The Pharo Smalltalk

http://www.pharo-project.org

Pharo in a nutshell

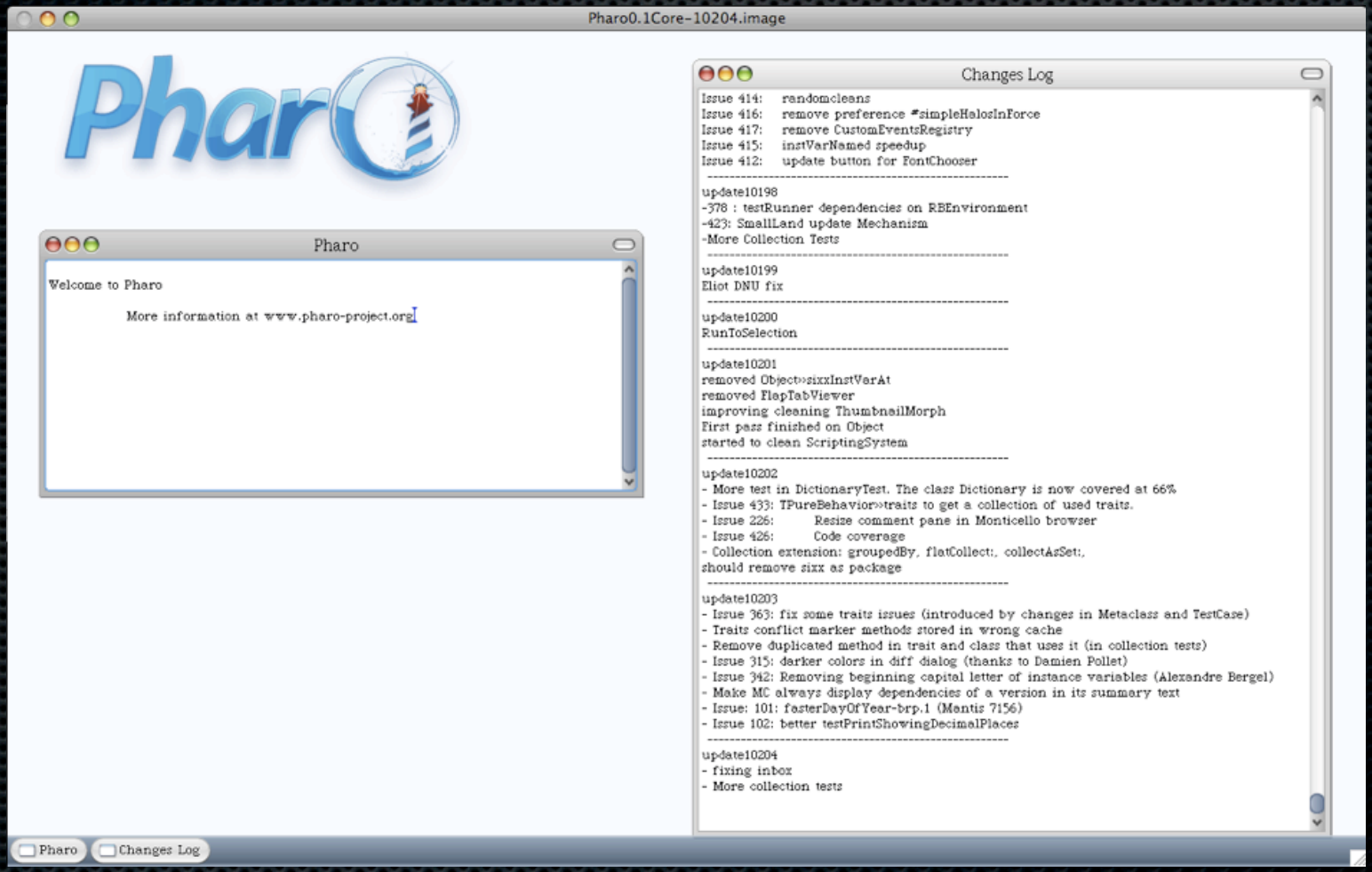
- *Pharo = language + IDE + update mechanism*
- Pure object-oriented programming language
- Dynamically typed and trait-based
- Open and flexible environment (OB, Polymorph, Scripting)
- Used as the executing platform for Seaside

Getting started with Pharo

Everything is an object

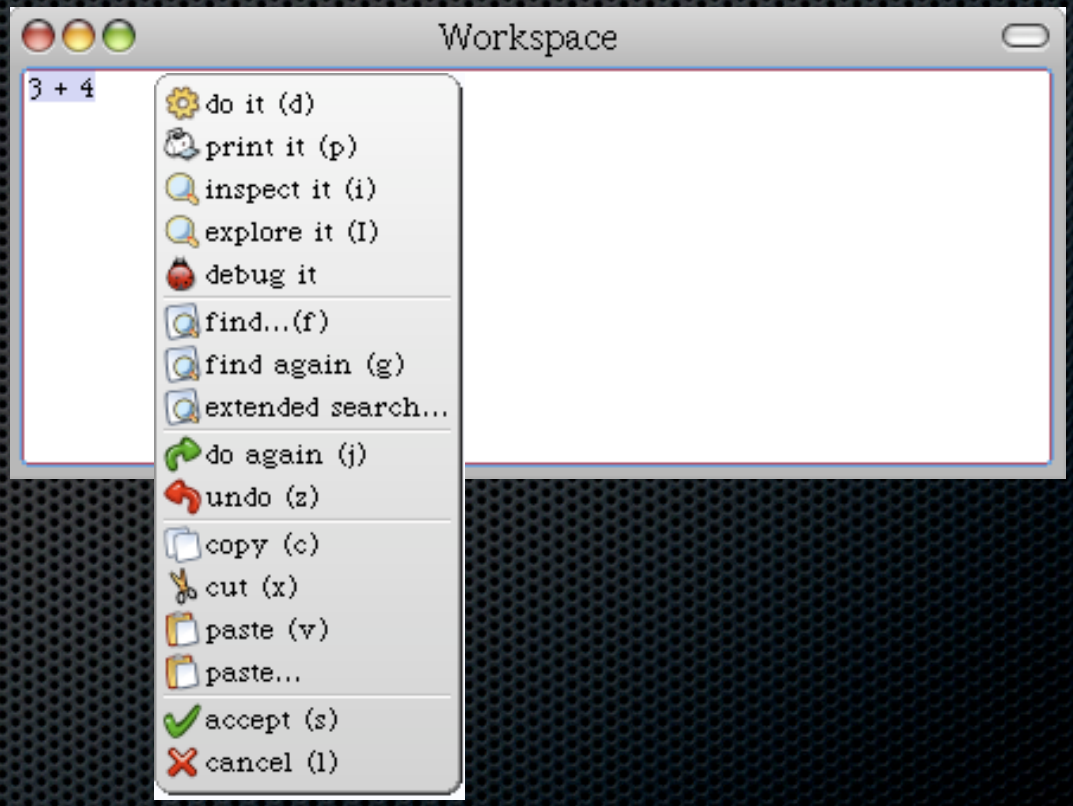
Everything happens by sending messages

Running Pharo

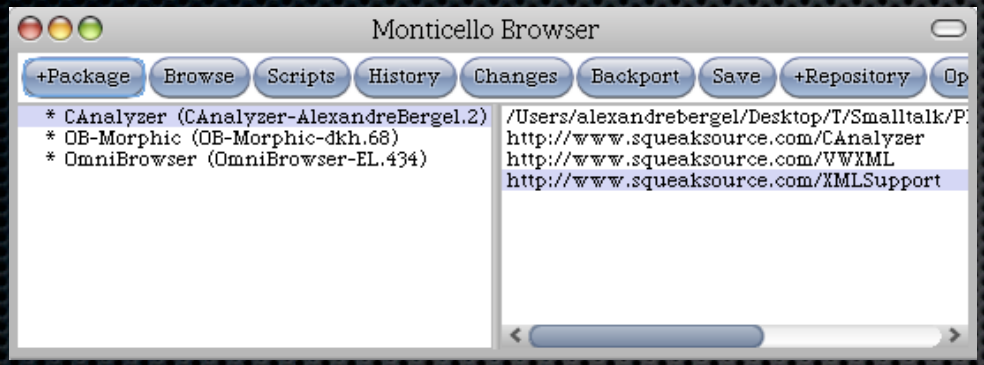


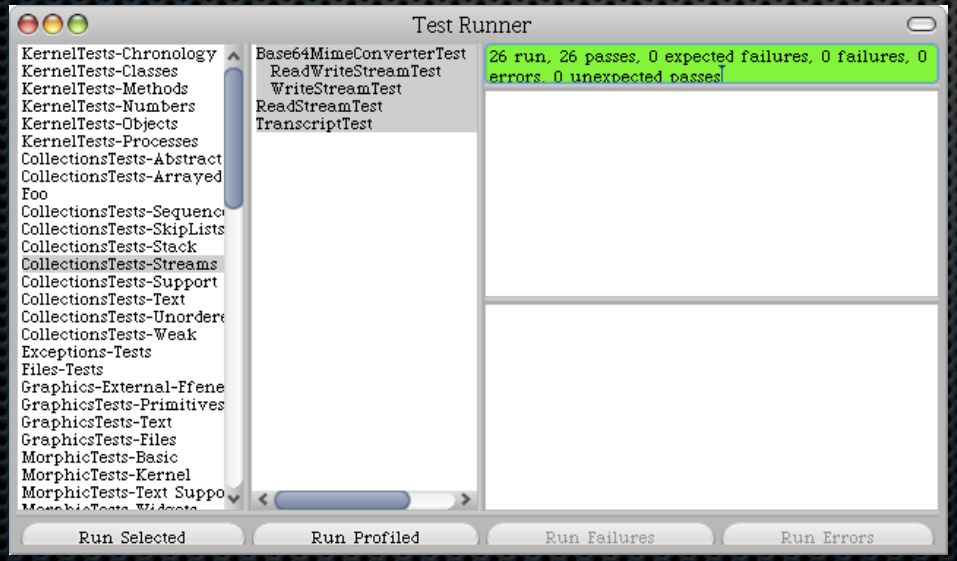
Do it, print it

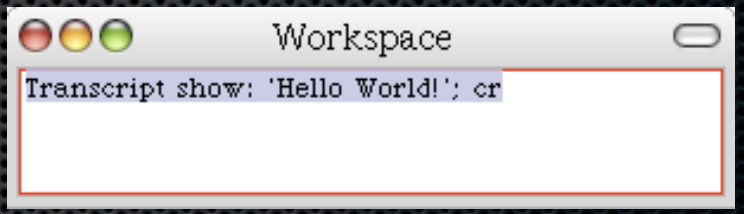
You can evaluate any expression anywhere in Pharo

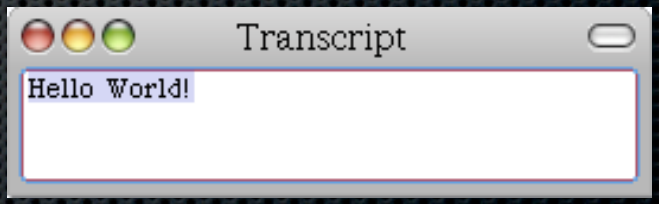


Standard development tools









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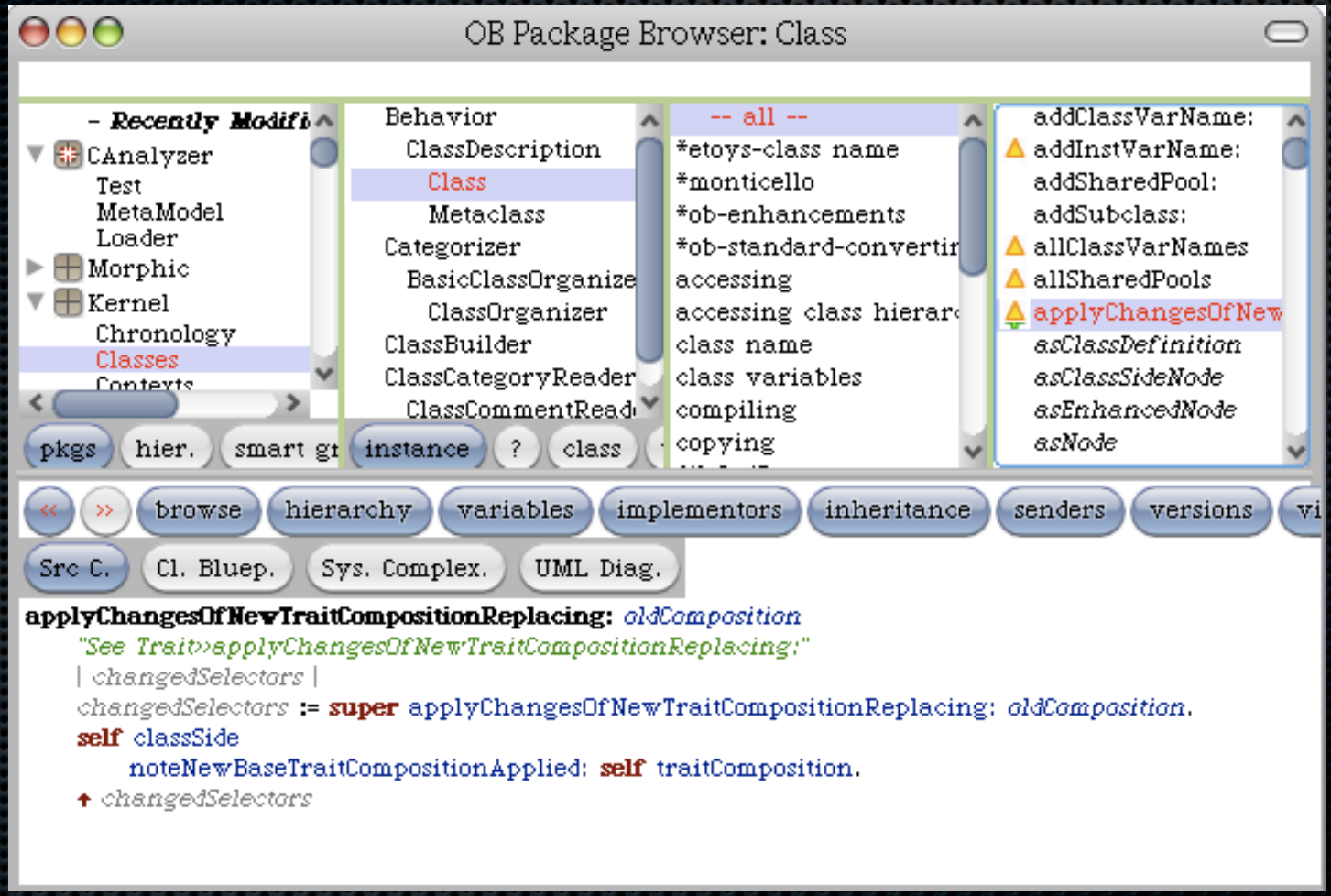
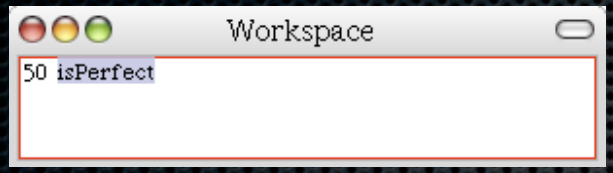
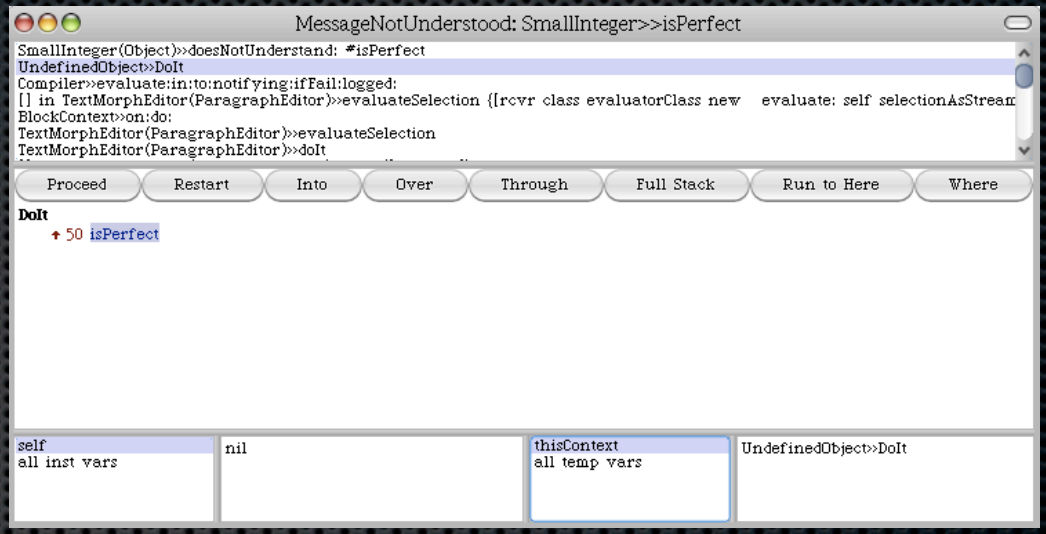
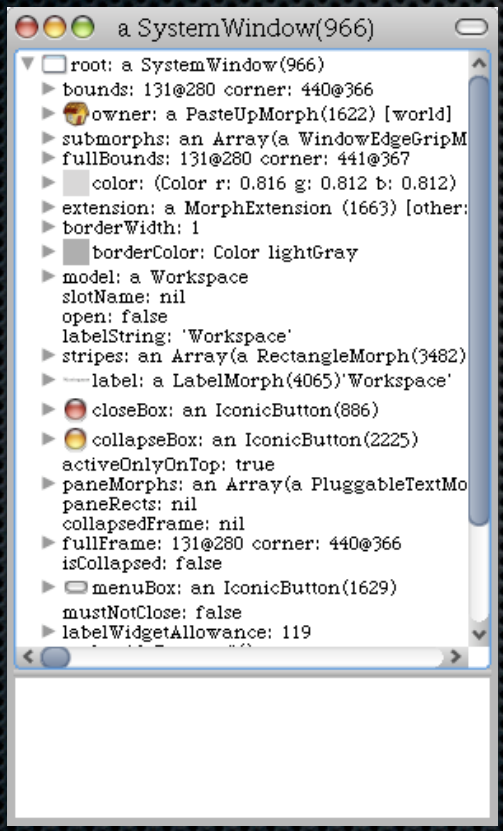
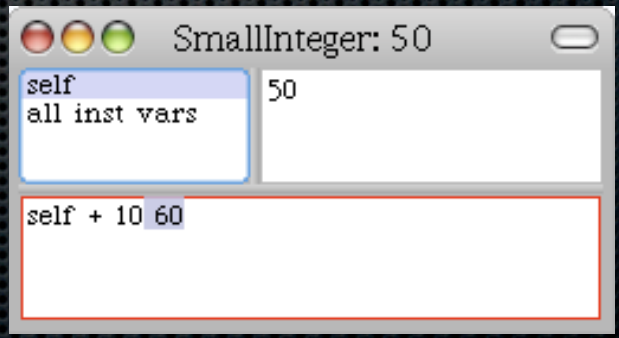


Debugger, explorer, inspector









Syntax in a nutshell

3 kinds of messages

Unary messages

```
5 factorial
Transcript cr
```

Binary messages

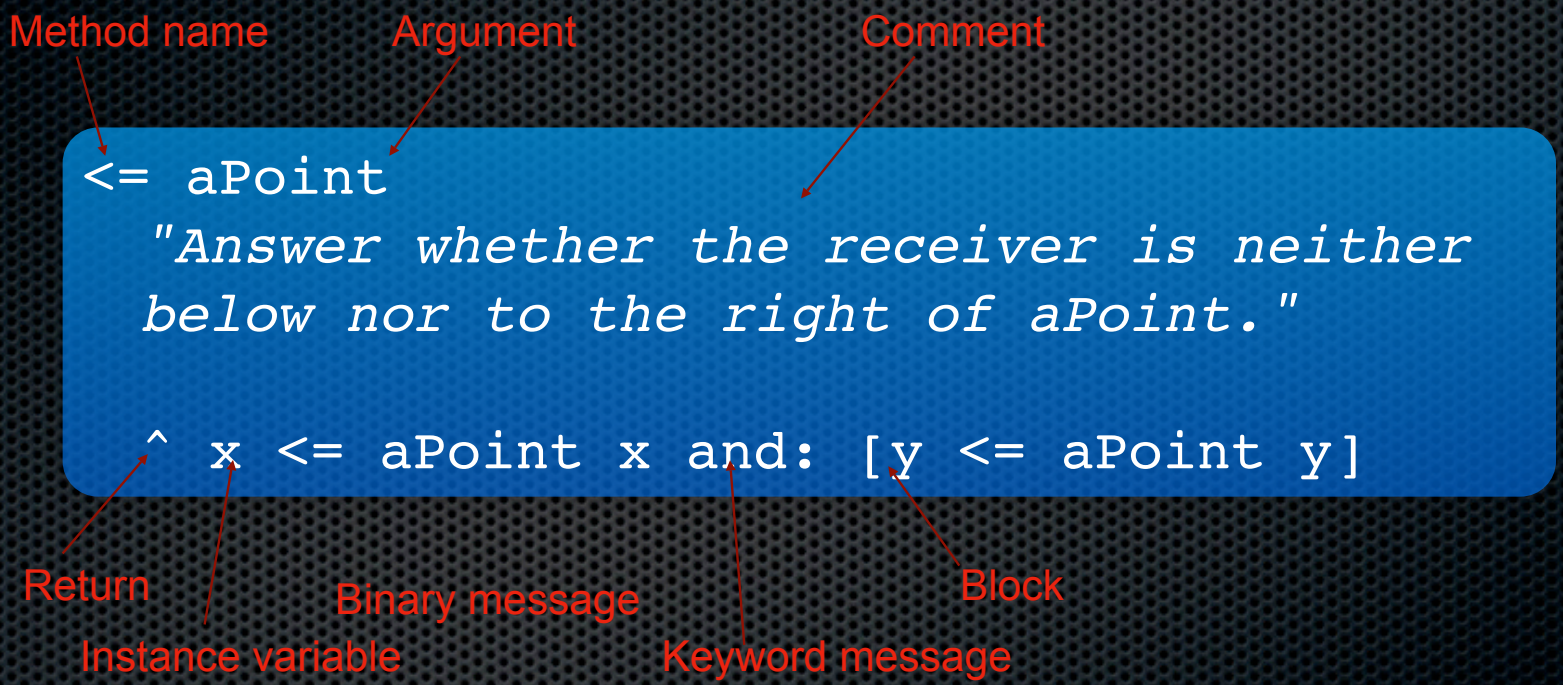
```
3 + 4
```

Keyword messages

```
3 raisedTo: 10 modulo: 5

Transcript show: 'hello world'
```

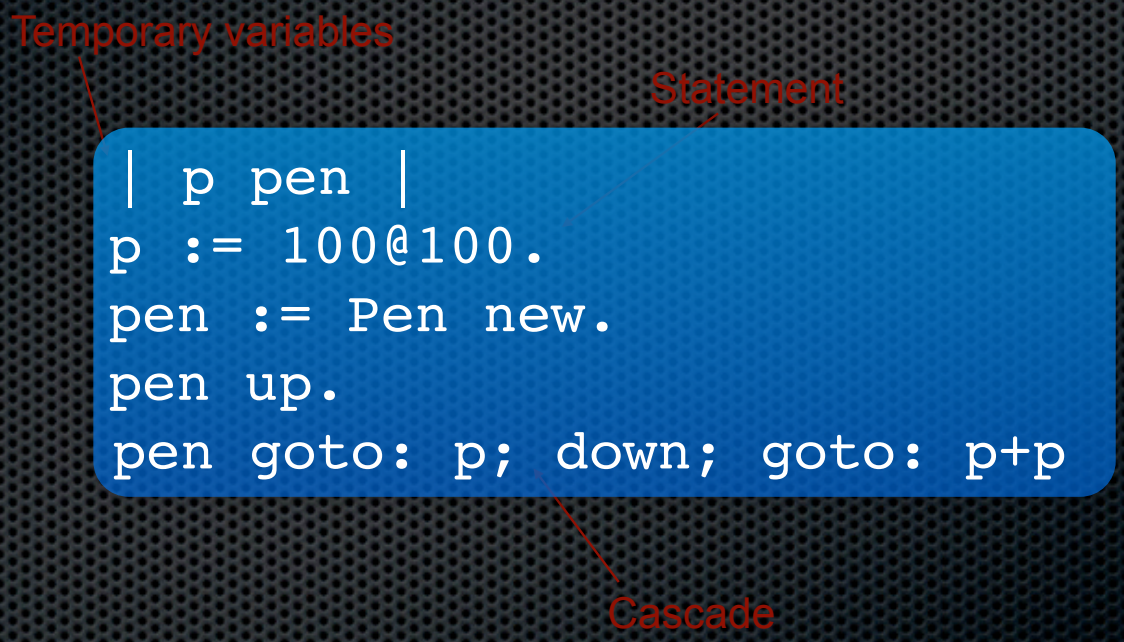
A typical method in Point




```
(2@3) <= (5@6)
```

```
true
```

Statement and cascades



Control structures

Every control structure is realized by message sends

```
4 timesRepeat: [Beeper beep]
```

```
max: aNumber
  ^ self < aNumber
    ifTrue: [aNumber]
    ifFalse: [self]
```

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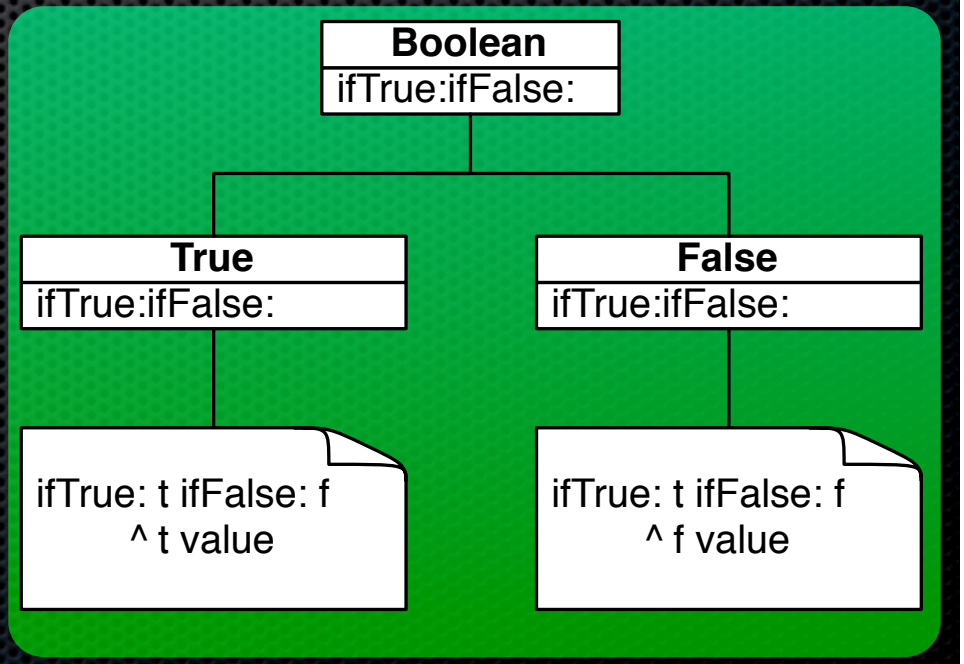

Creating classes

Send a message to a class (!)

```
Number subclass: #Complex
  instanceVariableNames: 'real imaginary'
  classVariableNames: ''
  poolDictionaries: ''
  category: 'ComplexNumbers'
```

How to join?

Join Pharo

- Strong community
- Goal: learning and having fun
- We need forces on several topics: graphics programming, compilation, virtual machines

Links

- Download: http://code.google.com/p/pharo
- Mailing list: http://gforge.inria.fr/mail/?group_id=1299