Part I -

Introduction

spring.io Notes on Reactive Programming Part I: The Reactive Landscape, (??) .

- ?
- Java
- ?

Prerequisite

- (Object Oriented Programming)
- (Functional Programming)
- (Functional Reactive Programming, FRP)
- (Lambda Expression)
- JSDK 8

Reactive Streams initiative

1970, (?), (?), (??) .

- (Spreadsheet) (Cell)

(FRP (??)) .

GUI

(??)
(FRP), IO, FRP: (Reactive Model) FRP (synchronous). 

"?".

(External Service Call)

REST (HTTP) (blocking) (synchronous). FRP, FRP. (IO), FRP.

(Highly Concurrent Message Consumers)

JVM 1. for J.

(SpreadSheet)

B A, C A B. B C A?

() (Abstraction Over (A)synchronous Processing)

Netflix Tech Blog: Functional Reactive in the Netflix API with RxJava

Ruby (Ruby Event-Machine)

(IO). Ruby 1.2.3. Ruby (Ruby 1.9). Fibers (Ruby). Fiber (Ruby, Fiber).

Actor Model


(Deferred results) (Futures)

Java 1.5 Doug Lea java.util.concurrent, Future. Functional Reactive in the Netflix API with RxJava, Future.

- (Map-reduce and fork-join)

- Java, (MapReduce Hadoop) JDK 1.7(Fork-Join). FRP (shallow). FRP, (composability) (declaritive communication).

(Coroutines)

"(coroutine)" (subroutine) - (entry point) (exit point) (Stream) (Fiber) (Generator).
Java

Java JVM (Clojure), Java 9, Java, JDK (reactive layer).

Reactive Streams

Reactive Streams, Java Technology Compatibility Kit, (back pressure) Publisher Subscriber, Reactive Stream JDK 9 java.util.concurrent.Flow, Kaazing, Typesafe.

RxJava

RxJava, Netflix/RxJava RxJava Groovy, Java (Lambda) Java 8 Reactive Stream RxJava David Karnok Reactive 2.

Reactor


Spring Framework 5.0

Spring Framework 5.0, HTTP, HTTP (decorate), Reactor, (Reactor RxJava) API, Tomcat, Jetty, (Reactor IO) Netty, Undertow.

Ratpack

Ratpack HTTP, Netty (interoperability) Reactive Stream, Reactive Stream, (auto-configuration) SpringBoot Spring Boot, Ratpack HTTP.

Akka

Akka Java, Akka Reactive Stream (interprocess communication), Akka David Karnok Reactive 3.

References

- https://spring.io/blog/2016/06/07/notes-on-reactive-programming-part-i-the-reactive-landscape
- http://techblog.netflix.com/2013/02/rxjava-netflix-api.html

- Part I - (SYS4U OPEN WIKI)
  - spring
  - reactive
  - reactor

- Part II - (SYS4U OPEN WIKI)
  - reactive
  - reactor
  - spring

- (Reactive Programming) (SYS4U OPEN WIKI)
  - reactive
1. Reactive Programming

- reactive
- springboot
- rp
- asynchronous
- non-blocking
- immutable
- fp
- functional-programming
- frp
- functional-reactive-programming

Related Information

- http://terms.naver.com/entry.nhn?docId=861249&cid=42346&categoryId=42346