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TimeoutException

Learn the reasons that cause TimeoutException to be thrown.

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TimeoutException is used as a means to indicate that a blocking operation has timed-out. Consider the [CyclicBarrier](#) class ([read about cyclic barrier here](#)) which exposes the method `await()`, which takes in a timeout value. If a thread invokes this method on an object of [CyclicBarrier](#) and the barrier isn't reached by other threads within the specified timeout by the first thread then [TimeoutException](#) is thrown and the barrier is broken. In some cases, values such as boolean can be returned to indicate timeout rather than throwing the [TimeoutException](#).

The program in the widget below demonstrates an instance of a [CyclicBarrier](#) throwing the [TimeoutException](#) when the main thread awaits at the barrier for 100 milliseconds.

Java

main.java

```
1 import java.util.concurrent.CyclicBarrier;
2 import java.util.concurrent.TimeUnit;
3 import java.util.concurrent.TimeoutException;
4 import java.util.concurrent.BrokenBarrierException;
5
6 class Demonstration {
7     public static void main( String args[] ) throws TimeoutException, InterruptedException,
8
9         | // create a barrier for two threads.
10        | CyclicBarrier barrier = new CyclicBarrier(2);
11
12        | // TimeoutException thrown after 100 ms elapse
```

Run

TimeoutException is a checked exception extending the [Exception](#) class and is part of the [java.util.concurrent](#) package. Some other Java classes that throw the [TimeoutException](#) are:

- java.util.concurrent.AbstractExecutorService
- jdk.jshell.execution.JdInitializer
- sun.nio.ch.PendingFuture

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