

## TP-Partie-1

Après avoir créer un depot Github, veuillez cloner le depot comme suit :

```
MINGW64/c/Users/Dell/Desktop/cours-A61  
Dell@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61  
$ git clone https://github.com/cegep2020/cours-A61.git
```

Vérifiez le status de votre dépôt :

```
Dell@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (main)  
$ git status  
On branch main  
Your branch is up to date with 'origin/main'.  
  
Untracked files:  
  (use "git add <file>..." to include in what will be committed)  
    .gitignore  
    packages/  
  
nothing added to commit but untracked files present (use "git add" to track)  
Dell@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (main)  
$ *
```

```
Dell@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (main)  
$ git remote set-url origin https://github.com/cegep2020/cours-A61.git
```

Créer une nouvelle branche :

```
Dell@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (main)  
$ git checkout -b branch-1  
Switched to a new branch 'branch-1'
```

Ouvrir un pull request, comme suit :

```
De1l@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (branch-1)
$ git commit --allow-empty -m "Ouvrir pull request"
[branch-1 720c068] Ouvrir pull request
8 files changed, 231 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 packages/regression_model/regression_model/__init__.py
 create mode 100644 packages/regression_model/regression_model/datasets/__init_
_.py
 create mode 100644 packages/regression_model/regression_model/pipeline.py
 create mode 100644 packages/regression_model/regression_model/preprocessors.py
 create mode 100644 packages/regression_model/regression_model/train_pipeline.p
y
 create mode 100644 packages/regression_model/requirements.txt
 create mode 100644 packages/regression_model/tox.ini
```

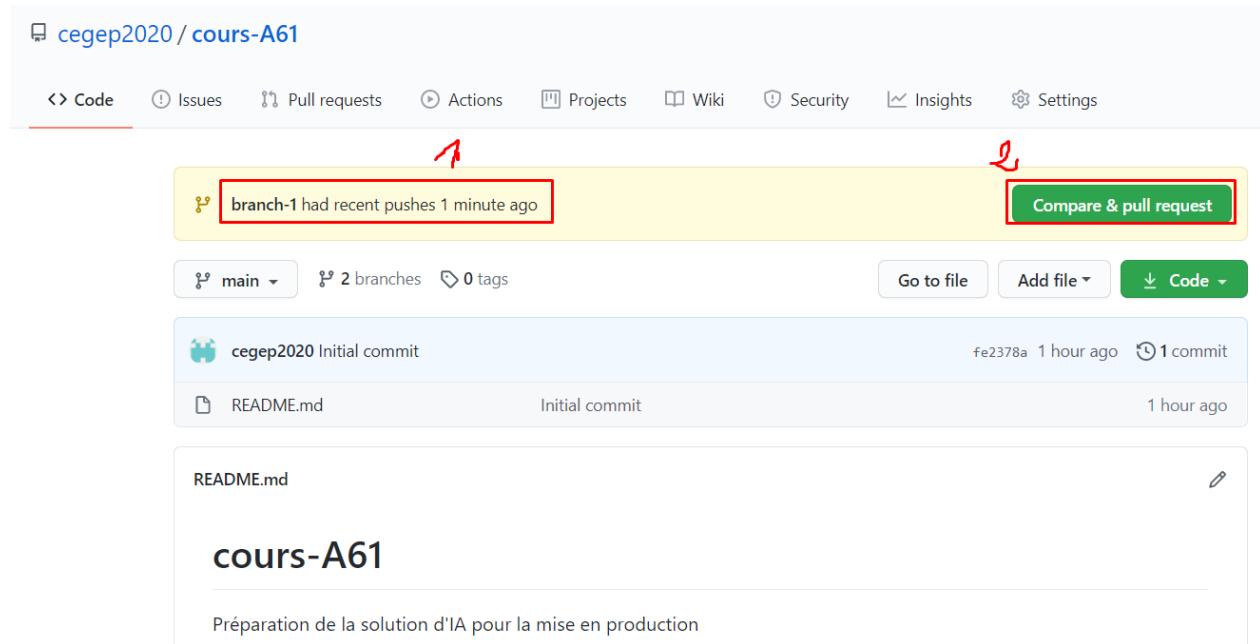
```
De1l@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        new file:   .gitignore
        new file:   packages/regression_model/regression_model/__init__.py
        new file:   packages/regression_model/regression_model/datasets/__init_
_.py
        new file:   packages/regression_model/regression_model/pipeline.py
        new file:   packages/regression_model/regression_model/preprocessors.py
        new file:   packages/regression_model/regression_model/train_pipeline.p
y
        new file:   packages/regression_model/requirements.txt
        new file:   packages/regression_model/tox.ini
```

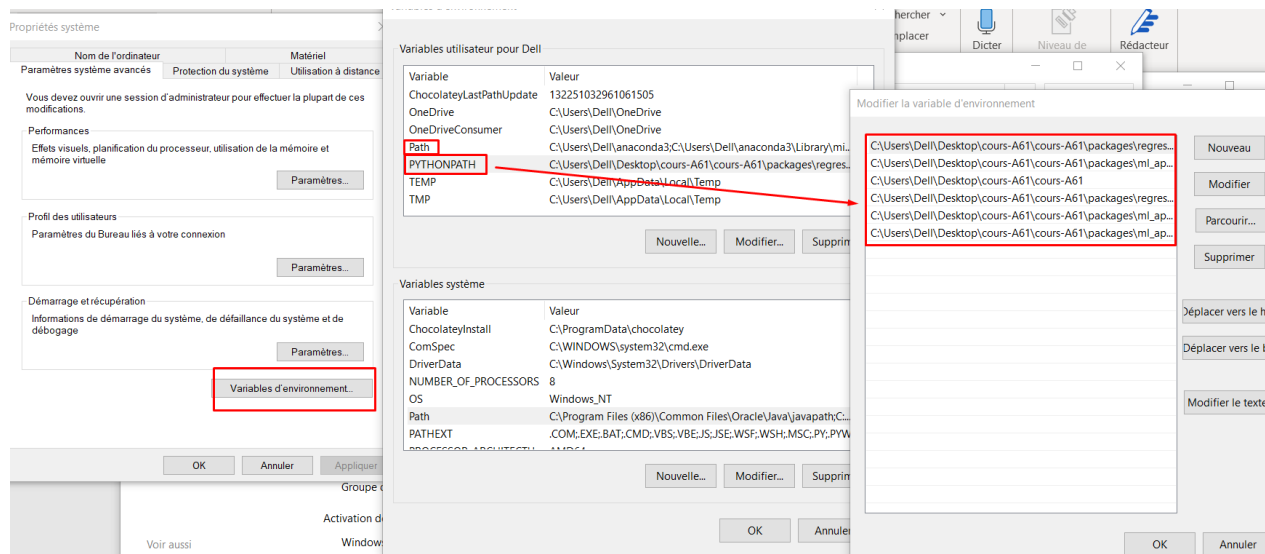
Puis, pousser votre depot vers github

```
De1l@DESKTOP-ED480Q9 MINGW64 ~/Desktop/cours-A61/cours-A61 (branch-1)
$ git push origin branch-1
Enumerating objects: 14, done.
Counting objects: 100% (14/14), done.
Delta compression using up to 8 threads
Compressing objects: 100% (10/10), done.
Writing objects: 100% (13/13), 3.26 KiB | 1.63 MiB/s, done.
Total 13 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'branch-1' on GitHub by visiting:
remote:   https://github.com/cegep2020/cours-A61/pull/new/branch-1
remote:
To https://github.com/cegep2020/cours-A61.git
 * [new branch]      branch-1 -> branch-1
```

Visitez github



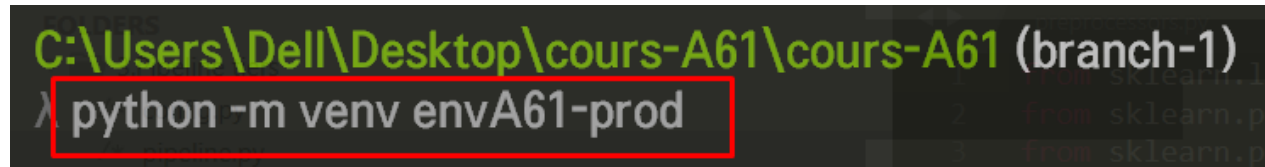
Définir les variables d'environnements :



Créez un environnement virtuel, comme suit :

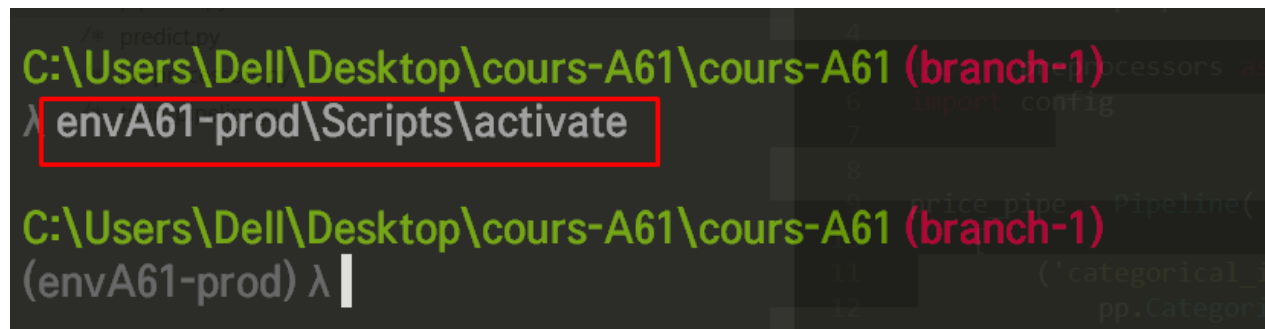
```
python -m venv envA61-prod
envA61-prod\Scripts\activate
python -m pip install --upgrade pip
pip install -r requirements.txt
```

Comme le montre les captures d'écrans ci-dessous :



```
C:\Users\Dell\Desktop\cours-A61\cours-A61 (branch-1)
λ python -m venv envA61-prod
```

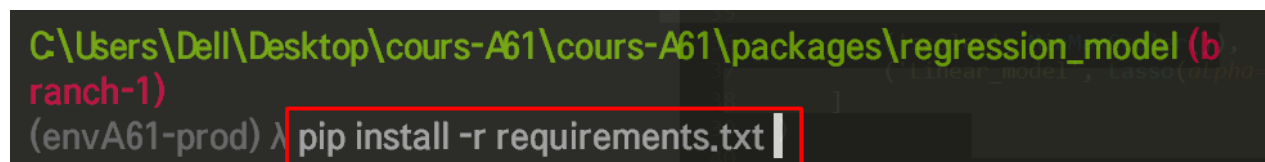
Activez votre env



```
C:\Users\Dell\Desktop\cours-A61\cours-A61 (branch-1)
λ envA61-prod\Scripts\activate

C:\Users\Dell\Desktop\cours-A61\cours-A61 (branch-1)
(envA61-prod) λ
```

Installer les modules necessaires



```
C:\Users\Dell\Desktop\cours-A61\cours-A61\packages\regression_model (branch-1)
(envA61-prod) λ pip install -r requirements.txt
```

Installer **tox**

```
C:\Users\Dell\Desktop\cours-A61\cours-A61\packages\regression_model (b  
ranch-1)  
(envA61-prod) \ pip install tox  
Collecting tox  
  Downloading tox-3.21.0-py2.py3-none-any.whl (84 kB)  
    | 84 kB 1.2 MB/s  
Requirement already satisfied: six>=1.14.0 in c:\users\dell\desktop\co  
urs-a61\cours-a61\enva61-prod\lib\site-packages (from tox) (1.15.0)  
Collecting colorama>=0.4.1  
  Using cached colorama-0.4.4-py2.py3-none-any.whl (16 kB)
```

Lancez tox comme suit,

```
C:\Users\Dell\Desktop\cours-A61\cours-A61\packages\regression_model (b  
ranch-1) \ tox  
regression_model create: C:\Users\Dell\Desktop\cours-A61\cours-A61\pac  
kages\regression_model\tox\regression_model  
regression_model installdeps: -rrequirements.txt  
regression_model installed: joblib==1.0.0,numpy==1.18.5,pandas==0.25.3  
,python-dateutil==2.8.1,pytz==2020.5,scikit-learn==0.22.2.post1,scipy=  
=1.6.0,six==1.15.0  
regression_model run-test-pre: PYTHONHASHSEED='833'  
regression_model run-test: commands[0] | python regression_model/train  
_pipeline.py  
Training...  
  
summary  
regression_model: commands succeeded  
congratulations :)
```

## Partie-2-- pipeline au complet

Après avoir modifier les fichiers en local

```
(envA61-prod) λ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   ../../.gitignore
        modified:   regression_model/pipeline.py
        modified:   regression_model/train_pipeline.py
        modified:   requirements.txt
        modified:   tox.ini

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        ../../envA61-prod/
        regression_model/config/
        regression_model/processing/
        regression_model/trained_models/

no changes added to commit (use "git add" and/or "git commit -a")

C:\Users\Dell\Desktop\cours-A61\cours-A61\packages\regression_model (main)
(envA61-prod) λ
```

Ajouter les fichiers à index (Staging area)

```
C:\Users\Dell\Desktop\cours-A61\cours-A61\packages\regression_model (main)
(envA61-prod) λ git add .
```

Vérifier le status

```

C:\Users\Dell\Desktop\cours-A61\cours-A61 (main)
(envA61-prod) λ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   envA61-prod/Scripts/Activate.ps1
    new file:   envA61-prod/Scripts/activate
    new file:   envA61-prod/Scripts/activate.bat
    new file:   envA61-prod/Scripts/deactivate.bat
    new file:   envA61-prod/Scripts/easy_install-3.8.exe
    new file:   envA61-prod/Scripts/easy_install.exe
    new file:   envA61-prod/Scripts/f2py.exe
    new file:   envA61-prod/Scripts/pip.exe
    new file:   envA61-prod/Scripts/pip3.8.exe
    new file:   envA61-prod/Scripts/pip3.exe
    new file:   envA61-prod/Scripts/python.exe
    new file:   envA61-prod/Scripts/pythonw.exe

```

Commit

```

C:\Users\Dell\Desktop\cours-A61\cours-A61 (main)
(envA61-prod) λ git commit -m "Ajout de pipeline au complet"
[main bbe8649] Ajout de pipeline au complet
24 files changed, 876 insertions(+), 62 deletions(-)
create mode 100644 envA61-prod/Scripts/Activate.ps1
create mode 100644 envA61-prod/Scripts/activate
create mode 100644 envA61-prod/Scripts/activate.bat
create mode 100644 envA61-prod/Scripts/deactivate.bat
create mode 100644 envA61-prod/Scripts/easy_install-3.8.exe
create mode 100644 envA61-prod/Scripts/easy_install.exe
create mode 100644 envA61-prod/Scripts/f2py.exe
create mode 100644 envA61-prod/Scripts/pip.exe
create mode 100644 envA61-prod/Scripts/pip3.8.exe
create mode 100644 envA61-prod/Scripts/pip3.exe
create mode 100644 envA61-prod/Scripts/python.exe
create mode 100644 envA61-prod/Scripts/pythonw.exe
create mode 100644 envA61-prod/Scripts/tox-quickstart.exe
create mode 100644 envA61-prod/Scripts/tox.exe
create mode 100644 envA61-prod/Scripts/virtualenv.exe

```

Pousser vers de depot:

```
Musique
C:\Users\Dell\Desktop\cours-A61\cours-A61 (main)
(envA61-prod) λ git push -u origin main
Enumerating objects: 33, done.
Counting objects: 100% (33/33), done.
Delta compression using up to 8 threads
Compressing objects: 100% (26/26), done.
Writing objects: 100% (27/27), 398.76 KiB | 7.12 MiB/s, done.
Total 27 (delta 7), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (7/7), completed with 1 local object.
To https://github.com/cegep2020/cours-A61.git
  720c068..bbe8649  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
```

Executer les tests.

```
C:\Users\Dell\Desktop\cours-A61\cours-A61\packages\regression_model (branch-2)
(envA61-prod) λ tox
regression_model installed: joblib==1.0.0,numpy==1.18.5,pandas==0.25.3
,python-dateutil==2.8.1,pytz==2020.5,scikit-learn==0.22.2.post1,scipy=
=1.6.0,six==1.15.0
regression_model run-test-pre: PYTHONHASHSEED='156'
regression_model run-test: commands[0] | python regression_model/train
_pipeline.py
saved pipeline
_____ summary _____
regression_model: commands succeeded
congratulations :)
```