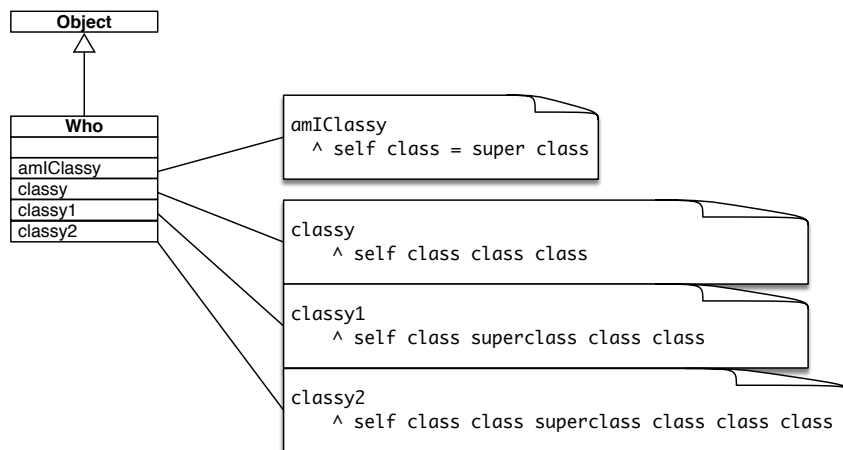


Smalltalk: Understanding Classes and Metaclasses

Please submit this exercise to the git repository before 10h15, October 11, 2016. Don't forget to register on piazza.com. Also [register for the course](#) by Oct 14!

Exercise 1

Based on the UML diagram



answer what will be the results of the following expressions:

1. `Who new amIClassy`
2. `Who new classy = Who new classy1`
3. `Who new classy1 = Who new classy2`

Explain your answers.

Exercise 2

Find all the abstract methods of the class `Collection`.

- Hint: An abstract method has the body `self subclassResponsibility`. Send `methods` to get the methods of a class, and use `messages` to get the messages sent by a method.

Exercise 3

How deep is the Pharo class hierarchy? Find the deepest class ignoring metaclasses.

- Hint: use the method `Class>>#subclasses`

Exercise 4

How deep is the Collections hierarchy? What is the deepest class?

Note: For the Exercise 3, 4, 5 file out the appropriate source code and commit the .st files to the git repository on <https://bitbucket.org>.