

Reactor 初期検討

```
In [1]: from ReactorDB import ReactorDB  
from Reaction import *
```

基本動作確認

まずはReactor DBに接続接続

```
In [2]: reactor = ReactorDB("reactorTest")
```

次に、登場人物のユーザ登録を行う。

(一郎、二郎、三郎、四郎、五郎、花子)

```
In [3]: reactor.addUser('ichiro', 'pass')  
reactor.addUser('jiro', 'pass')  
reactor.addUser('saburo', 'pass')  
reactor.addUser('shiro', 'pass')  
reactor.addUser('goro', 'pass')  
reactor.addUser('hanako', 'pass')
```

```
Out[3]: ObjectId('54da3d410661212c91179774')
```

ログインしてユーザIDを取得

```
In [4]: ichiro = reactor.checkUser('ichiro', 'pass')  
jiro = reactor.checkUser('jiro', 'pass')  
saburo = reactor.checkUser('saburo', 'pass')  
shiro = reactor.checkUser('shiro', 'pass')  
goro = reactor.checkUser('goro', 'pass')  
hanako = reactor.checkUser('hanako', 'pass')
```

ではまず、SeedとなるReactionを作成。

太郎君が「今日いい天気だね、どう思う？」と議題を提出。

```
In [5]: a = reactor.addReaction( Reaction(  
    { '_id' : None,  
     'time' : None,  
     'author_id' : ichiro,  
     'author_name' : None,  
     'target_id' : None,  
     'reactionFactor' : 0.0,  
     'comment' : "It's fine today, don't you think so?",  
     'evaluation' : EVAL_NEUT,  
     'strReactionIdList' : " }))
```

次郎くんがすかさず同意する。

```
In [6]: b = reactor.addReaction(Reaction(  
    { '_id' : None,  
     'time' : None,  
     'author_id' : jiro,  
     'author_name' : None,  
     'target_id' : a,  
     'reactionFactor' : 0.0,  
     'comment' : "Year, good weather",  
     'evaluation' : EVAL_PROS,  
     'strReactionIdList' : " }))
```

```
In [7]: print reactor.getReaction(a).strFormat()  
print reactor.getReaction(b).strFormat()
```

```
ichiro(54da3d410661212c9117976f) > "It's fine today, don't you think so?" @ 201  
5/02/11 02:17:55 (54da3d430661212c91179775:3.27)  
jiro(54da3d410661212c91179770) > "Year, good weather" @ 2015/02/11 02:17:  
57 (54da3d450661212c91179776:1.44)
```

引用を受けた太郎くんのRF : Reaction Factorが次郎君より高い。

今度は三郎君が異議を唱える。

```
In [8]: c = reactor.addReaction(Reaction(  
    { '_id' : None,  
     'time' : None,  
     'author_id' : saburo,  
     'author_name' : None,  
     'target_id' : a,  
     'reactionFactor' : 0.0,  
     'comment' : "I don't think so",  
     'evaluation' : EVAL_CONS,  
     'strReactionIdList' : " }))
```

分からぬ、という四郎君がしゃしゃり出てくる。

```
In [9]: d = reactor.addReaction(Reaction(  
    { '_id' : None,  
     'time' : None,  
     'author_id' : shiro,  
  
     'author_name' : None,  
     'target_id' : a,  
     'reactionFactor' : 0.0,  
     'comment' : "I don't know, coz I'm inside whole day",  
     'evaluation' : EVAL_NEUT,  
     'strReactionIdList' : " }))  
print reactor.getReaction(a).strFormat()  
print reactor.getReaction(d).strFormat()
```

```
ichiro(54da3d410661212c9117976f) > "It's fine today, don't you think so?" @ 201  
5/02/11 02:17:55 (54da3d430661212c91179775:6.79)  
shiro(54da3d410661212c91179772) > "I don't know, coz I'm inside whole day" @  
2015/02/11 02:18:02 (54da3d4a0661212c91179778:1.20)
```

反対意見でも、分からぬという意見でも、太郎君のSeedのReaction Factorはぐんぐん上昇。

寡黙な五郎君が黙って太郎くんに反対する。

```
In [10]: e = reactor.addReaction(Reaction(  
    { '_id' : None,  
     'time' : None,  
     'author_id' : goro,  
     'author_name' : None,  
     'target_id' : a,  
     'reactionFactor' : 0.0,  
     'comment' : "",  
     'evaluation' : EVAL_CONS,  
     'strReactionIdList' : " }))  
print reactor.getReaction(a).strFormat()  
print reactor.getReaction(e).strFormat()
```

```
ichiro(54da3d410661212c9117976f) > "It's fine today, don't you think so?" @ 201  
5/02/11 02:17:55 (54da3d430661212c91179775:8.23)  
goro(54da3d410661212c91179773) > "" @ 2015/02/11 02:18:06 (54da3d4e06  
61212c91179779:1.20)
```

五郎君の無言の異議でも太郎くんのReaction Factorは上昇しているのがわかる。

太郎君の発言に対するReaction Listを列挙してみる。

```
In [11]: for r_id in reactor.getReaction(a).reactionIdList:  
    print reactor.getReaction(r_id).strFormat()
```

```
jiro(54da3d410661212c91179770) > "Year, good weather" @ 2015/02/11 02:17:  
57 (54da3d450661212c91179776:1.44)  
saburo(54da3d410661212c91179771) > "I don't think so" @ 2015/02/11 02:18:  
00 (54da3d480661212c91179777:1.44)  
shiro(54da3d410661212c91179772) > "I don't know, coz I'm inside whole day" @  
2015/02/11 02:18:02 (54da3d4a0661212c91179778:1.20)  
goro(54da3d410661212c91179773) > "" @ 2015/02/11 02:18:06 (54da3d4e06  
61212c91179779:1.20)
```

多階層Reaction

こんどは、異議を唱えた三郎君に花子さんが同調する。

```
In [12]: f = reactor.addReaction(Reaction(  
    {'_id': None,  
     'time': None,  
     'author_id': hanako,  
     'author_name': None,  
     'target_id': c,  
     'reactionFactor': 0.0,  
     'comment': "Me too. It's cloudy today.",  
     'evaluation': EVAL_PROS,  
     'strReactionIdList': ''}))  
print reactor.getReaction(a).strFormat()  
print reactor.getReaction(c).strFormat()  
print reactor.getReaction(f).strFormat()
```

```
ichiro(54da3d410661212c9117976f) > "It's fine today, don't you think so?" @ 201  
5/02/11 02:17:55 (54da3d430661212c91179775:13.29)  
saburo(54da3d410661212c91179771) > "I don't think so" @ 2015/02/11 02:18:  
00 (54da3d480661212c91179777:3.51)  
hanako(54da3d410661212c91179774) > "Me too. It's cloudy today." @ 2015/02/  
11 02:18:15 (54da3d570661212c9117977a:1.44)
```

花子さんが同意したことで、太郎君、三郎君のRFも上昇している。

Reaction Chain

花子さんの発言をさかのぼり、太郎君→三郎君→花子さんの発言を全て表示してみる。

```
In [13]: chain = reactor.getReactionChain(reactor.getReaction(f))
```

```
In [14]: for r in reversed(chain):
          print r.strFormat()
```

ichiro(54da3d410661212c9117976f) > "It's fine today, don't you think so?" @ 201
5/02/11 02:17:55 (54da3d430661212c91179775:13.29)
saburo(54da3d410661212c91179771) > "I don't think so" @ 2015/02/11 02:18:
00 (54da3d480661212c91179777:3.51)

hanako(54da3d410661212c91179774) > "Me too. It's cloudy today." @ 2015/02/
11 02:18:15 (54da3d570661212c9117977a:1.44)