

Creating Observables

asObservable	convert various objects into Observables
create	create an Observable from scratch
deferred	create an Observable for each subscription
from (array)	convert an array into Observable
of	
empty	emit no items; terminates normally
error	emit no items; terminates with an error
never	emit no items; does not terminate
interval	emit a sequence of integers spaced by a given time interval
just	emit a particular item
range	emit a particular range of sequential integers
repeatElement	emit a particular item multiple times
t	
timer	emit a particular item after a given delay

Combining Observables

merge	combine multiple Observables into one by merging their emissions
startWith	emit a specified sequence of items before others from source
switchLatest	convert an Observable that emits Observables into a single Observable that emits the items emitted by the most-recently-emitted of those Observables
combineLatest	combine the latest item emitted by each Observable
zip	combine the emissions of multiple Observables together

Observable Utility Operators

delaySubscription	shift the emissions forward in time by a particular amount
do / doOnNext	register an action to take upon Observable lifecycle events
observeOn / observeSingleOn	specify the Scheduler on which an observer will observe
subscribe	operate upon the emissions and notifications from an Observable
subscribeOn	specify the Scheduler on which an Observable will operate
timeout	abort when no item emitted during a specified span of time
using	create a disposable resource that has the same lifespan as the Observable
debug	

Connectable Observable Operators

multicast	
publish	convert an ordinary Observable into a connectable Observable
refCount	make a Connectable Observable behave like an ordinary Observable
replay	ensure that all observers see the same sequence of emitted items
shareReplay	



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 Page 1 of 2.

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Transforming Observables

buffer	periodically gather items into bundles
flatMap	transform the items into Observables and merge them into a single one
flatMapFirst	
flatMapLatest	
map	transform the items by an Observable applying a function to each item
scan	apply a function to each item sequentially, and emit each successive value
window	periodically subdivide items into Observables

Filtering Observables

debounce / throttle	filters out items rapidly followed by another item
distinctUntilChanged	suppress duplicate items
elementAt	emit only item n
filter	emit only those items that pass a predicate test
sample	emit the most recent items since the previous sampling
skip	suppress the first n items
take	emit only the first n items
takeLast	emit only the final n items
single	emit only the first item

Conditional and Boolean Operators

amb	emit all of the items from only the first to emit an item or notification
skipWhile	discard items until a specified condition becomes false
skipUntil	discard items until a second Observable emits an item
takeWhile	mirror items until a specified condition becomes false
takeUntil	discard any items after a second Observable emits an item or terminates

Error Handling Operators

catch	recover from error by continuing the sequence without error
retry	resubscribe to source when error
retryWhen	

Mathematical and Aggregate Operators

concat	emit the emissions from two or more Observables without interleaving them
reduce / aggregate	apply a function to each item sequentially, and emit the final value
toArray	convert an Observable into an array



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