MOOD Metrics

The mood metrics set is composed of 6 different metrics: MHF, AHF, MIF, AIF, PF and CF.

MHF is the inverse percentage of MethodsVisible. Where MethodsVisible is equal to the sum of the number of other classes where the methos is visible divided by number of classes minus 1 divided by the number of methods.

AHF is the same as MHF but relative to attributes.

MIF is the number of inherited methods divide by the total number of methods available in classes.

AIF is the same as MIF but relative to attributes.

PF or polymorphism factor is equal to the number of overrides divided by the maximum number of possible overrides.

CF or coupling factor is the number of actual couplings divided by the maximum number of possible couplings. A coupling happens when class A calls methods or accesses variables of class B and in turn class B calls methods or accesses variables of class A.

In both packages all values seem normal except for the coupling factor which Is a bit high for groups package but is abnormally high on the auximport package. I used this website as reference for my values: <https://www.aivosto.com/project/help/pm-oo-mood.html>

The package auximport, under the paths rc/main/java/org/jabref/gui/auximport, has high CF which means it has a lot of coupling classes, this causes complexity, reduces encapsulation and potential reuse, this is related to one of the code smells found in this package which is inappropriate intimacy. This code smells occurs when two classes depend too much on one another.