| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AbstractProcessor.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   [**NEXT CLASS**](http://docs.google.com/javax/annotation/processing/Completion.html) | [**FRAMES**](http://docs.google.com/index.html?javax/annotation/processing/AbstractProcessor.html)    [**NO FRAMES**](http://docs.google.com/AbstractProcessor.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#2s8eyo1) | [METHOD](#3rdcrjn) |

## **javax.annotation.processing**

Class AbstractProcessor

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **javax.annotation.processing.AbstractProcessor**

**All Implemented Interfaces:** [Processor](http://docs.google.com/javax/annotation/processing/Processor.html)

public abstract class **AbstractProcessor**extends [Object](http://docs.google.com/java/lang/Object.html)implements [Processor](http://docs.google.com/javax/annotation/processing/Processor.html)

An abstract annotation processor designed to be a convenient superclass for most concrete annotation processors. This class examines annotation values to compute the [options](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getSupportedOptions()), [annotations](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getSupportedAnnotationTypes()), and [source version](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getSupportedSourceVersion()) supported by its subtypes.

The getter methods may [issue warnings](http://docs.google.com/javax/annotation/processing/Messager.html#printMessage(javax.tools.Diagnostic.Kind,%20java.lang.CharSequence)) about noteworthy conditions using the facilities available after the processor has been [initialized](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#isInitialized()).

Subclasses are free to override the implementation and specification of any of the methods in this class as long as the general [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) contract for that method is obeyed.

**Since:** 1.6

| **Field Summary** | |
| --- | --- |
| protected  [ProcessingEnvironment](http://docs.google.com/javax/annotation/processing/ProcessingEnvironment.html) | [**processingEnv**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#processingEnv)            Processing environment providing by the tool framework. |

| **Constructor Summary** | |
| --- | --- |
| protected | [**AbstractProcessor**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#AbstractProcessor())()            Constructor for subclasses to call. |

| **Method Summary** | |
| --- | --- |
| [Iterable](http://docs.google.com/java/lang/Iterable.html)<? extends [Completion](http://docs.google.com/javax/annotation/processing/Completion.html)> | [**getCompletions**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getCompletions(javax.lang.model.element.Element,%20javax.lang.model.element.AnnotationMirror,%20javax.lang.model.element.ExecutableElement,%20java.lang.String))([Element](http://docs.google.com/javax/lang/model/element/Element.html) element, [AnnotationMirror](http://docs.google.com/javax/lang/model/element/AnnotationMirror.html) annotation, [ExecutableElement](http://docs.google.com/javax/lang/model/element/ExecutableElement.html) member, [String](http://docs.google.com/java/lang/String.html) userText)            Returns an empty iterable of completions. |
| [Set](http://docs.google.com/java/util/Set.html)<[String](http://docs.google.com/java/lang/String.html)> | [**getSupportedAnnotationTypes**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getSupportedAnnotationTypes())()            If the processor class is annotated with [SupportedAnnotationTypes](http://docs.google.com/javax/annotation/processing/SupportedAnnotationTypes.html), return an unmodifiable set with the same set of strings as the annotation. |
| [Set](http://docs.google.com/java/util/Set.html)<[String](http://docs.google.com/java/lang/String.html)> | [**getSupportedOptions**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getSupportedOptions())()            If the processor class is annotated with [SupportedOptions](http://docs.google.com/javax/annotation/processing/SupportedOptions.html), return an unmodifiable set with the same set of strings as the annotation. |
| [SourceVersion](http://docs.google.com/javax/lang/model/SourceVersion.html) | [**getSupportedSourceVersion**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#getSupportedSourceVersion())()            If the processor class is annotated with [SupportedSourceVersion](http://docs.google.com/javax/annotation/processing/SupportedSourceVersion.html), return the source version in the annotation. |
| void | [**init**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#init(javax.annotation.processing.ProcessingEnvironment))([ProcessingEnvironment](http://docs.google.com/javax/annotation/processing/ProcessingEnvironment.html) processingEnv)            Initializes the processor with the processing environment by setting the processingEnv field to the value of the processingEnv argument. |
| protected  boolean | [**isInitialized**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#isInitialized())()            Returns true if this object has been [initialized](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#init(javax.annotation.processing.ProcessingEnvironment)), false otherwise. |
| abstract  boolean | [**process**](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#process(java.util.Set,%20javax.annotation.processing.RoundEnvironment))([Set](http://docs.google.com/java/util/Set.html)<? extends [TypeElement](http://docs.google.com/javax/lang/model/element/TypeElement.html)> annotations, [RoundEnvironment](http://docs.google.com/javax/annotation/processing/RoundEnvironment.html) roundEnv)            Processes a set of annotation types on type elements originating from the prior round and returns whether or not these annotations are claimed by this processor. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Field Detail** |
| --- |

### processingEnv

protected [ProcessingEnvironment](http://docs.google.com/javax/annotation/processing/ProcessingEnvironment.html) **processingEnv**

Processing environment providing by the tool framework.

| **Constructor Detail** |
| --- |

### AbstractProcessor

protected **AbstractProcessor**()

Constructor for subclasses to call.

| **Method Detail** |
| --- |

### getSupportedOptions

public [Set](http://docs.google.com/java/util/Set.html)<[String](http://docs.google.com/java/lang/String.html)> **getSupportedOptions**()

If the processor class is annotated with [SupportedOptions](http://docs.google.com/javax/annotation/processing/SupportedOptions.html), return an unmodifiable set with the same set of strings as the annotation. If the class is not so annotated, an empty set is returned.

**Specified by:**[getSupportedOptions](http://docs.google.com/javax/annotation/processing/Processor.html#getSupportedOptions()) in interface [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) **Returns:**the options recognized by this processor, or an empty set if none**See Also:**[SupportedOptions](http://docs.google.com/javax/annotation/processing/SupportedOptions.html)

### getSupportedAnnotationTypes

public [Set](http://docs.google.com/java/util/Set.html)<[String](http://docs.google.com/java/lang/String.html)> **getSupportedAnnotationTypes**()

If the processor class is annotated with [SupportedAnnotationTypes](http://docs.google.com/javax/annotation/processing/SupportedAnnotationTypes.html), return an unmodifiable set with the same set of strings as the annotation. If the class is not so annotated, an empty set is returned.

**Specified by:**[getSupportedAnnotationTypes](http://docs.google.com/javax/annotation/processing/Processor.html#getSupportedAnnotationTypes()) in interface [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) **Returns:**the names of the annotation types supported by this processor, or an empty set if none**See Also:**[SupportedAnnotationTypes](http://docs.google.com/javax/annotation/processing/SupportedAnnotationTypes.html)

### getSupportedSourceVersion

public [SourceVersion](http://docs.google.com/javax/lang/model/SourceVersion.html) **getSupportedSourceVersion**()

If the processor class is annotated with [SupportedSourceVersion](http://docs.google.com/javax/annotation/processing/SupportedSourceVersion.html), return the source version in the annotation. If the class is not so annotated, [SourceVersion.RELEASE\_6](http://docs.google.com/javax/lang/model/SourceVersion.html#RELEASE_6) is returned.

**Specified by:**[getSupportedSourceVersion](http://docs.google.com/javax/annotation/processing/Processor.html#getSupportedSourceVersion()) in interface [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) **Returns:**the latest source version supported by this processor**See Also:**[SupportedSourceVersion](http://docs.google.com/javax/annotation/processing/SupportedSourceVersion.html), [ProcessingEnvironment.getSourceVersion()](http://docs.google.com/javax/annotation/processing/ProcessingEnvironment.html#getSourceVersion())

### init

public void **init**([ProcessingEnvironment](http://docs.google.com/javax/annotation/processing/ProcessingEnvironment.html) processingEnv)

Initializes the processor with the processing environment by setting the processingEnv field to the value of the processingEnv argument. An IllegalStateException will be thrown if this method is called more than once on the same object.

**Specified by:**[init](http://docs.google.com/javax/annotation/processing/Processor.html#init(javax.annotation.processing.ProcessingEnvironment)) in interface [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) **Parameters:**processingEnv - environment to access facilities the tool framework provides to the processor **Throws:** [IllegalStateException](http://docs.google.com/java/lang/IllegalStateException.html) - if this method is called more than once.

### process

public abstract boolean **process**([Set](http://docs.google.com/java/util/Set.html)<? extends [TypeElement](http://docs.google.com/javax/lang/model/element/TypeElement.html)> annotations,  
 [RoundEnvironment](http://docs.google.com/javax/annotation/processing/RoundEnvironment.html) roundEnv)

Processes a set of annotation types on type elements originating from the prior round and returns whether or not these annotations are claimed by this processor. If true is returned, the annotations are claimed and subsequent processors will not be asked to process them; if false is returned, the annotations are unclaimed and subsequent processors may be asked to process them. A processor may always return the same boolean value or may vary the result based on chosen criteria.

The input set will be empty if the processor supports "\*" and the root elements have no annotations. A Processor must gracefully handle an empty set of annotations.

**Specified by:**[process](http://docs.google.com/javax/annotation/processing/Processor.html#process(java.util.Set,%20javax.annotation.processing.RoundEnvironment)) in interface [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) **Parameters:**annotations - the annotation types requested to be processedroundEnv - environment for information about the current and prior round **Returns:**whether or not the set of annotations are claimed by this processor

### getCompletions

public [Iterable](http://docs.google.com/java/lang/Iterable.html)<? extends [Completion](http://docs.google.com/javax/annotation/processing/Completion.html)> **getCompletions**([Element](http://docs.google.com/javax/lang/model/element/Element.html) element,  
 [AnnotationMirror](http://docs.google.com/javax/lang/model/element/AnnotationMirror.html) annotation,  
 [ExecutableElement](http://docs.google.com/javax/lang/model/element/ExecutableElement.html) member,  
 [String](http://docs.google.com/java/lang/String.html) userText)

Returns an empty iterable of completions.

**Specified by:**[getCompletions](http://docs.google.com/javax/annotation/processing/Processor.html#getCompletions(javax.lang.model.element.Element,%20javax.lang.model.element.AnnotationMirror,%20javax.lang.model.element.ExecutableElement,%20java.lang.String)) in interface [Processor](http://docs.google.com/javax/annotation/processing/Processor.html) **Parameters:**element - the element being annotatedannotation - the (perhaps partial) annotation being applied to the elementmember - the annotation member to return possible completions foruserText - source code text to be completed **Returns:**suggested completions to the annotation

### isInitialized

protected boolean **isInitialized**()

Returns true if this object has been [initialized](http://docs.google.com/javax/annotation/processing/AbstractProcessor.html#init(javax.annotation.processing.ProcessingEnvironment)), false otherwise.

**Returns:**true if this object has been initialized, false otherwise.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/AbstractProcessor.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   [**NEXT CLASS**](http://docs.google.com/javax/annotation/processing/Completion.html) | [**FRAMES**](http://docs.google.com/index.html?javax/annotation/processing/AbstractProcessor.html)    [**NO FRAMES**](http://docs.google.com/AbstractProcessor.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#2et92p0) | [METHOD](#tyjcwt) | DETAIL: [FIELD](#1t3h5sf) | [CONSTR](#2s8eyo1) | [METHOD](#3rdcrjn) |

[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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