

ava Multithreading for Senior Engineering Interviews / ... / TimeoutException

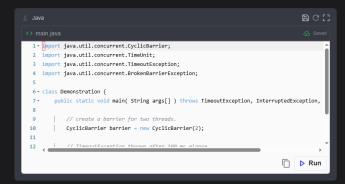
TimeoutException

Learn the reasons that cause TimeoutException to be thrown.

If you are interviewing, consider buying our **number#1** course for <u>Java Multithreading</u> <u>Interviews</u>.

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 cyclicarrier throwing the TimeoutException when the main thread awaits at the barrier for 100 milliseconds.



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.JdiInitiator
- sun.nio.ch.PendingFuture

