

# Reactive Spring

Full-stack reactive with Spring 5, Spring Boot 2, & Project Reactor

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# Who am I?

- Author
- Speaker
- Architect & Developer
- Java Champion
- Seeker of a better way





“In a nutshell reactive programming is about **non-blocking, event-driven applications** that **scale with a small number of threads** with **backpressure as a key ingredient** that aims to ensure producers do not overwhelm consumers.”

*–Rossen Stoyanchev, Project Reactor team*



# Reactive Streams: 4 interfaces

- ✧ Publisher<T>
- ✧ Subscriber<T>
- ✧ Subscription
- ✧ Processor<T,R>



# Project Reactor: a quick overview



## REACTIVE CORE

Reactor is a **fully non-blocking** foundation with efficient demand management. It directly interacts with Java 8 *functional API*, *Completable Future*, *Stream* and *Duration*.



## TYPED [0|1|N] SEQUENCES

Reactor offers 2 reactive **composable API** Flux [N] and Mono [0|1] extensively implementing Reactive Extensions.



## NON BLOCKING IPC

Suited for **Microservices** Architecture, Reactor IPC offers **backpressure-ready network engines** for HTTP (including Websockets), TCP and UDP. Reactive Encoding/Decoding is fully supported.



# Let's code!



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# Helpful resources

- ✦ <http://www.reactive-streams.org>
- ✦ <https://projectreactor.io>
- ✦ <https://github.com/mkheck/flux-flix-intro>
- ✦ <https://github.com/joshlong/flux-flix-service>



# Thanks for coming!

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