

Rendu exercice 2 programmation par composant

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Les fichiers « cle_component.cpp », « Makefile », et « test.py » ont été implémentés et ajoutés dans le git au niveau du répertoire « composant_cle ».

- Premier test grâce a test.py

```
walidanwar999@tp-1:~/python_cle_publicque_2023$ ls
Makefile README.md add_submodules.sh composant_cle gcc.mk hello pybind11 pybind11.mk voiture
walidanwar999@tp-1:~/python_cle_publicque_2023$ git submodule init
Submodule 'composant_cle/micro-ecc' (https://github.com/jluuM2/micro-ecc) registered for path 'composant_cle/micro-ecc'
Submodule 'pybind11' (https://github.com/pybind/pybind11) registered for path 'pybind11'
walidanwar999@tp-1:~/python_cle_publicque_2023$ git submodule update
Cloning into '/home/walidanwar999/python_cle_publicque_2023/composant_cle/micro-ecc'...
Cloning into '/home/walidanwar999/python_cle_publicque_2023/pybind11'...
Submodule path 'composant_cle/micro-ecc': checked out '10d1eaabe25e693f04fd032ae154c7b795087fc0'
Submodule path 'pybind11': checked out 'ffa346860b306c9bbfb341aed9c14c067751feb8'
walidanwar999@tp-1:~/python_cle_publicque_2023$ ls
Makefile README.md add_submodules.sh composant_cle gcc.mk hello pybind11 pybind11.mk voiture
walidanwar999@tp-1:~/python_cle_publicque_2023$ cd composant_cle
walidanwar999@tp-1:~/python_cle_publicque_2023/composant_cle$ ls
Makefile cle_component.cpp micro-ecc test.py
walidanwar999@tp-1:~/python_cle_publicque_2023/composant_cle$ make
g++ -fPIC 'python3-config --includes' -I ../pybind11/include -c cle_component.cpp -o cle_component.o
g++ -c -o uECC.o micro-ecc/uECC.c 'python3-config --includes' -I ../pybind11/include
g++ -o cle_component.so -shared cle_component.o uECC.o 'python3-config --ldflags'
echo "execution du test"
execution du test
python3 test.py
4b8e29b9b0ddd58a709edba7d6df6c07ebdaf5653e325114bc5318c238f87f0
F2CE1E40BEFBEBAF4045F1A6D126B7B949E7D5ADEA33F84A09A904093456F4FD504B1F70755BE4CEF27625B1E6B893E05FFEB361F2971FDA
1D6BE5E730A74303
walidanwar999@tp-1:~/python_cle_publicque_2023/composant_cle$
```

- Deuxième test directement sur le terminal avec python3.

```
walidanwar999@tp-1:~/python_cle_publicque_2023/composant_cle$ ls
Makefile cle_component.cpp cle_component.o cle_component.so micro-ecc test.py uECC.o
walidanwar999@tp-1:~/python_cle_publicque_2023/composant_cle$ python3
Python 3.9.2 (default, Feb 28 2021, 17:03:44)
[GCC 10.2.1 20210110] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import cle_component
>>> macle=cle_component.cle()
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
AttributeError: module 'cle_component' has no attribute 'cle'
>>> macle=cle_component.Cle()
>>> macle.initialize("4b8e29b9b0ddd58a709edba7d6df6c07ebdaf5653e325114bc5318c238f87f0")
File "<stdin>", line 1
  macle.initialize("4b8e29b9b0ddd58a709edba7d6df6c07ebdaf5653e325114bc5318c238f87f0")
      ^
SyntaxError: invalid character "'" (U+201D)
>>> initialize("4b8e29b9b0ddd58a709edba7d6df6c07ebdaf5653e325114bc5318c238f87f0")
Traceback (most recent call last):
  File "<stdin>", line 1, in <module>
NameError: name 'initialize' is not defined
>>> macle.initialize("4b8e29b9b0ddd58a709edba7d6df6c07ebdaf5653e325114bc5318c238f87f0")
>>> macle.getPrivateKey()
'4b8e29b9b0ddd58a709edba7d6df6c07ebdaf5653e325114bc5318c238f87f0'
>>> macle.getPublicKey()
'F2CE1E40BEFBEBAF4045F1A6D126B7B949E7D5ADEA33F84A09A904093456F4FD504B1F70755BE4CEF27625B1E6B893E05FFEB361F2971FDA1D6BE5E730A74303'
>>>
```