## 8.3    ModelElement (abstract)

ModelElement is the base element for the majority of modeling elements.

**Superclass**

SACMElement

**Attributes**

gid: String – a unique identifier that is unique within the scope of the model instance

name: String – the name of the element

isAbstract: Boolean – a flag to indicate whether the ModelElement is considered to be abstract. This is used to indicate whether an element is part of a pattern or template.

**Associations**

implementationConstraint: ImplementationConstraint [0..*] – allows the description of any implementation constraint associated with converting the element from being abstract to being concrete
description: Description – the description of the element [0..1]

note: Annotation [0..*] – a collection of annotations associated with the element.

taggedValue: TaggedValue [0..*] – a collection of tagged values may be associated with each ModelElement

**Semantics**

All the individual and identifiable elements of a SACM model correspond to a ModelElement.

**Constraints**

ImplementationConstraints should only be specified if isAbstract is true.

## 8.4    UtilityElement (abstract)

UtilityElement is an abstract element for a number of utility elements.

**Superclass**

SACMElement

**Associations**

expression: Expression [1] – the expression object containing the value of the UtilityElement (see Terminology section 10)

Attributes
sExpression: String – the text that describes the value of the UtilityElement

Constraints
If an Expression class is associated (through the expression association) with UtilityElement then sExpression should be null

## 8.8    TaggedValue

This class represents a simple key/value pair that can be attached to any element in SACM. This is a simple extension mechanism to allow users to add attributes to each element beyond those already specified in SACM.

**Superclass**

UtilityElement

**Attributes**

 key: Expression – the key of the tagged value

**Semantics**

TaggedValues can be used to specify attributes, and their corresponding values, for ModelElements.

**Constraints**

TaggedValues should not be used to document attributes that already form part of SACM (e.g., ArtefactProperty).

"If an Expression class is associated (through the key association) with TaggedValue then sKey should be null

sKey: Expression – the text that describes the key of the tagged value