

Documentation of TexGen-Doclet

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Abstract

This documentation describes the use of the TexGen-Doclet. A doclet is a class derived from `com.sun.javadoc.Doclet` that can be used to generate a documentation with the javadoc-tool out of commented java-source-code. By default javadoc generates a HTML documentation, TexGen generates \TeX -files according to the javadoc-package. The doclet is under GNU GENERAL PUBLIC LICENSE¹

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1 Usage

1.1 Calling javadoc

To use the doclet it has to be a parameter for the javadoc programm. The javadoc syntax is:

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```
javadoc [options] [packagenames] [sourcefiles] [@files]
```

Possible Options are -doclet and -docletpath. For TexGen write “TeX-Gen” after -doclet and after -docletpath the Path to the TexGen.jar jararchive.

1.2 Option for TexGen

TexGen provides an own option. You can use -dest and the path to the outputfolder, where the generated files will be located. If you don’t use this option, an folder named “texgendoc” will be created.

The final syntax is:

```
javadoc -doclet TexGen -docletpath <...texgen.jar> -dest <ausgabepath>
```

...

1.3 Using Eclipse

With Eclipse Javadoc can be called with an plugin. You have the possibility to choose a custom doclet. Use TexGen for the docletname and the path to the jararchive for the docletpath. The next dialog provides the inputfield for extra javadoc options. Here you can add -dest <outputpath>.

2 Known and Open Issues

- Special character in the documented text are converted not to interpret them as Tex-control character. These are: { } _ ^ & # []. All other special characters, that might build a tex-control-character should be avoided.
- Generic data types aren’t supported.
- Duplicate Classnames (e.g. in different packages) aren’t supported in linking.

3 Source Code documentation

4 TexGen

Full name: public class TexGen

Inherits Object←Doclet

The Doclet writes the javadoc-content into Tex-files referring to the javadoc-Package.

Mandatory CommandLineOption is: -dest destinationpath for the outputfile(s)

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Version 1.0

Inheritancetable

Element	Inherited from
LanguageVersion languageVersion()	Doclet
int optionLength(String)	Doclet
boolean start(RootDoc)	Doclet
boolean validOptions(String[][], DocErrorReporter)	Doclet
Object clone()	Object
boolean equals(Object)	Object
void finalize()	Object
Class getClass()	Object
int hashCode()	Object
void notify()	Object
void notifyAll()	Object
String toString()	Object
void wait(long)	Object
void wait(long, int)	Object
void wait()	Object

Fields

private static String destpath

In this variable the destinationpath is stored

The variable is set during validation of the commandlineparameter and read to write the output files

Author Jolle

Since version 1.0 from 13.05.2008

Construktors

public TexGen()

Methods

public static boolean start(RootDoc root)

method that is called from the javadoc-programm after parsing the input-files

Author Jolle

Since version 1.0 from 13.05.2008

Element	Inherited from
Object clone()	Object
boolean equals(Object)	Object
void finalize()	Object
Class getClass()	Object
int hashCode()	Object
void notify()	Object
void notifyAll()	Object
String toString()	Object
void wait(long)	Object
void wait(long, int)	Object
void wait()	Object

Fields

private static final String JDclass

private static final String JDheader

private static final String JDmethod

private static final String JDconstructor

private static final String JDfield

private static final String JDinterfaceOpt

private static final String JDclassOpt

`private static final String JDCpublic`

`private static final String JDCprivate`

`private static final String JDCprotected`

`private static final String JDCfinal`

`private static final String JDCstatic`

`private static final String JDCtransient`

`private static final String JDCvolatile`

`private static final String JDCabstract`

`private static final String JDCpackage`

`private static final String JDCinherits`

`private static final String JDCinhArrow`

`private static final String JDCimplements`

`private static final String JDCouterclass`

`private static final String JDCtype`

`private static final String JDcategory`

`private static final String JDdeprecated`

`private static final String JDsee`

`private static final String JDserial`

`private static final String JDserialData`

`private static final String JDserialField`

`private static final String JDsince`

`private static final String JDtext`

`private static final String JDversion`

`private static final String JDreturn`

`private static final String JDauthor`

`private static final String JDpara`

`private static final String JDthrows`

`private static final String JDinhtable`

`private static final String JDlinksimple`

`private static final String JDclinkarray`

private **TexPrintStream** ps_dateiausgabe

Stream, the output is written to.

Author Jolle

Since version 1.0 from 13.05.2008

Constructors

public **ClassWriter**(**String** s_zielpath) throws **IOException**, **FileNotFoundException**

Initializes the **ClassWriter**, creating a new file with a stream into

Author Jolle

Since version 1.0 of 13.05.2008

Parameter **String** s_zielpath path with the destination file

Exceptions **IOException** If the file cannot be created.
FileNotFoundException If the file isn't available after creation process

Methods

public void print(**ClassDoc** cd)

Writes the information of this file

Author Jolle

Since version 1.0 from 13.05.2008

Parameter **ClassDoc** cd class-object

private void print(**FieldDoc** fd)

Writes the information of a field

Author Jolle

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Parameter **FieldDoc** fd field-object

private void print(ConstructorDoc cd)

Writes the informationen of a constructor

Author Jolle

Since version 1.0 from 13.05.2008

Parameter ConstructorDoc cd constructor-object

private void print(MethodDoc md)

Writes the information of a method

Author Jolle

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Parameter MethodDoc md method-object

private void printTags(Doc d)

Writes all primitv javadoc attributes

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Parameter Doc d Doc-Type with the javadoc-information

private InhTable printClassInfo(ClassDoc cd)

Writes the classheader

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Return The tableOfInheritance is created in this method and returned
for later use.

Parameter ClassDoc cd Class-object

6 TexPrintStream

Full name: public class TexPrintStream

Inherits Object←OutputStream←FilterOutputStream←PrintStream

Conversion of special characters into tex-format

Author Jolle

Since 13.05.2008

Version 1.0

Inheritancetable

Element	Inherited from
OutputStream out	FilterOutputStream
PrintStream append(CharSequence)	PrintStream
PrintStream append(CharSequence, int, int)	PrintStream
PrintStream append(char)	PrintStream
Appendable append(char)	PrintStream
Appendable append(CharSequence, int, int)	PrintStream
Appendable append(CharSequence)	PrintStream
boolean checkError()	PrintStream
void clearError()	PrintStream
void close()	PrintStream
void flush()	PrintStream
PrintStream format(String, Object[])	PrintStream
PrintStream format(Locale, String, Object[])	PrintStream
void print(boolean)	PrintStream
void print(char)	PrintStream
void print(int)	PrintStream
void print(long)	PrintStream
void print(float)	PrintStream
void print(double)	PrintStream
void print(char[])	PrintStream
void print(String)	PrintStream
void print(Object)	PrintStream
PrintStream printf(String, Object[])	PrintStream
PrintStream printf(Locale, String, Object[])	PrintStream
void println()	PrintStream
void println(boolean)	PrintStream
void println(char)	PrintStream
void println(int)	PrintStream
void println(long)	PrintStream
void println(float)	PrintStream
void println(double)	PrintStream
void println(char[])	PrintStream
void println(String)	PrintStream
void println(Object)	PrintStream

void setError()	PrintStream
void write(int)	PrintStream
void write(byte[], int, int)	PrintStream
void close()	FilterOutputStream
void flush()	FilterOutputStream
void write(int)	FilterOutputStream
void write(byte[])	FilterOutputStream
void write(byte[], int, int)	FilterOutputStream
void close()	OutputStream
void flush()	OutputStream
void write(int)	OutputStream
void write(byte[])	OutputStream
void write(byte[], int, int)	OutputStream
Object clone()	Object
boolean equals(Object)	Object
void finalize()	Object
Class getClass()	Object
int hashCode()	Object
void notify()	Object
void notifyAll()	Object
String toString()	Object
void wait(long)	Object
void wait(long, int)	Object
void wait()	Object

Construktors

public **TexPrintStream**(**File** f) **throws** **FileNotFoundException**

Construktor, initialising the stream into the given file

Author Jolle

Since Version 1.0 from 13.05.2008

Parameter File f File to write

Exceptions FileNotFoundException if the file doesn't exist

Methods

public void printTex(**String** ausgabe)

Converts an String and writes it to the stream

Author Jolle

8 InhEntry

Full name: public class InhEntry

Inherits Object

Implements Comparable

One Entry of the table.

Author Jolle

Since 13.05.2008

Version 1.0

Inheritancetable

Element	Inherited from
Object clone()	Object
boolean equals(Object)	Object
void finalize()	Object
Class getClass()	Object
int hashCode()	Object
void notify()	Object
void notifyAll()	Object
String toString()	Object
void wait(long)	Object
void wait(long, int)	Object
void wait()	Object

Fields

private static final String JDInhEntry

Tex-command for an entry

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private Doc eintrag

the element of an entry

Author Jolle

Since version 1.0 from 13.05.2008
