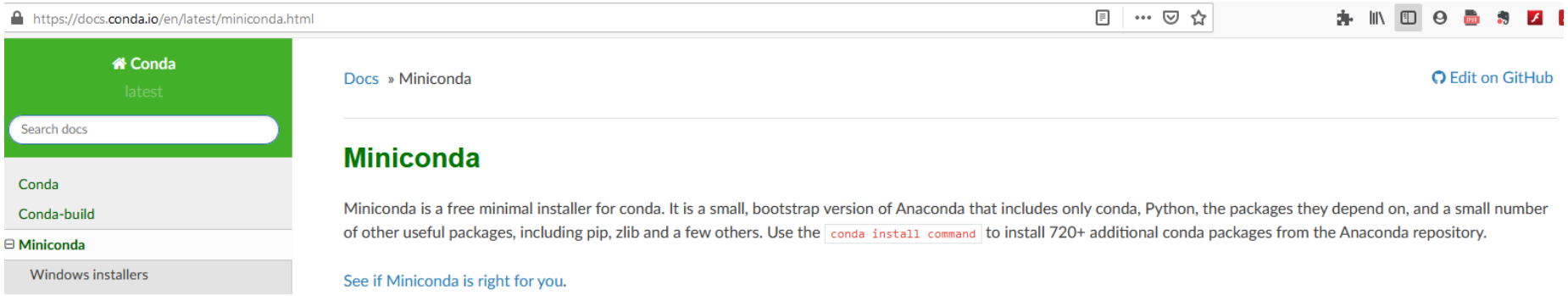
python v : 3.9

- Environment related to python 3.9
- For latest features testing
- Package1
- Package2
- …

Managing environment (conda or venv):
- One python version
- Given packages

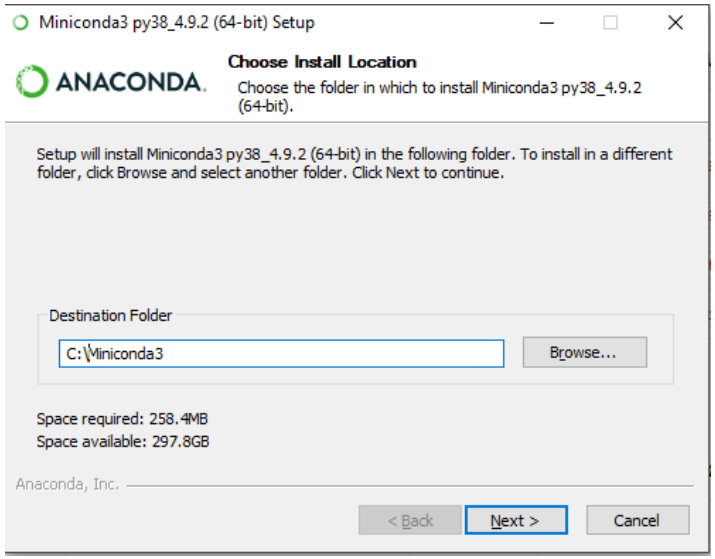
Managing packages (conda or pip):
- Specific packages on given servers
- Conda server using conda
- PyPi server using pip

Lightweight conda : Miniconda

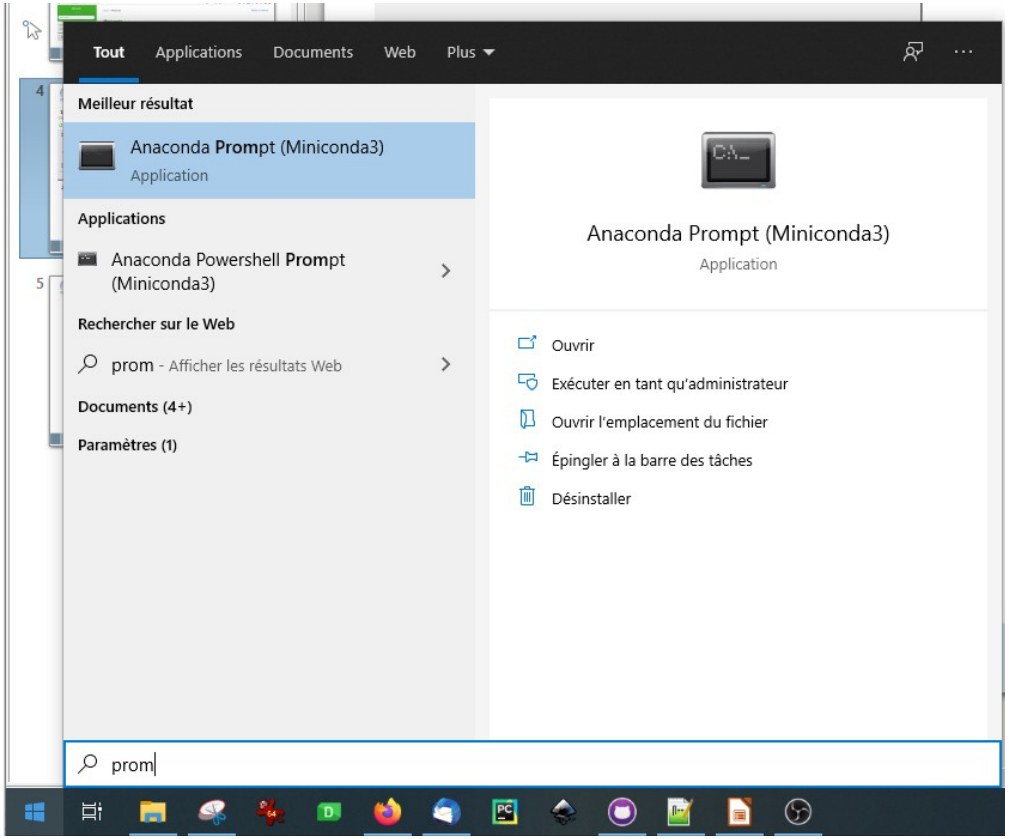


# Installation using Miniconda

1) Installing Miniconda (on root folder for ease)




2) Starting the Command Prompt



# Creating and using environment

In the anaconda prompt

- Create a new environment

```
(base) C:\Users\weber>conda create -n femtoup python=3.8.5
```

- Activate it

```
(base) C:\Users\weber>conda activate femtoup
(femtoup) C:\Users\weber>
```

- Install packages

One should install :

- Spyder (using conda)
- Jupyterlab (using pip)
- Pymodaq (using pip)

```
(femtoup) C:\Users\weber>conda install spyder
```

```
(femtoup) C:\Users\weber>pip install jupyterlab
```

# Environment file

Ecole-Femto-2021 / **installation**

https://github.com/Ecole-Femto-2021/installation/


Environment name

Packages installed using conda server : « conda install mypackage »

Packages installed using pip server : «pip install mypackage »

```
(base) C:\Users\weber>conda env create -f env_install.yml
```

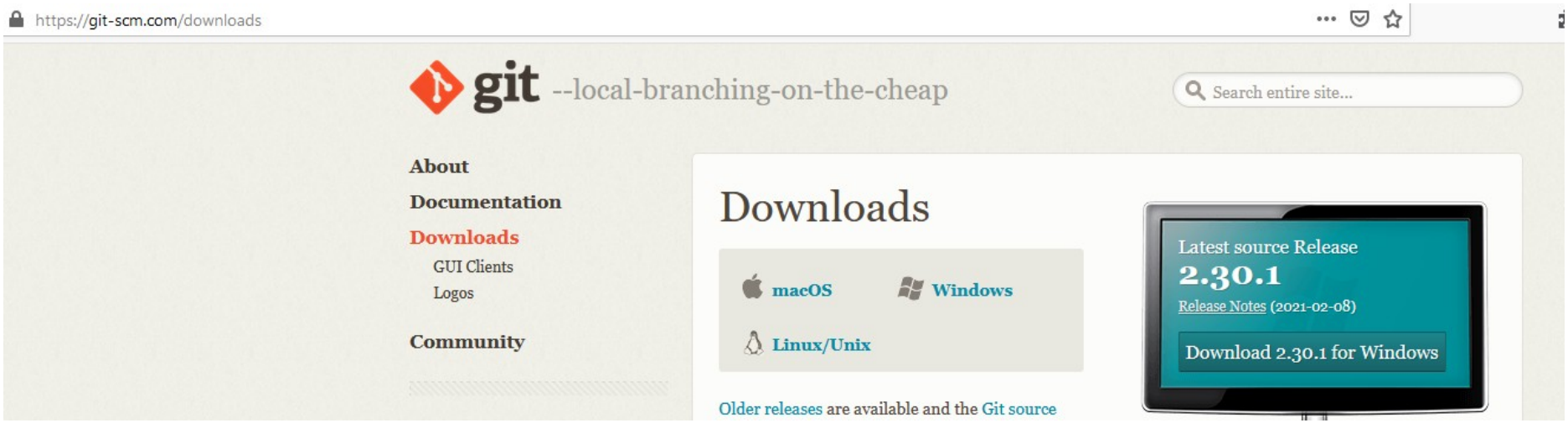
# Updating the Environment

If for some reason, the environment file is modified, you'll need to download it again and update the environment using :

```
(femtoupfile) C:\Users>conda env update --prefix ./env --file env_install.yml --prune
```

# Now is your turn!

# Other required software: Git




Required to get last development packages for the practicals

(Mac and Linux users may already have it on their computer!)
To check this enter « git --version » on your command line

```
(base) C:\Users\weber\Labo\Programmes Python\Git_others\FemtoUP2021\installation>git --version
git version 2.26.0.windows.1
```