Elements of Design - Class initialization

Stéphane Ducasse
stephane.ducasse@inria.fr
http://stephane.ducasse.free.fr/

Class Methods - Class Instance Variables
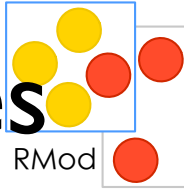
Classes (Packet class) represents class (Packet).

Class instance variables are instance variables of class

They should represent the state of class: number of created instances, number of messages sent, superclasses, subclasses....

Class methods represent class behavior: instance creation, class initialization, counting the number of instances....

If you weaken the second point: class state and behavior can be used to define common properties

Tuesday 24 March 15

Class Initialization
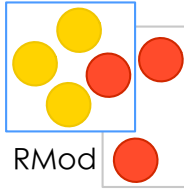
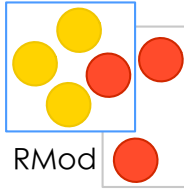How do we know that all the class behavior has been loaded?
At the end !

Automatically called by the system at load time or explicitly by the programmer.
Used to initialize a classVariable, a pool dictionary or class instance variables.
'Classname initialize' at the end of the saved files in Squeak

Tuesday 24 March 15

Example of class initialization
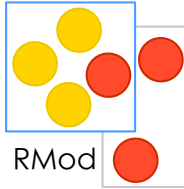
Magnitude subclass: #Date
    instanceVariableNames: 'day year'
    classVariableNames:
        'DaysInMonth FirstDayOfMonth MonthNames
         SecondsInDay WeekDayNames'

Tuesday 24 March 15

Date class>>initialize

```
Date class>>initialize
    "Initialize class variables representing the names of the months and
     days and the number of seconds, days in each month, and first day of
     each month. "
     MonthNames := #(January February March April May
     June July August September October November December ).
     SecondsInDay := 24 * 60 * 60.
     DaysInMonth := #(31 28 31 30 31 30 31 31 30 31 30 31 ).
     FirstDayOfMonth := #(1 32 60 91 121 152 182 213 244 274 305 335 ).
      WeekDayNames := #(Monday Tuesday Wednesday Thursday Friday
Saturday Sunday )
```