



SOFTWARE ARCHITECTURES



Future ^[1]

A Future is the result of asynchronous computation.

Future<V>

V might be; Integer, String, etc.

isDone() Returns **true** if this task completed.

isCancelled() Returns **true** if this task was cancelled before it completed normally.

get() Waits if necessary for the computation to complete, and then **retrieves its result**.

[1] <https://docs.oracle.com/javase/7/docs/api/java/util/concurrent/Future.html>

Executor Service ^[2] and Executors ^[3]

An Executor that provides methods to manage termination and methods that can produce a Future for tracking progress of one or more asynchronous tasks.

newSingleThreadExecutor()

Creates an Executor that uses a single worker thread operating off an unbounded queue.

submit()

Submits a value-returning task for execution and returns a Future representing the pending results of the task. The Future's get method will return the task's result upon successful completion.

[2] <https://docs.oracle.com/javase/7/docs/api/java/util/concurrent/ExecutorService.html>

[3] <https://docs.oracle.com/javase/7/docs/api/java/util/concurrent/Executors.html>