

**Module** java.base  
**Package** java.lang

## Class Exception

java.lang.Object  
  java.lang.Throwable  
    java.lang.Exception

**All Implemented Interfaces:**  
Serializable

**Direct Known Subclasses:**  
AbsentInformationException, AgentInitializationException, AgentLoadException, AlreadyBoundException, AttachNotSupportedException, AWTException, BackingStoreException, BadAttributeValueExpException, BadBinaryOpValueExpException, BadLocationException, BadStringOperationException, BrokenBarrierException, CardException, CertificateException, ClassNotLoadedException, CloneNotSupportedException, DataFormatException, DatatypeConfigurationException, DestroyFailedException, ExecutionControl.ExecutionControlException, ExecutionException, ExpandVetoException, FontFormatException, GeneralSecurityException, GSSEException, IllegalClassFormatException, IllegalConnectorArgumentsException, IncompatibleThreadStateException, InterruptedException, IntrospectionException, InvalidApplicationException, InvalidMidiDataException, InvalidPreferencesFormatException, InvalidTargetObjectTypeException, InvalidTypeException, InvocationException, IOException, JMException, JShellException, KeySelectorException, LambdaConversionException, LineUnavailableException, MarshalException, MidiUnavailableException, MimeTypeParseException, NamingException, NoninvertibleTransformException, NotBoundException, ParseException, ParserConfigurationException, PrinterException, PrintException, PrivilegedActionException, PropertyVetoException, ReflectiveOperationException, RefreshFailedException, RuntimeException, SAXException, ScriptException, ServerNotActiveException, SQLException, StringConcatException, TimeoutException, TooManyListenersException, TransformerException, TransformException, UnmodifiableClassException, UnsupportedAudioFileException, UnsupportedCallbackException, UnsupportedFlavorException, UnsupportedLookAndFeelException, URISyntaxException, VMStartException, XAException, XMLParseException, XMLSignatureException, XMLStreamException, XPathException

public class **Exception**  
extends Throwable

The class Exception and its subclasses are a form of Throwable that indicates conditions that a reasonable application might want to catch.

The class Exception and any subclasses that are not also subclasses of RuntimeException are *checked exceptions*. Checked exceptions need to be declared in a method or constructor's throws clause if they can be thrown by the execution of the method or constructor and propagate outside the method or constructor boundary.

**See Java Language Specification:**  
11.2 Compile-Time Checking of Exceptions

**Since:**  
1.0

**See Also:**

Error, Serialized Form

### Constructor Summary

Constructors		
Modifier	Constructor	Description
	<b>Exception()</b>	Constructs a new exception with null as its detail message.
	<b>Exception(String message)</b>	Constructs a new exception with the specified detail message.
	<b>Exception(String message, Throwable cause)</b>	Constructs a new exception with the specified detail message and cause.
protected	<b>Exception(String message, Throwable cause, boolean enableSuppression, boolean writableStackTrace)</b>	Constructs a new exception with the specified detail message, cause, suppression enabled or disabled, and writable stack trace enabled or disabled.
	<b>Exception(Throwable cause)</b>	Constructs a new exception with the specified cause and a detail message of (cause==null ? null : cause.toString()) (which typically contains the class and detail message of cause).

### Method Summary

Methods declared in class java.lang.Throwable

addSuppressed, fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, getSuppressed, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString

Methods declared in class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Constructor Details

Exception

public Exception()

Constructs a new exception with null as its detail message. The cause is not initialized, and may subsequently be initialized by a call to Throwable.initCause(java.lang.Throwable).

Exception

public Exception(String message)

Constructs a new exception with the specified detail message. The cause is not initialized, and may subsequently be initialized by a call to Throwable.initCause(java.lang.Throwable).

Parameters:

message - the detail message. The detail message is saved for later retrieval by the Throwable.getMessage() method.

Exception

public Exception(String message,
 Throwable cause)

Constructs a new exception with the specified detail message and cause.

Note that the detail message associated with cause is not automatically incorporated in this exception's detail message.

Parameters:

message - the detail message (which is saved for later retrieval by the Throwable.getMessage() method).

cause - the cause (which is saved for later retrieval by the Throwable.getCause() method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

Since:

1.4

Exception

public Exception(Throwable cause)

Constructs a new exception with the specified cause and a detail message of (cause==null ? null : cause.toString()) (which typically contains the class and detail message of cause). This constructor is useful for exceptions that are little more than wrappers for other throwables (for example, PrivilegedActionException).

Parameters:

cause - the cause (which is saved for later retrieval by the Throwable.getCause() method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

Since:

1.4

Exception

protected Exception(String message,
 Throwable cause,
 boolean enableSuppression,
 boolean writableStackTrace)

Constructs a new exception with the specified detail message, cause, suppression enabled or disabled, and writable stack trace enabled or disabled.

Parameters:

message - the detail message.

cause - the cause. (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

`enableSuppression` - whether or not suppression is enabled or disabled

`writableStackTrace` - whether or not the stack trace should be writable

**Since:**

1.7

[Report a bug or suggest an enhancement](#)

For further API reference and developer documentation see the [Java SE Documentation](#), which contains more detailed, developer-targeted descriptions with conceptual overviews, definitions of terms, workarounds, and working code examples. [Other versions](#).

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