

Introduction to Python

More OO – Decorators and Generators

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Review of Previous Class

- Really Quick OO overview
- Built an html generator, using:
 - A base class with a couple methods
 - Subclasses overriding class attributes
 - Subclasses overriding a method
 - Subclasses overriding the `__init__`

Homework review

Homework notes

multiple inheritance

Multiple inheritance:
Pulling from more than one class

```
class Combined(Super1, Super2, Super3):  
    def __init__(self, something, something else):  
        Super1.__init__(self, .....)  
        Super2.__init__(self, .....)  
        Super3.__init__(self, .....)
```

(calls to the super class `__init__` are optional – case dependent)

Attribute resolution – left to right

(Why would you want to do this?)

mix-ins

Hierarchies are not always simple

- Animal
 - Mammal
 - GiveBirth()
 - Bird
 - LayEggs()

Where do you put a Platypus or an Armadillo?

Real World Example: FloatCanvas

properties

Simple attributes:

```
In [5]: class C(object):  
        def __init__(self):  
            self.x = 5
```

```
In [6]: c = C()
```

```
In [7]: c.x
```

```
Out[7]: 5
```

```
In [8]: c.x = 8
```

```
In [9]: c.x
```

```
Out[9]: 8
```