

The Future of ReactiveCocoa

@jspahrsummers

RAC 3.0

Hot *or* Cold?

.NET offers:

IEnumerable

IEnumerator

IObservable

IObserver

Observer

Event -> ()

Observable

(Event -> ()) -> ()

Duals?

Flip the arrows!

???

() -> Event

Enumerator
() -> Event

Enumerable

() -> (() -> Event)

Push:

Event \rightarrow ()

(Event \rightarrow ()) \rightarrow ()

Pull:

() \rightarrow Event

() \rightarrow (() \rightarrow Event)

But why is enumeration
blocking
in a reactive framework?

Enumerator v1
() -> Event

Enumerator v2

() -> Promise Event

Push:

Event \rightarrow ()

(Event \rightarrow ()) \rightarrow ()

Pull:

() \rightarrow Promise Event

() \rightarrow (() \rightarrow Promise Event)

Promises allow work to be performed
out-of-order & asynchronously
when and where the caller wants

Observables and Enumerables are:

✓ **Monadic**

✓ **Modular**

✓ **Asynchronous**

Observables are driven by the
producer

Enumerables are controlled by the
consumer

Observables are the *same* to all
observers

Enumerables are enumerated
independently

Observables are *always live*

Enumerables *start new work* with
each enumeration

~~Hot signals~~ **Observables**
~~Cold signals~~ **Enumerables**

Questions?