

Up and Running with Python

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- OO Python
- Creating Web pages in Python

Object Oriented Python

- Classes in Python are containers for the properties of a class of objects and their respective functions, usually called methods.
- Inheritance allows a new class, a.k.a. a sub-class, to be derived from a parent class, a.k.a. a super-class.

Simple example of OO Python

```
class person:  
    age = 0  
    no_of_children = 0  
    def print_age(self):  
        print "Age is ", self.age
```

```
class female (person):  
    def is_a_mother(self):  
        if self.no_of_children > 0 :  
            print "Mother"
```

```
mary = female()  
mary.age = 42  
mary.no_of_children = 2
```

```
mary.print_age()  
mary.is_a_mother()
```

N.B. using the variable name self is just a convention, but it makes the code clearer.

For more examples, see <http://www.jesshamrick.com/2011/05/18/an-introduction-to-classes-and-inheritance-in-python/>

Using Python in Web Development with Frameworks

- Web Frameworks are collections of Python packages or modules that help developers create web pages without being concerned with low level details (see <http://wiki.python.org/moin/WebFrameworks>)
- Tutorial using Django (<https://www.djangoproject.com/>) at <http://net.tutsplus.com/tutorials/python-tutorials/python-from-scratch-creating-a-dynamic-website/>
- Microframework Flask from the Flask project at <https://github.com/mitsuhiko/flask> and <http://flask.pocoo.org/docs/> and <http://flask.pocoo.org/docs/quickstart/#quickstart>
- Other Python Web Frameworks are Grok (<http://grok.zope.org/>), WebPy (<http://webpy.org/>), TurboGears (<http://turbogears.org/>).

Review

- Python Basics
- Python programming constructs including OO
- A very brief introduction to Python Web Development Frameworks
- Now that you've been there, you can get the T-shirt at <http://www.freewear.org/?org=Python>

Further Study

- MITOpenCourse Class using Python (suitable for beginners)
<http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-00-introduction-to-computer-science-and-programming-fall-2008/> and accompanying book
<http://mitpress.mit.edu/books/introduction-computation-and-programming-using-python>
- Six free e-Books for Python learners, see
<http://readwrite.com/2011/03/25/python-is-an-increasingly-popu>
- Teaching Kids Python <http://boingboing.net/2012/12/18/python-for-kids-a-playful-int.html>
- Integrated Development Environments for Python
<http://wiki.python.org/moin/IntegratedDevelopmentEnvironments>