Software Design and Evolution

2014   Prof. O. Nierstrasz, Mircea Lungu, Nevena Milojković and Haidar Osman

Metrics and Problem Detection / Moose

Please send the solutions before 10h15, October 28, 2014.

Exercise 1

Write a method using FAMIX package which will find the top 10 most frequently invoked methods in JHotDraw. We assume that the method is invoked at the call-site if it is statically bound to the receiver.

Exercise 2

Write a method using FAMIX package which will find all call-sites where polymorphism can occur. It means, find all call-sites a.m() where the class/interface of the object a has at least one subclass, and the method m is overridden at least once in those subclasses.

Exercise 3

Write a method using FAMIX package that finds all hierarchies in JHotDraw, i.e., including only classes and interfaces from JHotDraw itself, excluding Object and other system classes.

Exercise 4

Write a method using FAMIX package which will find all classes in JHotDraw system implementing at least one method defined more than once in the hierarchy of that class (hierarchy including all super-classes and all subclasses of the class in question).

Note: For the exercises, copy the appropriate source code and send it to *nevena@iam.unibe.ch.*