| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/FilterReader.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/java/io/FilterOutputStream.html)   [**NEXT CLASS**](http://docs.google.com/java/io/FilterWriter.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/FilterReader.html)    [**NO FRAMES**](http://docs.google.com/FilterReader.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | [FIELD](#3znysh7) | [CONSTR](#tyjcwt) | [METHOD](#3dy6vkm) | DETAIL: [FIELD](#2s8eyo1) | [CONSTR](#3rdcrjn) | [METHOD](#lnxbz9) |

## **java.io**

Class FilterReader

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 [java.io.Reader](http://docs.google.com/java/io/Reader.html)  
 **java.io.FilterReader**

**All Implemented Interfaces:** [Closeable](http://docs.google.com/java/io/Closeable.html), [Readable](http://docs.google.com/java/lang/Readable.html) **Direct Known Subclasses:** [PushbackReader](http://docs.google.com/java/io/PushbackReader.html)

public abstract class **FilterReader**extends [Reader](http://docs.google.com/java/io/Reader.html)

Abstract class for reading filtered character streams. The abstract class FilterReader itself provides default methods that pass all requests to the contained stream. Subclasses of FilterReader should override some of these methods and may also provide additional methods and fields.

**Since:** JDK1.1

| **Field Summary** | |
| --- | --- |
| protected  [Reader](http://docs.google.com/java/io/Reader.html) | [**in**](http://docs.google.com/java/io/FilterReader.html#in)            The underlying character-input stream. |

| **Fields inherited from class java.io.**[**Reader**](http://docs.google.com/java/io/Reader.html) |
| --- |
| [lock](http://docs.google.com/java/io/Reader.html#lock) |

| **Constructor Summary** | |
| --- | --- |
| protected | [**FilterReader**](http://docs.google.com/java/io/FilterReader.html#FilterReader(java.io.Reader))([Reader](http://docs.google.com/java/io/Reader.html) in)            Creates a new filtered reader. |

| **Method Summary** | |
| --- | --- |
| void | [**close**](http://docs.google.com/java/io/FilterReader.html#close())()            Closes the stream and releases any system resources associated with it. |
| void | [**mark**](http://docs.google.com/java/io/FilterReader.html#mark(int))(int readAheadLimit)            Marks the present position in the stream. |
| boolean | [**markSupported**](http://docs.google.com/java/io/FilterReader.html#markSupported())()            Tells whether this stream supports the mark() operation. |
| int | [**read**](http://docs.google.com/java/io/FilterReader.html#read())()            Reads a single character. |
| int | [**read**](http://docs.google.com/java/io/FilterReader.html#read(char%5B%5D,%20int,%20int))(char[] cbuf, int off, int len)            Reads characters into a portion of an array. |
| boolean | [**ready**](http://docs.google.com/java/io/FilterReader.html#ready())()            Tells whether this stream is ready to be read. |
| void | [**reset**](http://docs.google.com/java/io/FilterReader.html#reset())()            Resets the stream. |
| long | [**skip**](http://docs.google.com/java/io/FilterReader.html#skip(long))(long n)            Skips characters. |

| **Methods inherited from class java.io.**[**Reader**](http://docs.google.com/java/io/Reader.html) |
| --- |
| [read](http://docs.google.com/java/io/Reader.html#read(char%5B%5D)), [read](http://docs.google.com/java/io/Reader.html#read(java.nio.CharBuffer)) |

| **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** |
| --- |

### in

protected [Reader](http://docs.google.com/java/io/Reader.html) **in**

The underlying character-input stream.

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

### FilterReader

protected **FilterReader**([Reader](http://docs.google.com/java/io/Reader.html) in)

Creates a new filtered reader.

**Parameters:**in - a Reader object providing the underlying stream. **Throws:** [NullPointerException](http://docs.google.com/java/lang/NullPointerException.html) - if in is null

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

### read

public int **read**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Reads a single character.

**Overrides:**[read](http://docs.google.com/java/io/Reader.html#read()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Returns:**The character read, as an integer in the range 0 to 65535 (0x00-0xffff), or -1 if the end of the stream has been reached **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### read

public int **read**(char[] cbuf,  
 int off,  
 int len)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Reads characters into a portion of an array.

**Specified by:**[read](http://docs.google.com/java/io/Reader.html#read(char%5B%5D,%20int,%20int)) in class [Reader](http://docs.google.com/java/io/Reader.html) **Parameters:**cbuf - Destination bufferoff - Offset at which to start storing characterslen - Maximum number of characters to read **Returns:**The number of characters read, or -1 if the end of the stream has been reached **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### skip

public long **skip**(long n)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Skips characters.

**Overrides:**[skip](http://docs.google.com/java/io/Reader.html#skip(long)) in class [Reader](http://docs.google.com/java/io/Reader.html) **Parameters:**n - The number of characters to skip **Returns:**The number of characters actually skipped **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### ready

public boolean **ready**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Tells whether this stream is ready to be read.

**Overrides:**[ready](http://docs.google.com/java/io/Reader.html#ready()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Returns:**True if the next read() is guaranteed not to block for input, false otherwise. Note that returning false does not guarantee that the next read will block. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### markSupported

public boolean **markSupported**()

Tells whether this stream supports the mark() operation.

**Overrides:**[markSupported](http://docs.google.com/java/io/Reader.html#markSupported()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Returns:**true if and only if this stream supports the mark operation.

### mark

public void **mark**(int readAheadLimit)  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Marks the present position in the stream.

**Overrides:**[mark](http://docs.google.com/java/io/Reader.html#mark(int)) in class [Reader](http://docs.google.com/java/io/Reader.html) **Parameters:**readAheadLimit - Limit on the number of characters that may be read while still preserving the mark. After reading this many characters, attempting to reset the stream may fail. **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### reset

public void **reset**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

Resets the stream.

**Overrides:**[reset](http://docs.google.com/java/io/Reader.html#reset()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

### close

public void **close**()  
 throws [IOException](http://docs.google.com/java/io/IOException.html)

**Description copied from class:** [**Reader**](http://docs.google.com/java/io/Reader.html#close()) Closes the stream and releases any system resources associated with it. Once the stream has been closed, further read(), ready(), mark(), reset(), or skip() invocations will throw an IOException. Closing a previously closed stream has no effect.

**Specified by:**[close](http://docs.google.com/java/io/Closeable.html#close()) in interface [Closeable](http://docs.google.com/java/io/Closeable.html)**Specified by:**[close](http://docs.google.com/java/io/Reader.html#close()) in class [Reader](http://docs.google.com/java/io/Reader.html) **Throws:** [IOException](http://docs.google.com/java/io/IOException.html) - If an I/O error occurs

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/FilterReader.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/java/io/FilterOutputStream.html)   [**NEXT CLASS**](http://docs.google.com/java/io/FilterWriter.html) | [**FRAMES**](http://docs.google.com/index.html?java/io/FilterReader.html)    [**NO FRAMES**](http://docs.google.com/FilterReader.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
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[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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