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*

`decorators``

Classes#

`classproperty`` |

---|---

Functions#

`memoizemethod``(method) | Decorator to cause a method to cache it's results in self for each

---|---

`clear_memoized_methods``(obj, *method_names) | Clear the memoized method or

@memoizedproperty results for the given

`memoizedproperty``(func) | Decorator to cause a method to cache it's results in self for each

memoizemethod(_method_)#

Decorator to cause a method to cache it's results in self for each combination of inputs and return the cached result on subsequent calls. Does not support named arguments or arg values that are not hashable.

```
>>> class Foo (object):
...     @memoizemethod
...     def foo(self, x, y=0):
...         print('running method with', x, y)
...         return x + y + 3
...
>>> foo1 = Foo()
>>> foo2 = Foo()
>>> foo1.foo(10)
running method with 10 0
13
>>> foo1.foo(10)
13
>>> foo2.foo(11, y=7)
running method with 11 7
21
>>> foo2.foo(11)
running method with 11 0
14
>>> foo2.foo(11, y=7)
```

```
>>> class Foo (object):
...     def __init__(self, lower):
...         self.lower = lower
...     @memoizemethod
...     def range_tuple(self, upper):
...         print('running function')
...         return tuple(i for i in range(self.lower, upper))
...     @memoizemethod
...     def range_iter(self, upper):
...         print('running function')
...         return (i for i in range(self.lower, upper))
...
>>> foo = Foo(3)
>>> foo.range_tuple(6)
running function
(3, 4, 5)
>>> foo.range_tuple(7)
running function
(3, 4, 5, 6)
>>> foo.range_tuple(6)
(3, 4, 5)
>>> foo.range_iter(6)
Traceback (most recent call last):
TypeError: Can't memoize a generator or non-hashable object!
```

```
clear_memoized_methods(_obj_ , _* method_names_)#
```

Clear the memoized method or @memoizedproperty results for the given method names from the given object.

```
>>> v = [0]

>>> def inc():
...     v[0] += 1
...     return v[0]
...

>>> class Foo(object):
...     @memoizemethod
...     def foo(self):
...         return inc()
...     @memoizedproperty
...     def g(self):
...         return inc()
...

>>> f = Foo()

>>> f.foo(), f.foo()

(1, 1)

>>> clear_memoized_methods(f, 'foo')

>>> (f.foo(), f.foo(), f.g, f.g)
```



```
(2, 2, 3, 3)
```

```
>>> (f.foo(), f.foo(), f.g, f.g)
```

```
(2, 2, 3, 3)
```

```
>>> clear_memoized_methods(f, 'g', 'no_problem_if_undefined')
```

```
>>> f.g, f.foo(), f.g
```

```
(4, 2, 4)
```

```
>>> f.foo()
```

```
2
```

```
memoizedproperty(_func_)#
```

Decorator to cause a method to cache it's results in self for each combination of inputs and return the cached result on subsequent calls. Does not support named arguments or arg values that are not hashable.

```
>>> class Foo (object):
```

```
...     _x = 1
```

```
...     @memoizedproperty
```

```
...     def foo(self):
```

```
...         self._x += 1
```

```
...         print('updating and returning {0}'.format(self._x))
```

```
...         return self._x
```

...

```
>>> foo1 = Foo()
```

```
>>> foo2 = Foo()
```

```
>>> foo1.foo
```

updating and returning 2

2

```
>>> foo1.foo
```

2

```
>>> foo2.foo
```

updating and returning 2

2

```
>>> foo1.foo
```

2

```
_class _classproperty(_getter =None_, _setter =None_)#
```

```
__get__(_obj_ , _type_ =None_)#
```

```
__set__(_obj_ , _value_)#
```

setter(_setter_)#

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[__Edit on GitHub](<https://github.com/conda/conda/edit/main/docs/source/dev-guide/api/conda/auxlib/decorators/index.rst>)

[__Show Source]([../../../../../_sources/dev-guide/api/conda/auxlib/decorators/index.rst.txt](https://github.com/conda/conda/blob/main/docs/source/dev-guide/api/conda/auxlib/decorators/index.rst.txt))

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Created using [Sphinx](<https://www.sphinx-doc.org/>) 7.4.7.

[Analytics Dashboard __](<https://docs-conda-io.goatcounter.com> "Analytics

Dashboard")

Built with the [PyData Sphinx Theme](<https://pydata-sphinx-theme.readthedocs.io/en/stable/index.html>) 0.15.4.