

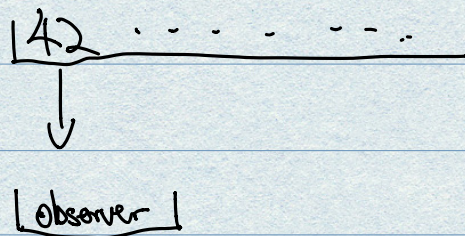
Lecture #3 Reactive Language (Rx)

RxJS.

Push-pull duality

- Iterable: sequence iterate over and pull elements
- Observable: sequence notifying when a new element is available. It pushes the value to the observer.

Basics: Observable / Observer.



Subscribe (func(next), func(err), func())
 ↑ ↑ ↑
 onNext onError onComplete.

for-loop like sequence generator:

Rx.Observable.GenerateWithTime(

initial,

func(i) return test(i) ← test

func(i) return op(i) ← incr.

func(i) return op(i) ← value.

func(i) return op(...) ← wait time.

Events and Asynchrony

document \rightarrow observable \rightarrow select

\rightarrow where \rightarrow observer.

Throttle \rightarrow block requests.

Asynchrony with the Server

Int \rightarrow Observable [Int]

Wikipedia case:

String \rightarrow Observable [Array [String]].