

HOW TO DEFINE A CLASS (RECAP)

```
class Animal(object):  
    def __init__(self, age):  
        self.age = age  
        self.name = None  
  
myanimal = Animal(3)
```

class definition

name

class parent

variable to refer to an instance of the class

special method to create an instance

what data initializes an Animal type

name is a data attribute even though an instance is not initialized with it as a param

one instance

mapped to self.age in class def

GETTER AND SETTER METHODS

```
class Animal(object):
    def __init__(self, age):
        self.age = age
        self.name = None

    def get_age(self):
        return self.age
    def get_name(self):
        return self.name

    def set_age(self, newage):
        self.age = newage
    def set_name(self, newname=""):
        self.name = newname

    def __str__(self):
        return "animal:" + str(self.name) + ":" + str(self.age)
```

getter

setter

- **getters and setters** should be used outside of class to access data attributes

AN INSTANCE and DOT NOTATION (RECAP)

- instantiation creates an **instance of an object**

```
a = Animal(3)
```

- **dot notation** used to access attributes (data and methods) though it is better to use getters and setters to access data attributes

```
a.age
```

```
a.get_age()
```

- access method
- best to use getters
and setters

- access data attribute
- allowed, but not recommended