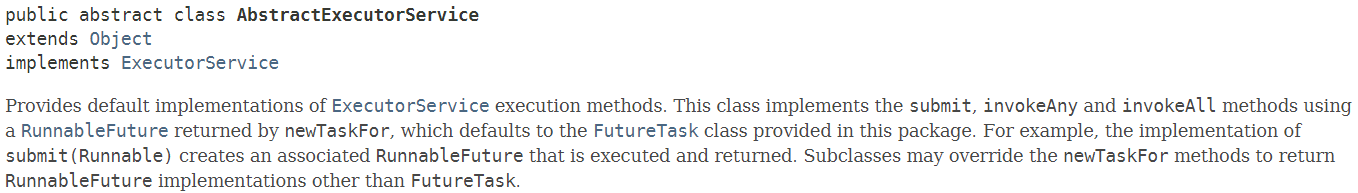
AbstractExecutorService抽象类源码源码阅读

# 接口概述



AbstractExecutorService抽象类提供了ExecutorService接口中一些方法的默认实现。抽象类中主要实现了submit、invokeAny、invokeAll等方法，并且这且方法通过抽象类中实现的newTaskFor方法返回一个RunnableFuture实例作为返回值。子类可以重写newTaskFor方法以返回RunTask以外的RunnableFuture实现。

# 方法概述

|  |  |
| --- | --- |
| **Modifier and Type** | **Method and Description** |
| <T> [**List**](https://docs.oracle.com/javase/8/docs/api/java/util/List.html)<[**Future**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Future.html)<T>> | [**invokeAll**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#invokeAll-java.util.Collection-)([**Collection**](https://docs.oracle.com/javase/8/docs/api/java/util/Collection.html)<? extends [**Callable**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Callable.html)<T>> tasks)  Executes the given tasks, returning a list of Futures holding their status and results when all complete.  （执行给定的任务，并在所有任务完成时返回保存其状态和结果的Future列表。） |
| <T> [**List**](https://docs.oracle.com/javase/8/docs/api/java/util/List.html)<[**Future**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Future.html)<T>> | [**invokeAll**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#invokeAll-java.util.Collection-long-java.util.concurrent.TimeUnit-)([**Collection**](https://docs.oracle.com/javase/8/docs/api/java/util/Collection.html)<?extends [**Callable**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Callable.html)<T>> tasks, long timeout, **[TimeUnit](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/TimeUnit.html" \o "enum in java.util.concurrent)** unit)  Executes the given tasks, returning a list of Futures holding their status and results when all complete or the timeout expires, whichever happens first.  （执行给定的任务，并在所有任务完成或超时到期时（以先发生者为准）返回持有其状态和结果的Future列表。） |
| <T> T | [**invokeAny**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#invokeAny-java.util.Collection-)([**Collection**](https://docs.oracle.com/javase/8/docs/api/java/util/Collection.html)<? extends [**Callable**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Callable.html)<T>> tasks)  Executes the given tasks, returning the result of one that has completed successfully (i.e., without throwing an exception), if any do. |
| <T> T | [**invokeAny**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#invokeAny-java.util.Collection-long-java.util.concurrent.TimeUnit-)([**Collection**](https://docs.oracle.com/javase/8/docs/api/java/util/Collection.html)<? extends [**Callable**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Callable.html)<T>> tasks, long timeout, **[TimeUnit](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/TimeUnit.html" \o "enum in java.util.concurrent)** unit)  Executes the given tasks, returning the result of one that has completed successfully (i.e., without throwing an exception), if any do before the given timeout elapses. |
| protected <T> **[RunnableFuture](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/RunnableFuture.html" \o "interface in java.util.concurrent)**<T> | [**newTaskFor**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#newTaskFor-java.util.concurrent.Callable-)([**Callable**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Callable.html)<T> callable)  Returns a RunnableFuture for the given callable task.  （返回给定可调用任务的RunnableFuture） |
| protected <T> **[RunnableFuture](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/RunnableFuture.html" \o "interface in java.util.concurrent)**<T> | [**newTaskFor**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#newTaskFor-java.lang.Runnable-T-)([**Runnable**](https://docs.oracle.com/javase/8/docs/api/java/lang/Runnable.html) runnable, T value)  Returns a RunnableFuture for the given runnable and default value. |
| <T> [**Future**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Future.html)<T> | [**submit**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#submit-java.util.concurrent.Callable-)([**Callable**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Callable.html)<T> task)  Submits a value-returning task for execution and returns a Future representing the pending results of the task.  （提交带返回值的要执行任务，返回一个Future，表示任务的未决结果） |
| [**Future**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Future.html)<?> | [**submit**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#submit-java.lang.Runnable-)([**Runnable**](https://docs.oracle.com/javase/8/docs/api/java/lang/Runnable.html) task)  Submits a Runnable task for execution and returns a Future representing that task. |
| <T> [**Future**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/Future.html)<T> | [**submit**](https://docs.oracle.com/javase/8/docs/api/java/util/concurrent/AbstractExecutorService.html#submit-java.lang.Runnable-T-)([**Runnable**](https://docs.oracle.com/javase/8/docs/api/java/lang/Runnable.html) task, T result)  Submits a Runnable task for execution and returns a Future representing that task. |