

Table 6.1 Adding an Action to a CompletableFuture<T> Object

| Method        | Parameter                 | Description  |
|---------------|---------------------------|--|
| thenRun       | () -> void                | Execute the Runnable with void result.   |
| thenAccept    | T -> void                 | Like thenApply, but with void result.  |
| thenApply     | T -> U                    | Apply a function to the result.  |
| thenCompose   | T -> CompletableFuture<U> | Invoke the Future valued function on the result and return its Future when it completes. |
| whenComplete  | (T, Throwable) -> void    | Like handle, but with void result.   |
| handle        | (T, Throwable) -> U       | Process the result or error.   |
| exceptionally | Throwable -> T            | Process the error.   |

Table 6.2 Combining a CompletableFuture<T> Object with a CompletableFuture<U> Object

| Method         | Parameters                           | Description   |
|----------------|--------------------------------------|---|
| runAfterBoth   | CompletableFuture<?>, () -> void     | Execute the Runnable after both Futures complete.                                   |
| thenAcceptBoth | CompletableFuture<U>, (T, U) -> void | Like thenCombine, but with void result.   |
| thenCombine    | CompletableFuture<U>, (T, U) -> V    | When results are available from both Futures, combine them with the given function. |
| runAfterEither | CompletableFuture<?>, () -> void     | Execute the Runnable after one or the other Future completes.                       |
| acceptEither   | CompletableFuture<T>, T -> void      | Like applyToEither, but with void result.   |
| applyToEither  | CompletableFuture<T>, T -> V         | When a result is available from either Future, pass it to the given function.       |
| static allOf   | CompletableFuture<?>...              | Complete with void result after all given Futures complete.                         |
| static anyOf   | CompletableFuture<?>...              | Complete with void result after any given Future completes.                         |