**Dependency Metrics**

This metrics set subdivides the metrics into three categories: Class Metrics, Interface Metrics and Package Metrics.

Class and Interface Metrics have the following metrics: Cyclic Dependencies, Dependencies, Transitive Dependencies, Dependents, Transitive Dependents, Package Dependencies and Dependent Packages.

Package Metrics only have: Cyclic Dependencies, Package dependencies, Dependent Packages and Transitively Dependent Packages.

**Metrics:**

* Cyclic Dependencies (Cyclic):

Cyclic Dependencies is the number of classes/interfaces/packages (depends on the subdivision) in which each class directly or indirectly depends on to function properly. Such cyclic dependencies may result in code which is difficult to understand and test.

* Values on “JabRef” Class/Interface subdivision:

The max value is 784 and the min value is 0. All classes have a value corresponding to the max or min value.

* Values on “JabRef” Package subdivision:

The max value is 149 and the min value is 0. All classes have a value corresponding to the max or min value.

* Dependencies (Dcy):

Dependencies is the number of classes/interfaces (depends on the subdivision) which each class directly depends on.

* Values on “JabRef” Class subdivision:

The max value is 114 and the min value is 0. The values vary mostly between 10 and 0 that are considered reasonable values, with an average of 6,35.

* Values on “JabRef” Interface subdivision:

The max value is 56 and the min value is 0. The values vary mostly between 3 and 0 that are considered good values, with an average of 2,55.

* Transitive Dependencies (Dcy\*):

Transitive Dependencies is the number of classes/interfaces (depends on the subdivision) which each class directly or indirectly depends on.

* Values on “JabRef” Class subdivision:

The max value is 1398 and the min value is 0. The values have an average of 769,31, that is considered a high value because the higher the value means it depends on more classes.

* Values on “JabRef” Interface subdivision:

The max value is 1335 and the min value is 0. The values have an average of 731,32 and like the class subdivision, its a high value.

* Dependents (Dpt):

Dependents is the number of classes/interfaces (depends on the subdivision) which directly depend on each class.

* Values on “JabRef” Class subdivision:

The max value is 389 and the min value is 0. The values vary mostly between 10 and 0 that are considered good values, with an average of 5,43.

* Values on “JabRef” Interface subdivision:

The max value is 205 and the min value is 1. The values vary mostly between 9 and 1 that are considered reasonable values, but with an average of 19,22.

* Transitive Dependents (Dpt\*):

Transitive Dependents is the number of classes/ interfaces (depends on the subdivision) which directly or indirectly depend on each class.

* Values on “JabRef” Class subdivision:

The max value is 993 and the min value is 0. The values vary mostly between 933 and 842 that are considered high values, with an average of 766,69.

* Values on “JabRef” Interface subdivision:

The max value is 919 and the min value is 9. The values vary mostly between 919 and 842 that are considered high values, with an average of 766,59, very close to the one that we have on the class subdivision.

* Package Dependencies (PDcy):

Package Dependencies is the number of packages on which each class directly or indirectly depends.

* Values on “JabRef” Class subdivision:

The max value is 51 and the min value is 0. The values vary mostly between 6 and 0 that are considered good values, with an average of 3,84.

* Values on “JabRef” Interface subdivision:

The max value is 30 and the min value is 0. The values vary mostly between 3 and 0 that are considered good values, with an average of 1,77.

* Values on “JabRef” Package subdivision:

The max value is 102 and the min value is 0. The values vary mostly between 5 and 0 that are considered good values, but with an average of 9,64.

* Dependent Packages (PDpt):

Dependent Packages is the number of packages which directly or indirectly depend on each class.

* Values on “JabRef” Class subdivision:

The max value is 103 and the min value is 0. The values vary mostly between 3 and 0 that are considered good values, with an average of 3.

* Values on “JabRef” Interface subdivision:

The max value is 65 and the min value is 1. The values vary mostly between 5 and 1 that are considered good values, with an average of 6,85.

* Values on “JabRef” Package subdivision:

The max value is 159 and the min value is 1. The values vary mostly between 159 and 155 that are considered high values, with an average of 147,42.

* Transitively Dependent Packages (PDpt\*):

Transitively Dependent Packages is the number of packages which contain direct or indirect dependencies on each package.

* Values on “JabRef” Package subdivision:

The max value is 159 and the min value is 1. The values have an average of 147,42.