Inheritance and Lookup

5: Lookup in metaclasses

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Pharo

http://www.pharo.org
Goal

1. in Pharo, everything is an object
2. objects can receive messages
3. classes are objects too

Classes can receive messages. The mechanism is **exactly** the same
The lookup starts in the **class** of the **receiver** then:

- if the method is defined in the class, it is returned
- otherwise the search continues in the superclass
A Class is an Instance of Another Class

Class X is always the unique instance of the class X class:

- Node is a class and an object
- each object is an instance of a class
- the class of Node is Node class
- the class Node class is automatically created
Superclass Chain

Object

Node

Workstation

Object class

Node class

Workstation class

aWorkstation
Lookup of Class Methods is No Different

1. Look in superclasses
2. Go to the class

Object

Node

Workstation

Object class

Node class

Workstation class

goto the class

aWorkstation

goto the class

newNamed: 'Minna'
What You Should Know

- A class is an object
- A class can receive messages
- Method lookup is exactly the same as for all objects:
  - go to the class of the receiver
  - follow inheritance chain
- More during the lecture *Understanding Metaclasses*