

STACK TRACE ELEMENT

The **StackTraceElement** class element represents a single stack frame which is a stack trace when an exception occurs. Extracting stack trace from an exception could provide useful information such as class name, method name, file name, and the source-code line number. The `getStackTrace()` method of the `Throwable` class returns an array of `StackTraceElement`s.

StackTraceElement class constructor

`StackTraceElement(String declaringClass, String methodName, String fileName, int lineNumber)`

This creates a stack trace element representing the specified execution point.

Stack Trace Element class methods

Method	Description
<code>boolean equals(Object obj)</code>	Returns true if the invoking <code>StackTraceElement</code> is the same as the one passed in <code>obj</code> . Otherwise, it returns false.
<code>String getClassName()</code>	Returns the class name of the execution point
<code>String getFileName()</code>	Returns the filename of the execution point
<code>int getLineNumber()</code>	Returns the source-code line number of the execution point
<code>String getMethodName()</code>	Returns the method name of the execution point
<code>String toString()</code>	Returns the <code>String</code> equivalent of the invoking sequence

Example:

```
public class StackTraceEx{
    public static void main(String[] args) {
        try{
            throw new RuntimeException("go"); //raising an runtime exception
        }
        catch(Exception e){
            System.out.println("Printing stack trace:");
            //create array of stack trace elements
            final StackTraceElement[] stackTrace = e.getStackTrace();
            for (StackTraceElement s : stackTrace) {
                System.out.println("\tat " + s.getClassName() + "." + s.getMethodName()
                    + "(" + s.getFileName() + ":" + s.getLineNumber() + ")");
            }
        }
    }
}
```

Sample Output:

Printing stack trace:at StackTraceEx.main(StackTraceEx.java:5)

