Learning Object-Oriented
Programming and Design with TDD

Yourself

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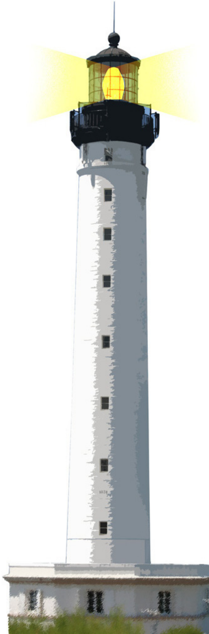
W2S10



Remember the Cascade (;)

A cascade: Sending multiple messages to the same object

```
Transcript cr.
Transcript show: 1.
Transcript show: 2
```

is equivalent to:

```
Transcript
   cr ;
   show: 1 ;
   show: 2
```

- ; is called a cascade

A Puzzle and Candidate for Cascade

We add 2 to a set

```
Set new add: 2
>>> 2
```

We get 2 and not the set!

Why?

```
Set >> add: newObject
  "Include newObject as one of the receiver's elements, but only if not already present.
      Answer newObject."
  [...]
  ^ newObject
```

- The method `add:` returns its argument, not the receiver

```
Set new add: 2
>>> 2
```

A Verbose Solution

To get the collection back, we can use a temporary variable

```
| s |
s := Set new.
s add: 2.
s
```

yourself

```
Object >> yourself
  ^ self
```

```
Set new
  add: 2;
  yourself
>>> aSet
```

- add: and yourself are sent to the new Set
- the cascade (;) returns the returned value of yourself

Another Idiom

```
Set class >> with: anObject
  "Answer an instance of me containing anObject."
  | instance |
  instance := self new.
  instance add: anObject.
  ^ instance
```

is equivalent to

```
Set class >> with: anObject
  "Answer an instance of me containing anObject."
  ^ self new
    add: anObject;
    yourself
```

Using yourself makes sure the code returns the new instance

What You Should Know

- Some simple methods are powerful
- Cascade ; and yourself often go together

Resources

- Pharo Mooc - W3S07 Videos `http://mooc.pharo.org`
- Pharo by Example `http://books.pharo.org`

A course by Stéphane Ducasse
http://stephane.ducasse.free.fr

Reusing some parts of the Pharo Mooc by

Damien Cassou, Stéphane Ducasse, Luc Fabresse
http://mooc.pharo.org