

מטלה 6

קישור לטסטים:

X-Shapley:

https://github.com/LIADN7/fairpy/blob/master/fairpy/items/x_shapley.py

Shapley:

<https://github.com/LIADN7/fairpy/blob/master/fairpy/items/shapley.py>

הסבר קצר על הטסטים והאלגוריתמים:

X-Shapley:

לאלגוריתם יש שתי חלקים

```
def x_shap(abc: dict(), agents: list[str]) -> list(): (1
```

מחזיר את החלוקה לפי האלגוריתם

```
def get_explanation(X: list(), agents: list[str]): (2
```

מחזיר הסבר על כל חלוקה לפי ערכי שאפלי

```
def contain_str(comb_list: list[str], comb_list_k: list[str]): (3
```

מחזיר האם האם הרשימה com_list מוכלת ברשימה comb_list_k

Shapley:

```
def values22(abc:dict, agents: list[str]):
```

מחזיר את ערכי שאפלי לקבוצה מסויימת של שחקנים

קישור לunittest:

https://github.com/LIADN7/fairpy/blob/master/fairpy/items/test_shapley.py

תמונות הרצה:

(הערה: הרוב קורס כיוון שעשיתי מימוש חלקי כבר של הפונק')

Unittests:

```
=====
ERROR: test_contain_str (__main__.test_shapley)
-----
Traceback (most recent call last):
  File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\test_shapley.py", line 15, in test_contain_str
    self.assertEqual(XS.contain_str(st1,st2) , True)
AttributeError: module 'x_shapley' has no attribute 'contain_str'

=====
ERROR: test_get_explanation (__main__.test_shapley)
-----
Traceback (most recent call last):
  File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\test_shapley.py", line 71, in test_get_explanation
    self.assertEqual(XS.get_explanation(X, agents) , res)
AttributeError: module 'x_shapley' has no attribute 'get_explanation'

=====
ERROR: test_values (__main__.test_shapley)
-----
Traceback (most recent call last):
  File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\test_shapley.py", line 82, in test_values
    self.assertEqual(S.values(abc, agents), res)
AttributeError: module 'shapley' has no attribute 'values'

=====
ERROR: test_x_shap (__main__.test_shapley)
-----
Traceback (most recent call last):
  File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\test_shapley.py", line 29, in test_x_shap
    X = XS.x_shap(abc, agents)
AttributeError: module 'x_shapley' has no attribute 'x_shap'

-----
Ran 4 tests in 0.003s

FAILED (errors=4)
```

Shaply tests:

```
print(res)
Exception raised:
Traceback (most recent call last):
  File "C:\Program Files\Python310\lib\doctest.py", line 1346, in __run
    exec(compile(example.source, filename, "single",
  File "<doctest __main__.shapley.values[11]>", line 1, in <module>
    print(res)
NameError: name 'res' is not defined
*****
File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\shapley.py", line 46, in __main__.shapley.values
Failed example:
    res = values(abc, agents)
Exception raised:
Traceback (most recent call last):
  File "C:\Program Files\Python310\lib\doctest.py", line 1346, in __run
    exec(compile(example.source, filename, "single",
  File "<doctest __main__.shapley.values[14]>", line 1, in <module>
    res = values(abc, agents)
NameError: name 'values' is not defined
*****
File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\shapley.py", line 47, in __main__.shapley.values
Failed example:
    print(res)
Exception raised:
Traceback (most recent call last):
  File "C:\Program Files\Python310\lib\doctest.py", line 1346, in __run
    exec(compile(example.source, filename, "single",
  File "<doctest __main__.shapley.values[15]>", line 1, in <module>
    print(res)
NameError: name 'res' is not defined
*****
1 items had failures:
  8 of 16 in __main__.shapley.values
***Test Failed*** 8 failures.
8 failures, 16 tests
```

X_shapley tests:

```
Exception raised:
Traceback (most recent call last):
  File "C:\Program Files\Python310\lib\doctest.py", line 1346, in __run
    exec(compile(example.source, filename, "single",
  File "<doctest __main__.x_shapley.x_shap[11]>", line 1, in <module>
    for i in X: print(i)
NameError: name 'X' is not defined
*****
File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\x_shapley.py", line 93, in __main__.x_shapley.x_shap
Failed example:
  X = x_shap(abc, agents)
Exception raised:
Traceback (most recent call last):
  File "C:\Program Files\Python310\lib\doctest.py", line 1346, in __run
    exec(compile(example.source, filename, "single",
  File "<doctest __main__.x_shapley.x_shap[14]>", line 1, in <module>
    X = x_shap(abc, agents)
NameError: name 'x_shap' is not defined
*****
File "c:\VisualStudioProjects\XShapley\fairpy\fairpy\items\x_shapley.py", line 94, in __main__.x_shapley.x_shap
Failed example:
  for i in X: print(i)
Exception raised:
Traceback (most recent call last):
  File "C:\Program Files\Python310\lib\doctest.py", line 1346, in __run
    exec(compile(example.source, filename, "single",
  File "<doctest __main__.x_shapley.x_shap[15]>", line 1, in <module>
    for i in X: print(i)
NameError: name 'X' is not defined
*****
3 items had failures:
  4 of 12 in __main__.x_shapley.contain_str
  2 of 6 in __main__.x_shapley.get_explanation
  8 of 16 in __main__.x_shapley.x_shap
***Test Failed*** 14 failures.
14 failures, 34 tests
```