| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/TypeElement.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**PREV CLASS**](http://docs.google.com/javax/lang/model/element/PackageElement.html)   [**NEXT CLASS**](http://docs.google.com/javax/lang/model/element/TypeParameterElement.html) | [**FRAMES**](http://docs.google.com/index.html?javax/lang/model/element/TypeElement.html)    [**NO FRAMES**](http://docs.google.com/TypeElement.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#2et92p0) | DETAIL: FIELD | CONSTR | [METHOD](#3dy6vkm) |

## **javax.lang.model.element**

Interface TypeElement

**All Superinterfaces:** [Element](http://docs.google.com/javax/lang/model/element/Element.html)

public interface **TypeElement**extends [Element](http://docs.google.com/javax/lang/model/element/Element.html)

Represents a class or interface program element. Provides access to information about the type and its members. Note that an enum type is a kind of class and an annotation type is a kind of interface.

While a TypeElement represents a class or interface *element*, a [DeclaredType](http://docs.google.com/javax/lang/model/type/DeclaredType.html) represents a class or interface *type*, the latter being a use (or *invocation*) of the former. The distinction is most apparent with generic types, for which a single element can define a whole family of types. For example, the element java.util.Set corresponds to the parameterized types java.util.Set<String> and java.util.Set<Number> (and many others), and to the raw type java.util.Set.

Each method of this interface that returns a list of elements will return them in the order that is natural for the underlying source of program information. For example, if the underlying source of information is Java source code, then the elements will be returned in source code order.

**Since:** 1.6 **See Also:**[DeclaredType](http://docs.google.com/javax/lang/model/type/DeclaredType.html)

| **Method Summary** | |
| --- | --- |
| [List](http://docs.google.com/java/util/List.html)<? extends [TypeMirror](http://docs.google.com/javax/lang/model/type/TypeMirror.html)> | [**getInterfaces**](http://docs.google.com/javax/lang/model/element/TypeElement.html#getInterfaces())()            Returns the interface types directly implemented by this class or extended by this interface. |
| [NestingKind](http://docs.google.com/javax/lang/model/element/NestingKind.html) | [**getNestingKind**](http://docs.google.com/javax/lang/model/element/TypeElement.html#getNestingKind())()            Returns the *nesting kind* of this type element. |
| [Name](http://docs.google.com/javax/lang/model/element/Name.html) | [**getQualifiedName**](http://docs.google.com/javax/lang/model/element/TypeElement.html#getQualifiedName())()            Returns the fully qualified name of this type element. |
| [TypeMirror](http://docs.google.com/javax/lang/model/type/TypeMirror.html) | [**getSuperclass**](http://docs.google.com/javax/lang/model/element/TypeElement.html#getSuperclass())()            Returns the direct superclass of this type element. |
| [List](http://docs.google.com/java/util/List.html)<? extends [TypeParameterElement](http://docs.google.com/javax/lang/model/element/TypeParameterElement.html)> | [**getTypeParameters**](http://docs.google.com/javax/lang/model/element/TypeElement.html#getTypeParameters())()            Returns the formal type parameters of this type element in declaration order. |

| **Methods inherited from interface javax.lang.model.element.**[**Element**](http://docs.google.com/javax/lang/model/element/Element.html) |
| --- |
| [accept](http://docs.google.com/javax/lang/model/element/Element.html#accept(javax.lang.model.element.ElementVisitor,%20P)), [asType](http://docs.google.com/javax/lang/model/element/Element.html#asType()), [equals](http://docs.google.com/javax/lang/model/element/Element.html#equals(java.lang.Object)), [getAnnotation](http://docs.google.com/javax/lang/model/element/Element.html#getAnnotation(java.lang.Class)), [getAnnotationMirrors](http://docs.google.com/javax/lang/model/element/Element.html#getAnnotationMirrors()), [getEnclosedElements](http://docs.google.com/javax/lang/model/element/Element.html#getEnclosedElements()), [getEnclosingElement](http://docs.google.com/javax/lang/model/element/Element.html#getEnclosingElement()), [getKind](http://docs.google.com/javax/lang/model/element/Element.html#getKind()), [getModifiers](http://docs.google.com/javax/lang/model/element/Element.html#getModifiers()), [getSimpleName](http://docs.google.com/javax/lang/model/element/Element.html#getSimpleName()), [hashCode](http://docs.google.com/javax/lang/model/element/Element.html#hashCode()) |

| **Method Detail** |
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### getNestingKind

[NestingKind](http://docs.google.com/javax/lang/model/element/NestingKind.html) **getNestingKind**()

Returns the *nesting kind* of this type element.

**Returns:**the nesting kind of this type element

### getQualifiedName

[Name](http://docs.google.com/javax/lang/model/element/Name.html) **getQualifiedName**()

Returns the fully qualified name of this type element. More precisely, it returns the *canonical* name. For local and anonymous classes, which do not have canonical names, an empty name is returned.

The name of a generic type does not include any reference to its formal type parameters. For example, the fully qualified name of the interface java.util.Set<E> is "java.util.Set". Nested types use "." as a separator, as in "java.util.Map.Entry".

**Returns:**the fully qualified name of this class or interface, or an empty name if none**See Also:**[Elements.getBinaryName(javax.lang.model.element.TypeElement)](http://docs.google.com/javax/lang/model/util/Elements.html#getBinaryName(javax.lang.model.element.TypeElement))**See**  [**The Java Language Specification, Third Edition**](http://java.sun.com/docs/books/jls/)**:** 6.7 Fully Qualified Names and Canonical Names

### getSuperclass

[TypeMirror](http://docs.google.com/javax/lang/model/type/TypeMirror.html) **getSuperclass**()

Returns the direct superclass of this type element. If this type element represents an interface or the class java.lang.Object, then a [NoType](http://docs.google.com/javax/lang/model/type/NoType.html) with kind [NONE](http://docs.google.com/javax/lang/model/type/TypeKind.html#NONE) is returned.

**Returns:**the direct superclass, or a NoType if there is none

### getInterfaces

[List](http://docs.google.com/java/util/List.html)<? extends [TypeMirror](http://docs.google.com/javax/lang/model/type/TypeMirror.html)> **getInterfaces**()

Returns the interface types directly implemented by this class or extended by this interface.

**Returns:**the interface types directly implemented by this class or extended by this interface, or an empty list if there are none

### getTypeParameters

[List](http://docs.google.com/java/util/List.html)<? extends [TypeParameterElement](http://docs.google.com/javax/lang/model/element/TypeParameterElement.html)> **getTypeParameters**()

Returns the formal type parameters of this type element in declaration order.

**Returns:**the formal type parameters, or an empty list if there are none

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/TypeElement.html) | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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| [**PREV CLASS**](http://docs.google.com/javax/lang/model/element/PackageElement.html)   [**NEXT CLASS**](http://docs.google.com/javax/lang/model/element/TypeParameterElement.html) | [**FRAMES**](http://docs.google.com/index.html?javax/lang/model/element/TypeElement.html)    [**NO FRAMES**](http://docs.google.com/TypeElement.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#2et92p0) | DETAIL: FIELD | CONSTR | [METHOD](#3dy6vkm) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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