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| **Metric** | **Attribute** | **Detail** |
| **Coupling Between Objects (CBO)** | Coupling, Modularity | CBO is a count of the classes to which the class being inspected references.  This metric is a measure of the number of other objects to which the class being considered is coupled. A high number can indicate poor encapsulation and lower modularity resulting in a low level of reusability. |
| **Depth of Inheritance tree (DIT)** | Complexity | DIT is calculated as the number of classes from that which is being measured to its top-level parent.  This is a measure of design complexity, capturing the number of parent classes from which a class inherits. A high number may indicate excessive design complexity. |
| **Lack of Cohesion of Methods (LCOM)** | Cohesion | The LCOM is a count of method pairs whose similarity is 0 minus the count of method pairs whose similarity is not zero. The degree of similarity for two methods m1 and m2 in a class is given by:  LCOM = {*v*1} ∩ {*v*2}  {*v*1} and {*v*2} are the sets of instance variables used by *M*1 and *M*2.  This metric is a measure the dissimilarity of methods in a class via instanced variables. A high number can point towards poorly designed classes that do not adhere to the “single responsibility principle”. |
| **Number Of Children (NOC)** | Reuse | NOC is the number of direct subclasses extending the class being measured.  This metric is an indicator of reuse and abstraction. High numbers may indicate poor design or diluted abstraction. |
| **Response For a Class (RFC)** | Complexity | RFC is the number of methods within a class added to the number of methods invoked by any of those methods.  This is a measure of the count of methods which may be executed in response to a message. High numbers may highlight objects with undue complexity. |
| **Weighted Methods per Class (WMC)** | Complexity | WMC is calculated as the number of methods in the class where each method complexity is considered to be ‘unity’ or equal to 1.  This metric is the sum of the complexity of the methods of a class and is an indicator of the complexity of a class through its method count. A high number can indicate undue complexity and limited scope for re-use. |