CompletableFuture

Creation

CompletableFuture.supplyAsync(someSupplier);

Returns a CompletableFuture that asynchronously completes the provided supplier

CompletableFuture.runAsync(someRunnableTask)

Returns a CompletableFuture that asynchronously completes the provided runnable task

CompletableFuture.completedFuture(someValue)

Returns an already completed CompletableFuture containing the given value

CompletableFuture is a Future that may be explicitly completed (setting its value and status), and may be used as a CompletionStage, supporting dependent functions and actions that trigger upon its completion.

Callbacks

.thenAccept(Consumer);

Returning a CompletionStage where provided Consumer is added as a callback on preceding computation

.thenApply(Function);

Returning a CompletionStage where provided Function is added as a callback on preceding computation

.exceptionally(FunctionHandlingThrowable);

Returning a CompletionStage where provided Function is added as a callback if preceding computation result in an exception

.thenCombine(otherComputation, BiFunction);

Returning a CompletionStage where provided BiFunction is added as a callback on preceding computation and the provided computation when both are done

.acceptEither(otherComputation, Consumer);

Returning a CompletionStage where provided Consumer is added as a callback on the calculation - either preceding computation or the provided computation - that finishes first