Chidamber-Kemerer metrics

The set Chidamber-Kemerer metrics give us Coupling Between Objects (CBO), Depth of inheritance tree (DIT), lack of cohesion of methods (LCOM), number children (NOC), response for class (RFC), Weighted method complexity (WMC).

The CBO give us the number of classes to which a class is coupled. The DIT give use the maximum inheritance path from the class to the root class. NOC give us the number of immediate sub-classes of a class, WMC give us the number of methods defined in the class, and RFC is the number of methods in the class plus the number of remote methods called by the class.

In the collected metrics we can check that the Coupling Between Objects parameter of the BibEntry is too high and possible a code smell (Feature Envy, Inappropriate Intimacy), because the high value of the parameter describe that the class has multiples calls to other classes.

In the same class we can check that the Weighted method complexity, which is the number of methods defined in the class, is too high and creating a possibility to a code smells like Large Class.

A high value of response for class parameter could result in a complex and hard to understand class, creating a code smell.