

Table 1: DIT Design Metric - Definition and Computation

Depth of Inheritance Tree (DIT)	
Definition	The depth of a class, measured by DIT, within the inheritance hierarchy is the maximum length from the class node to the root of the tree, measured by the number of ancestor classes. DIT has a minimum value of one, for classes that do not have ancestors.
Worse	For greater values.
Computation Details	We consider only hierarchy classes belonging to the system: we visit the <i>Ancestor Classes</i> in a bottom up order and we stop counter at the first class that does not belong to the system.
Visitor Type	Model Visitor

Implementation details for each entity the visitor can visit

visit: Class	Visit Type: Model Visitor
	Applicability: Not Interface nor Enumeration ComplexType

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
Ancestor Classes	Type	Type

Table 2: NOI Design Metric - Definition and Computation

Number of Interfaces (NOI)	
Definition	Number of interfaces declared in a package or in a system.
Worse	-
Computation Details	We sum up the <i>Interface Declared Classes</i> .
Visitor Type	Model Visitor

Implementation details for each entity the visitor can visit

visit: Package	Visit Type: Model Visitor
	Applicability: Package

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
Declared Classes	Package	Package
visit: Project	Visit Type: Model Visitor	
	Applicability: Project	

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
NOI	Package	Package

Table 3: NOC Design Metric - Definition and Computation

Number of Children (NOC)	
Definition	Number of children counts the immediate subclasses subordinated to a class in the class hierarchy.
Worse	For greater values.
Computation Details	We sum up the <i>Children Classes</i> .
Visitor Type	Model Visitor

Implementation details for each entity the visitor can visit

visit: Class	Visit Type: Model Visitor
	Applicability: Not Anonymous ComplexType

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
Children Classes	Type	Type

Table 4: NMO Design Metric - Definition and Computation

Number of Methods Overridden (NMO)	
Definition	NMO represents the number of methods that have been overridden i.e., defined in the superclass and redefined in the class. This metric includes methods doing super invocation to their parent method. NMO is not defined for classes that have not superclass.
Worse	For low values.
Computation Details	We sum up the <i>Overridden Methods</i> .
Visitor Type	Model Visitor

Implementation details for each entity the visitor can visit

visit: Class	Visit Type: Model Visitor
	Applicability: Not abstract ComplexType, Nested ComplexType, Anonymous ComplexType, Enumeration ComplexType

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
Overridden Methods	Type	Type

Table 5: NIM Design Metric - Definition and Computation

Number of Inherited Methods (NIM)	
Definition	NIM is a simple measure showing the amount of behaviour that a given class can reuse. It counts the number of methods that a class can access in its superclasses. NIM is not defined for classes that have not superclass.
Worse	For high values.
Computation Details	We sum up the <i>Inherited Methods</i> .
Visitor Type	Model Visitor

Implementation details for each entity the visitor can visit

visit: Class	Visit Type: Model Visitor
	Applicability: Not abstract ComplexType, Nested ComplexType, Anonymous ComplexType, Enumeration ComplexType

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
Inherited Methods	Type	Type

Table 6: NOII Design Metric - Definition and Computation

Number of Implemented Interfaces (NOII)	
Definition	Number of implemented interfaces by a class.

Worse	-
Computation Details	We sum up the <i>Implemented Interfaces</i> .
Visitor Type	Model Visitor

Implementation details for each entity the visitor can visit

visit: Class	Visit Type: Model Visitor
	Applicability: ComplexType.

Dependencies Information:

Dep-visitor	Dep-entity	Dep-level
Implemented Interfaces	Type	Type