pdepend cheat sheet

Software metrics Abstraction-Instability Chart

I - Instability

ratio between efferent coupling (Ce) and total package coupling (Ce + Ca)

Ce - Efferent Couplings

number of packages that classes from this package depend on **Ca** - Afferent Couplings

number of packages that depend upon classes within this package 1 - Unstable

unstable package without incoming dependencies but depending upon others

maximally stable package that depends upon nothing

0 - Stable

Optimal values

$$A = 1, I = 0$$

$$A = 0, I = 1$$

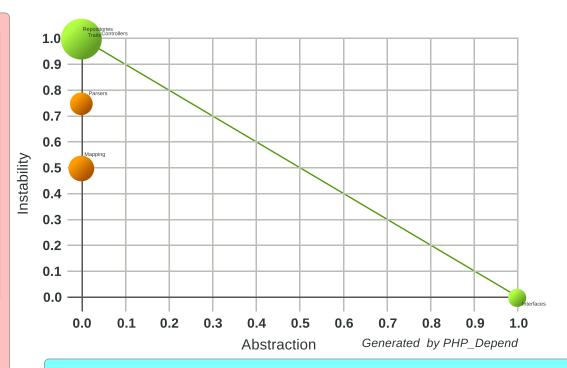
D - Distance

normalized distance calculated by the formula

$$((A + I) - 1)$$

Main sequence

diagonal drawn between the two optima. It represents an average between A and I. Packages near this line can be called **balanced**



0 - Non-abstract all classes in this package are non-abstract Abstract & Interfaces - 1

a package that only
consists of abstract
classes and interfaces

A - Abstraction

ratio between **a**bstract **c**lasses and total of all classes (= abstract + **c**oncrete **c**lasses)

0 = all classes are non-abstract

= all classes are abstract or interfaces

 $\frac{ac}{ac + cc}$