

**Observable** : Observables are lazy Push collections of multiple values

**Observer**: An Observer is a consumer of values delivered by an Observable.

**What is a Subscription?** : A Subscription is an object that represents a disposable resource, usually the execution of an Observable. A Subscription has one important method, `unsubscribe`, that takes no argument and just disposes the resource held by the subscription. In previous versions of RxJS, Subscription was called "Disposable".

**Subject** : A Subject is like an Observable, but can multicast to many Observers. Subjects are like EventEmitters: they maintain a registry of many listeners.

**What is a Scheduler?** A scheduler controls when a subscription starts and when notifications are delivered. It consists of three components.

- **A Scheduler is a data structure.** It knows how to store and queue tasks based on priority or other criteria.
- **A Scheduler is an execution context.** It denotes where and when the task is executed (e.g. immediately, or in another callback mechanism such as `setTimeout` or `process.nextTick`, or the animation frame).
- **A Scheduler has a (virtual) clock.** It provides a notion of "time" by a getter method `now()` on the scheduler. Tasks being scheduled on a particular scheduler will adhere only to the time denoted by that clock.

### **Observable operators:**

**Empty** : Creates an Observable that emits no items to the Observer and immediately emits a complete notification.

**From**: Creates an Observable from an Array, an array-like object, a Promise, an iterable object, or an Observable-like object.

**FromEvent**: Creates an Observable that emits events of a specific type coming from the given event target

**OF** : Converts the arguments to an observable sequence.

**Range** : Creates an Observable that emits a sequence of numbers within a specified range.

**Timer** : Creates an Observable that starts emitting after an `dueTime` and emits ever increasing numbers after each `period` of time thereafter.

**Concat** : Concatenates multiple Observables together by sequentially emitting their values, one Observable after the other.

**Merge**: Flattens multiple Observables together by blending their values into one Observable.

**GroupBy** : Groups the items emitted by an Observable according to a specified criterion, and emits these grouped items as `GroupedObservable`

**Map**: Like `Array.prototype.map()`, it passes each source value through a transformation function to get corresponding output values.

**Pluck** : Like `map`, but meant only for picking one of the nested properties of every emitted object.

**SwitchMap** : Maps each value to an Observable, then flattens all of these inner Observables.

**Filter** : Like `Array.prototype.filter()`, it only emits a value from the source if it passes a criterion function.

**First**: Emits only the first value. Or emits only the first value that passes some test.

**Last** : Returns an Observable that emits only the last item emitted by the source Observable.

**Single** : Returns an Observable that emits the single item emitted by the source Observable that matches a specified predicate, if that Observable emits one such item.

**Skip** : Returns an Observable that skips the first `count` items emitted by the source Observable.

**Take** : Emits only the first `count` values emitted by the source Observable.

**Find** : Finds the first value that passes some test and emits that.

**FindIndex** : It's like `find`, but emits the index of the found value, not the value itself.

**IsEmpty** : Tells whether any values are emitted by an observable

**Count** : Tells how many values were emitted, when the source completes.

**Max** : The Max operator operates on an Observable that emits numbers

**Min**: The Min operator operates on an Observable that emits numbers