Reactive Streams Using Spring WebFlux 5

Experiencing Reactive Programming

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Reactive Streams Using Spring WebFlux 5

Version Check

Version Check

This version was created by using:

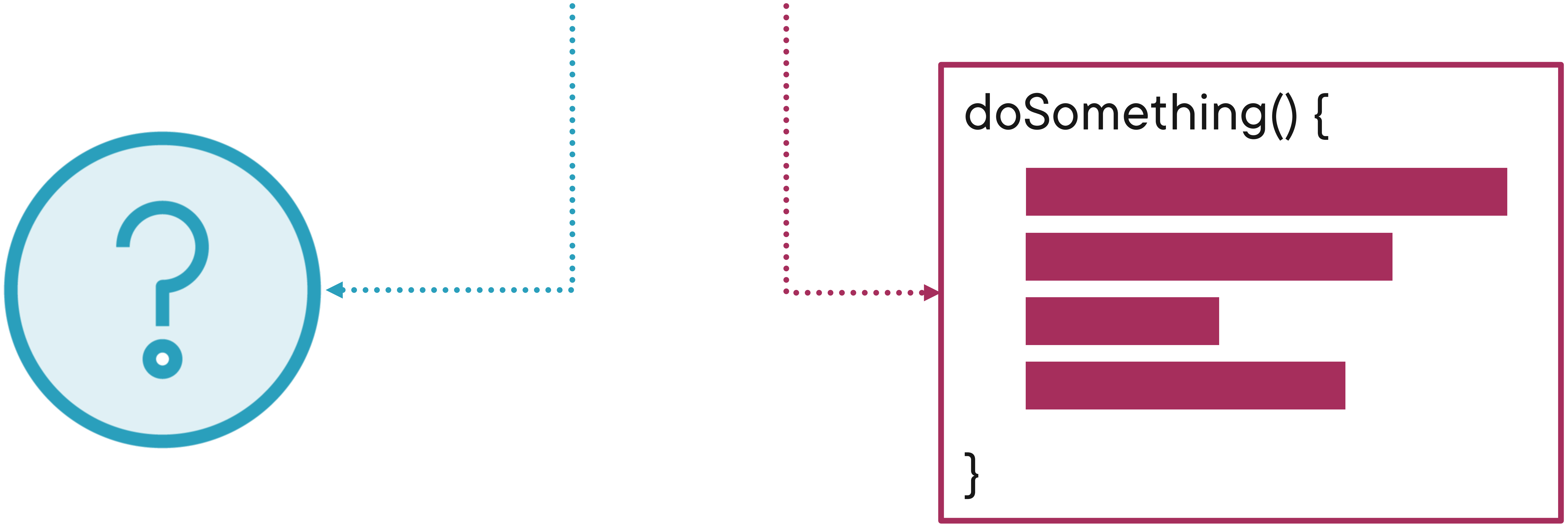
- Spring Boot 2.6.3
- Spring WebFlux 5.3.15
- Java 17

Version Check

This course is 100% applicable to:

- Spring Boot 2.0 through Spring Boot 2.6
- Spring WebFlux 5.0 through Spring WebFlux 5.3
- Java 8 through Java 17

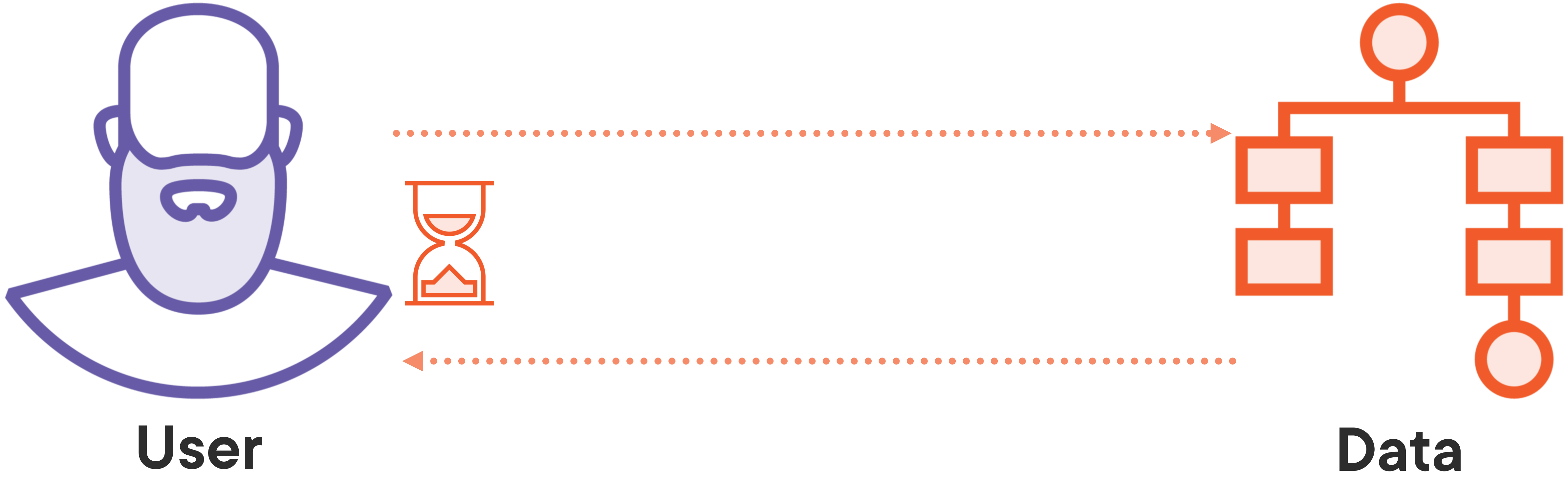
Reactive Programming

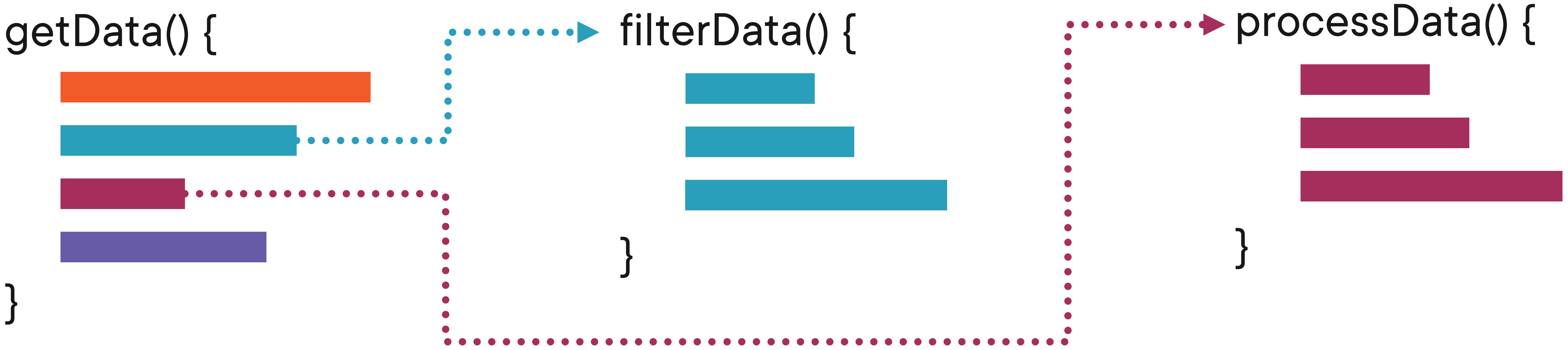


```
doSomething() {

}
```

Imperative Programming





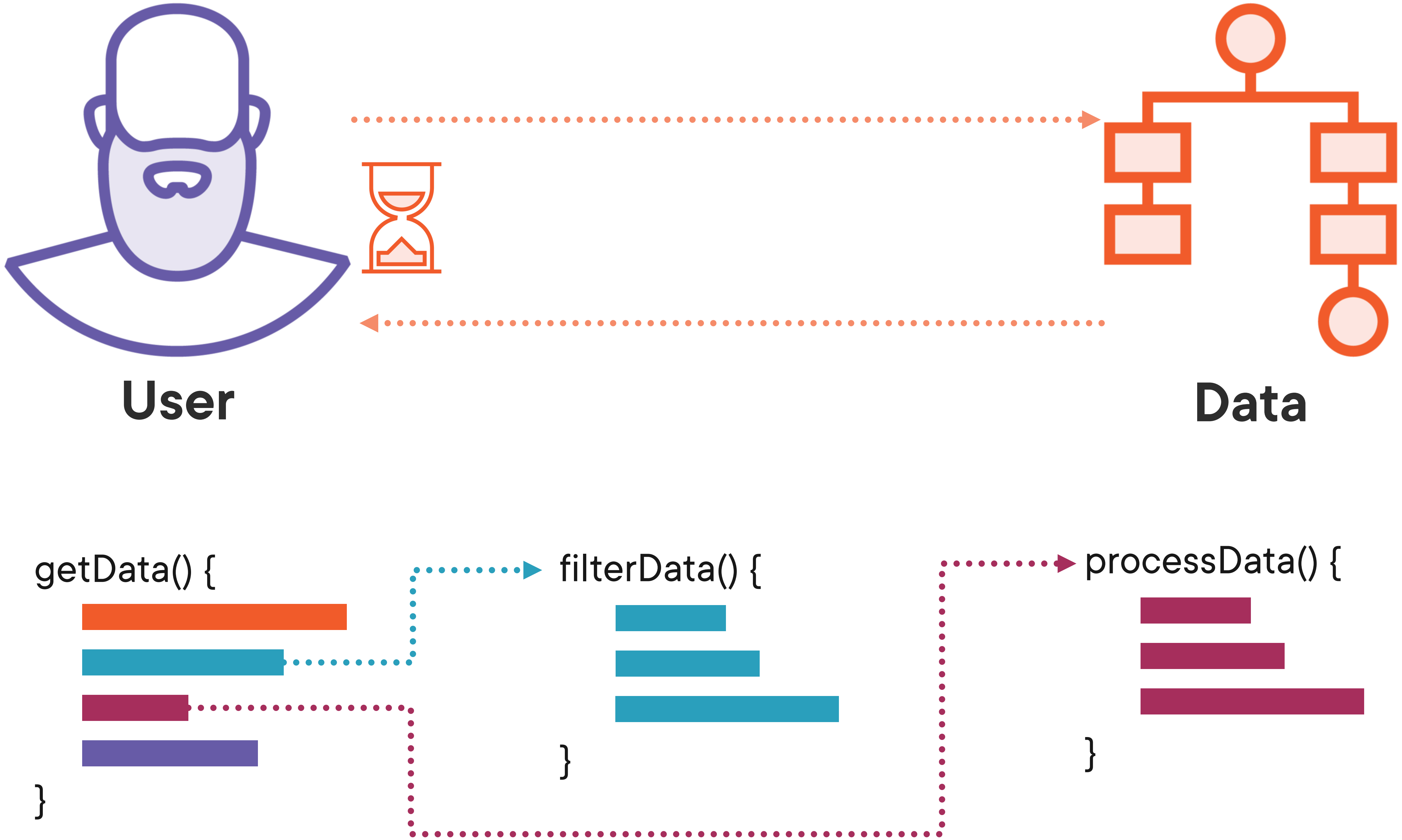
Reactive Programming

Non-blocking asynchronous components

Data streams

Functional programming

Reactive Programming



User

Data

getData() {

}

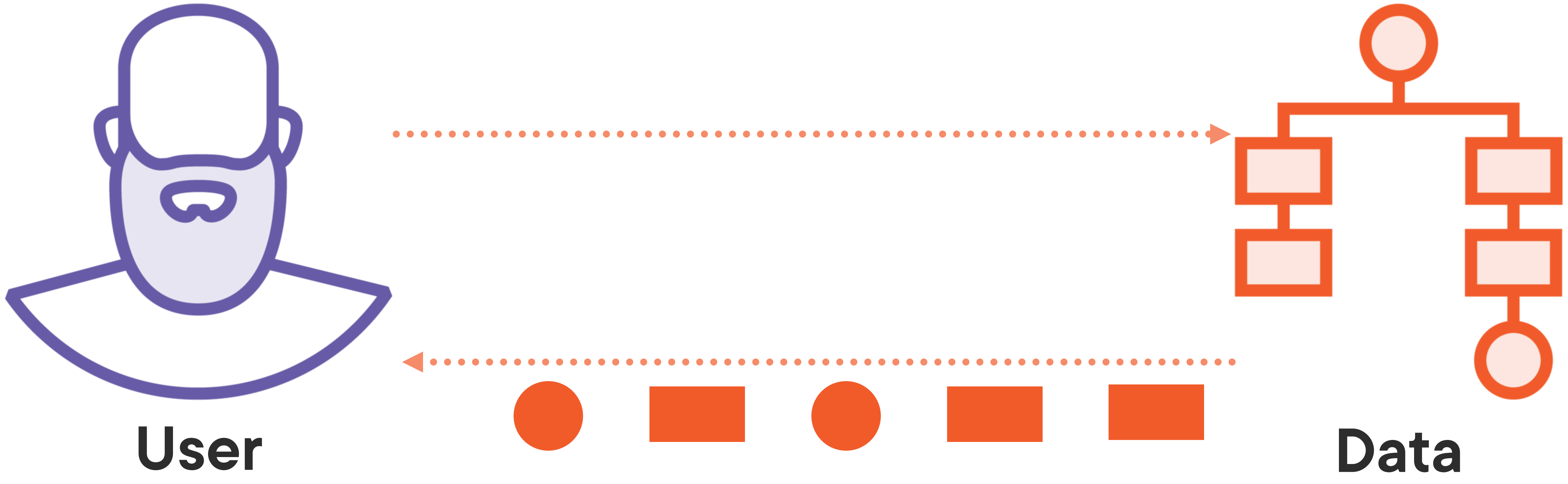
filterData() {

}

processData() {

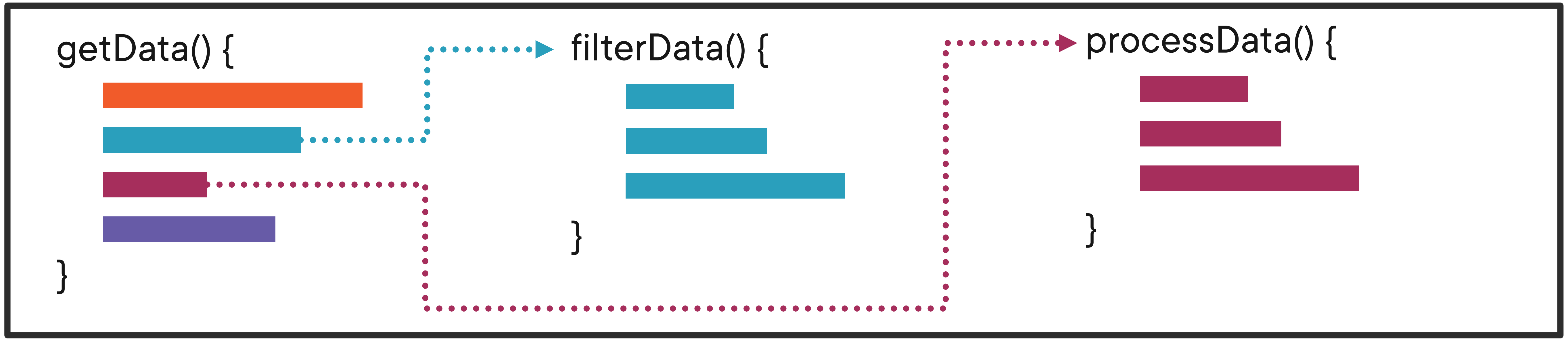
}

Reactive Programming



User

Data



getData() {

}

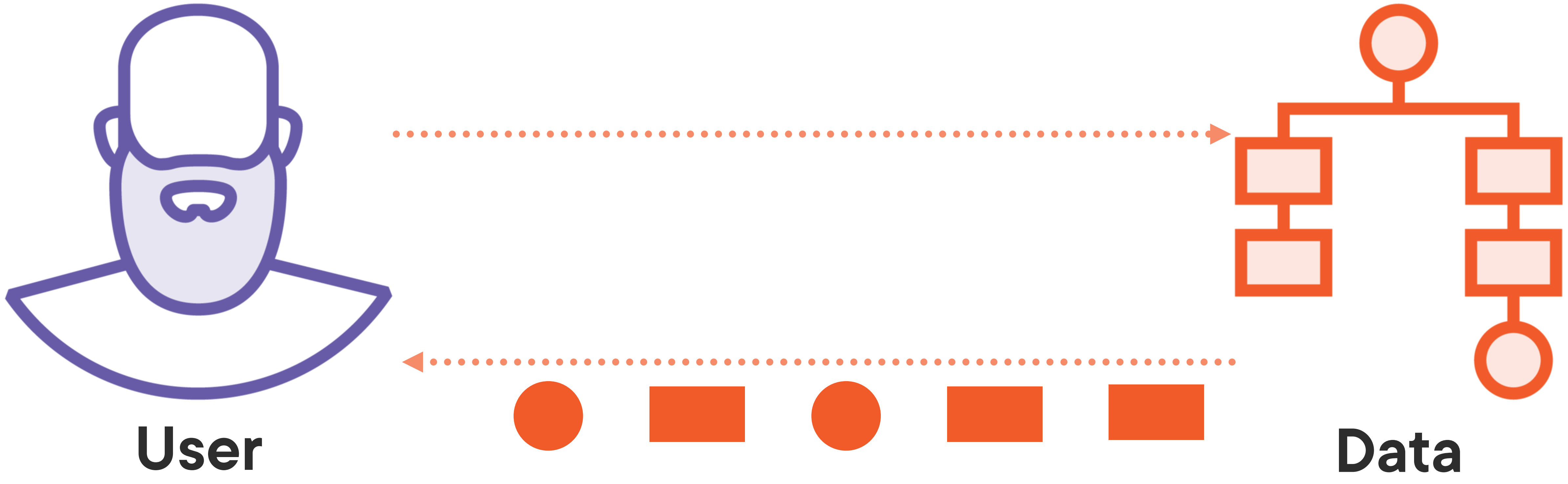
filterData() {

}

processData() {

}

Reactive Programming



```
getData() {
    ▬▬▬▬▬▬
        .filter( ▬▬▬▬▬▬ )
        .process( ▬▬▬▬▬ )
        .return( ▬▬▬▬▬ )
}
```

Reactive Programming Use Cases

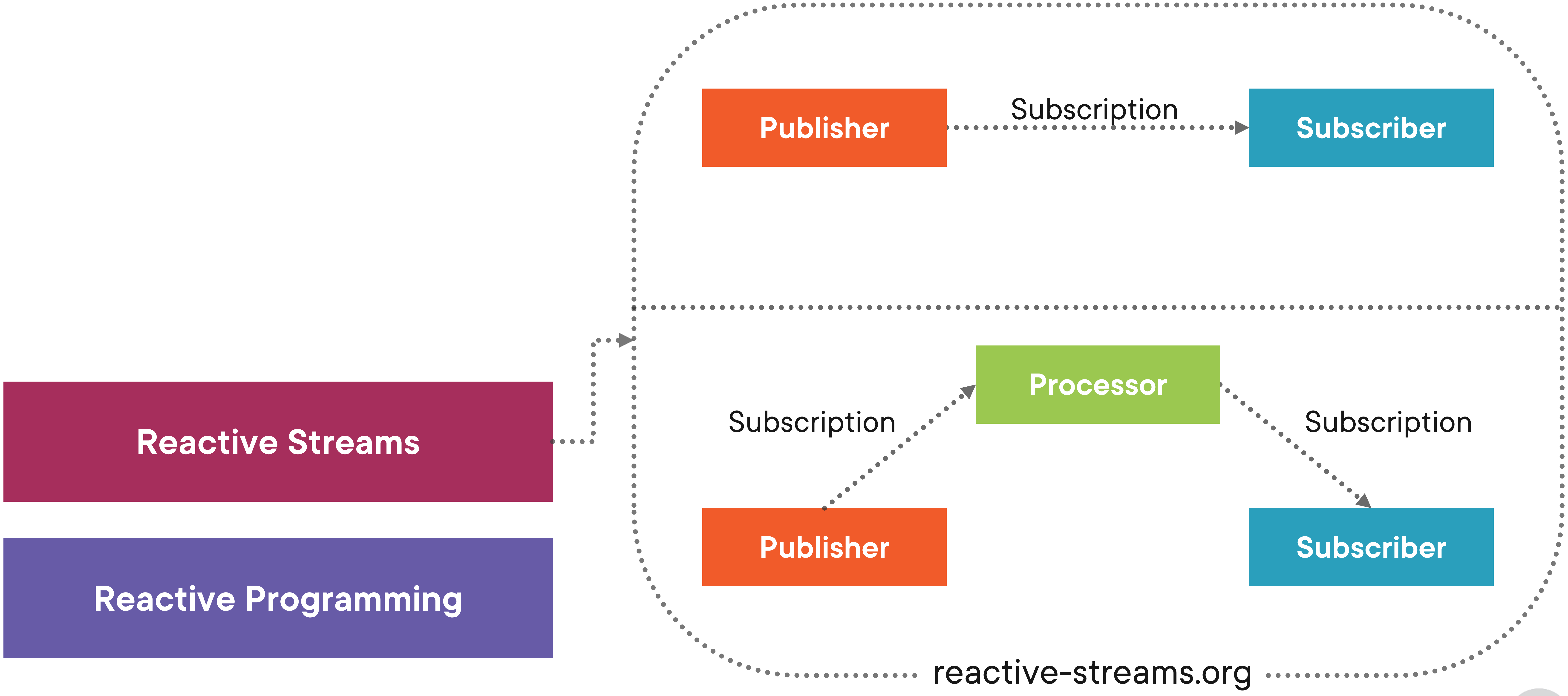
I/O operations

UI controllers

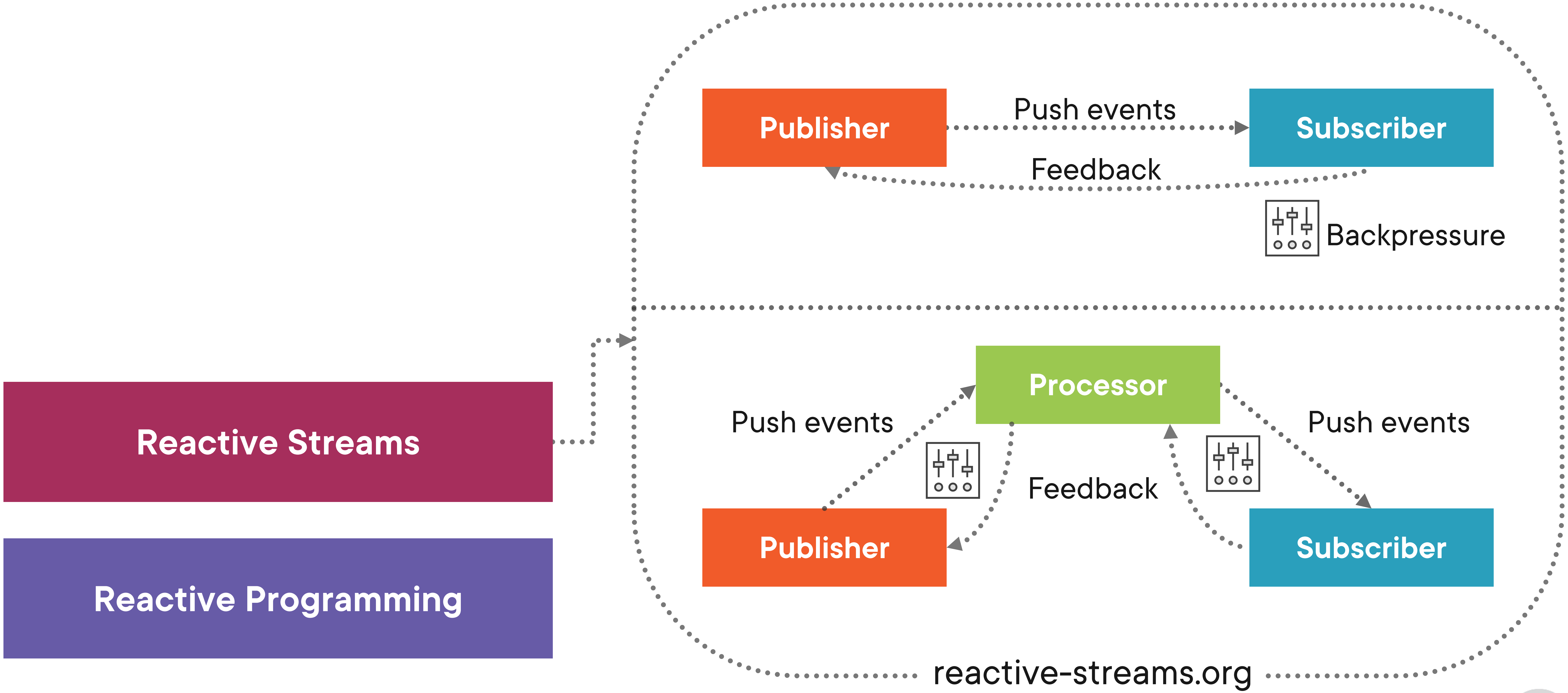
Internet of Things

Spring WebFlux

Spring WebFlux



Spring WebFlux



Reactive Streams

Reactive Programming

Publisher

Push events

Subscriber

Feedback

Backpressure

Processor

Push events

Push events

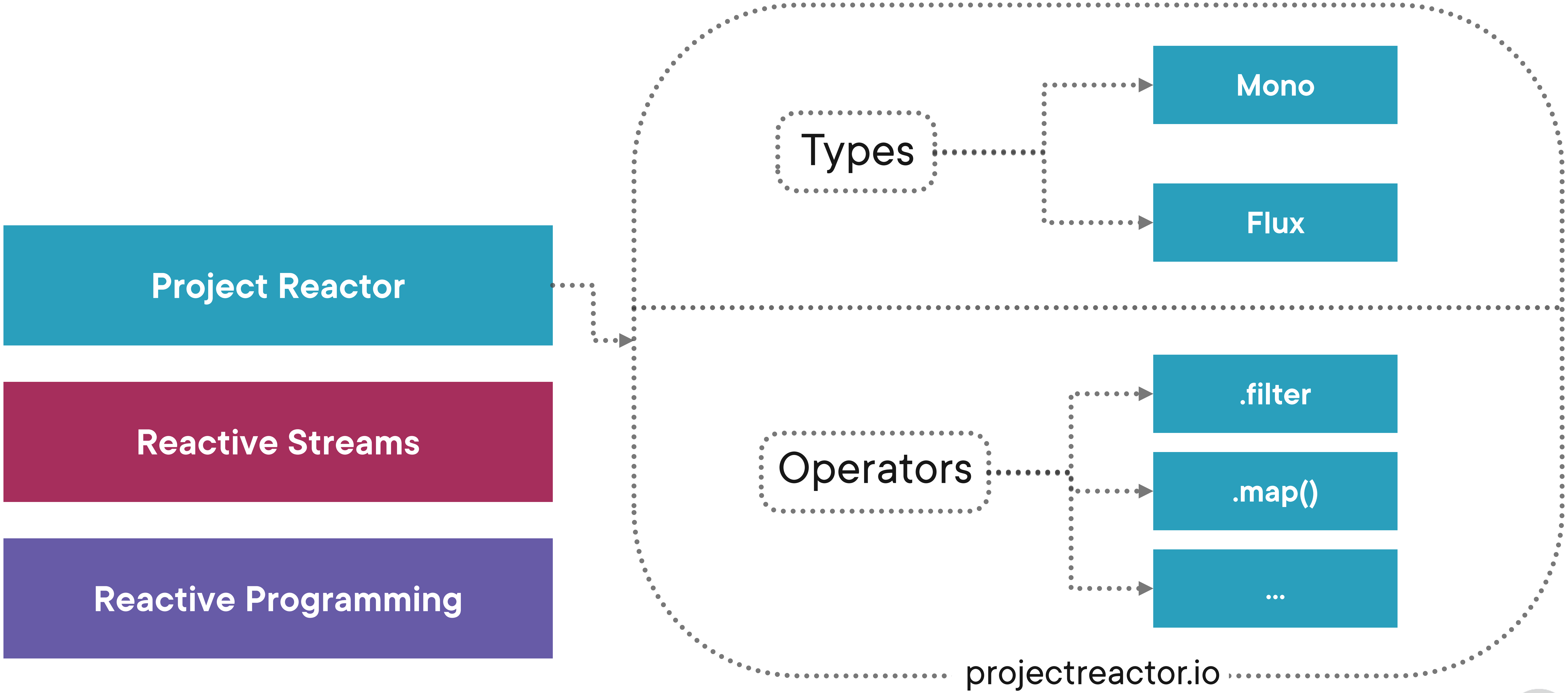
Feedback

Publisher

Subscriber

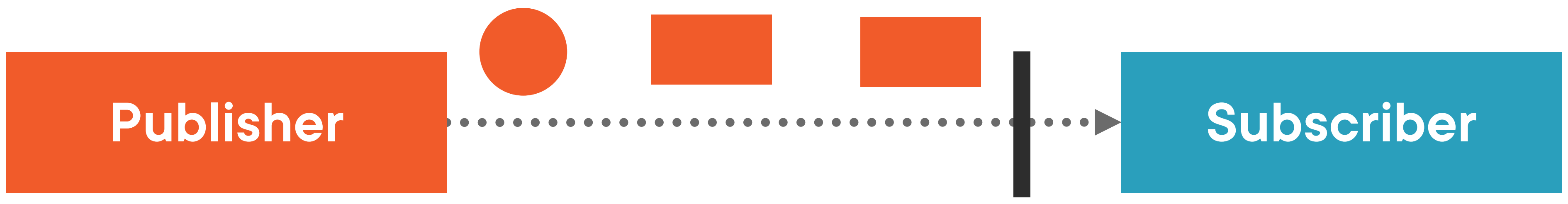
reactive-streams.org

Spring WebFlux



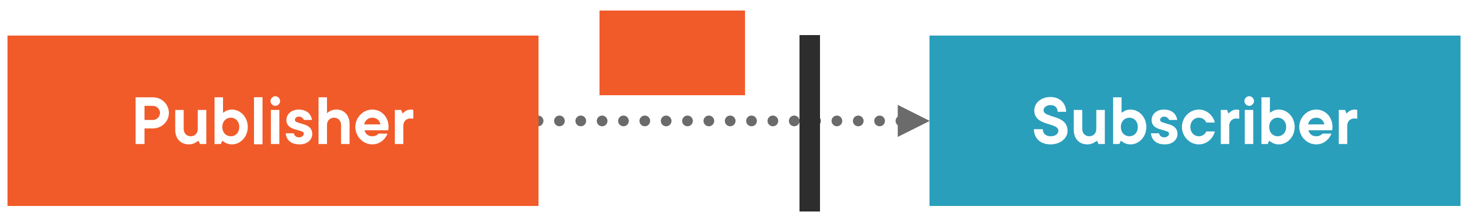
Project Reactor Types

Flux



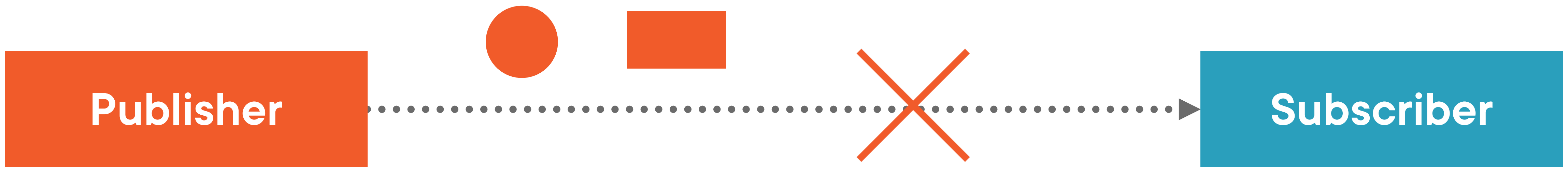
.onSubscribe()
.onNext(●)
.onNext(■)
.onNext(■)
.onComplete( )

Mono



.onSubscribe()
.onNext(■)
.onComplete( )

Project Reactor Types



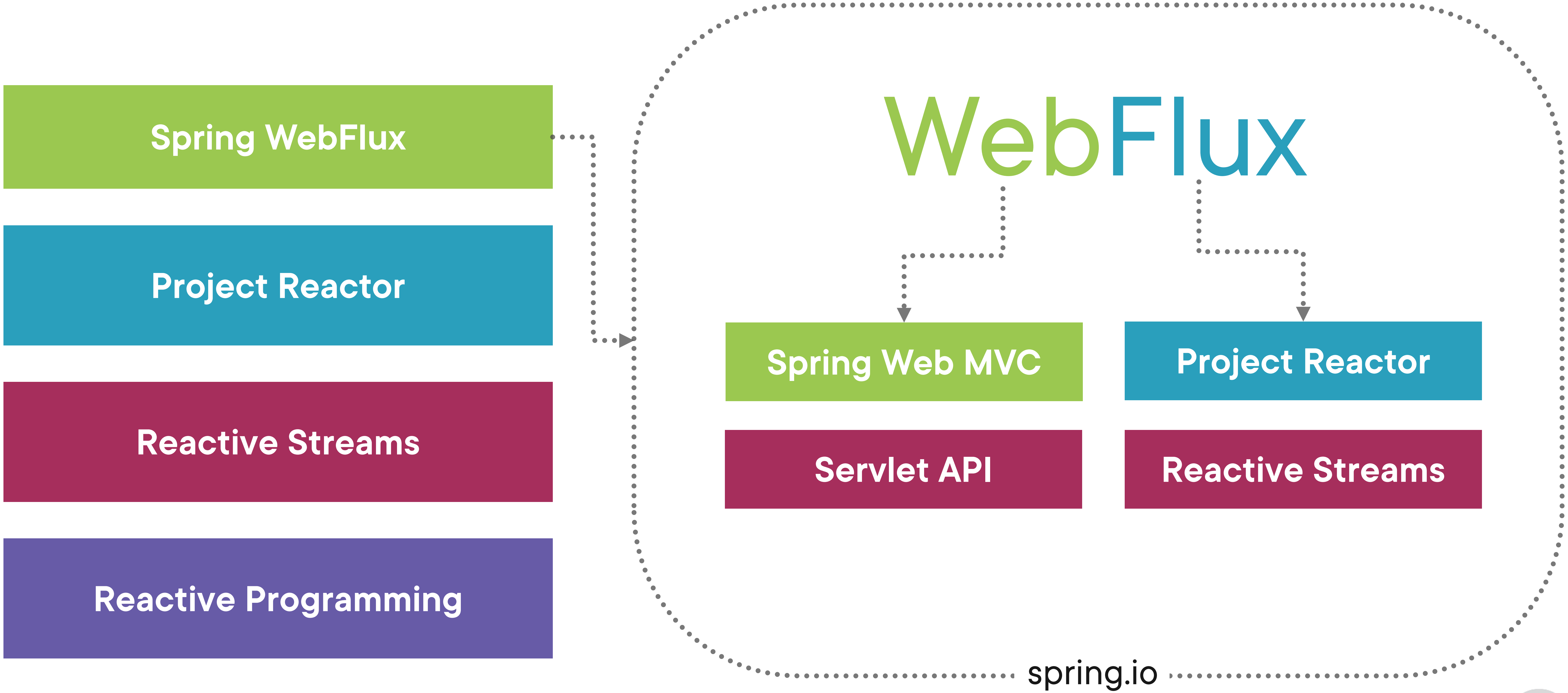
.onSubscribe()

.onNext(●)

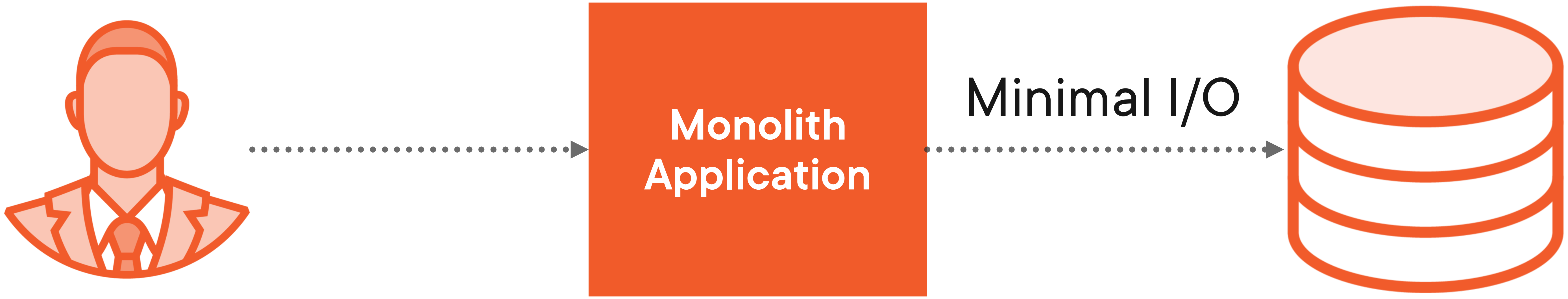
.onNext(▬)

.onError( )

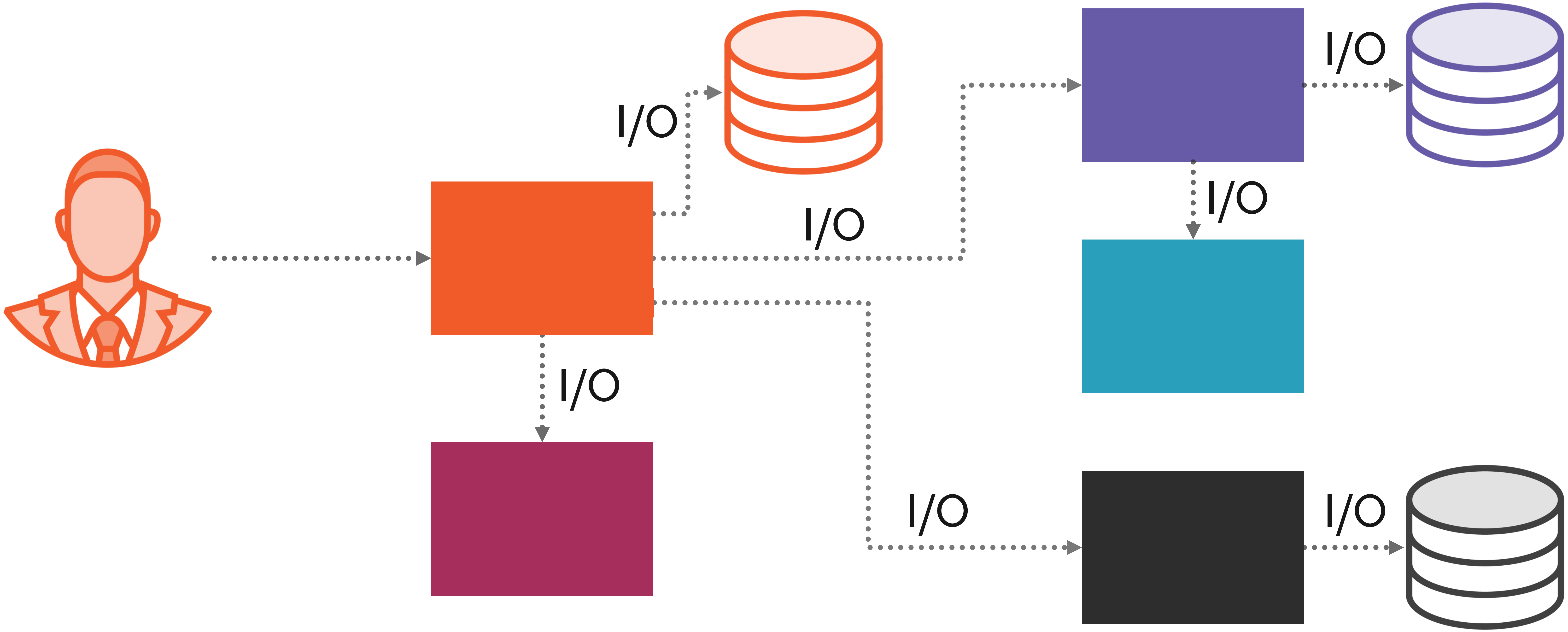
Spring WebFlux



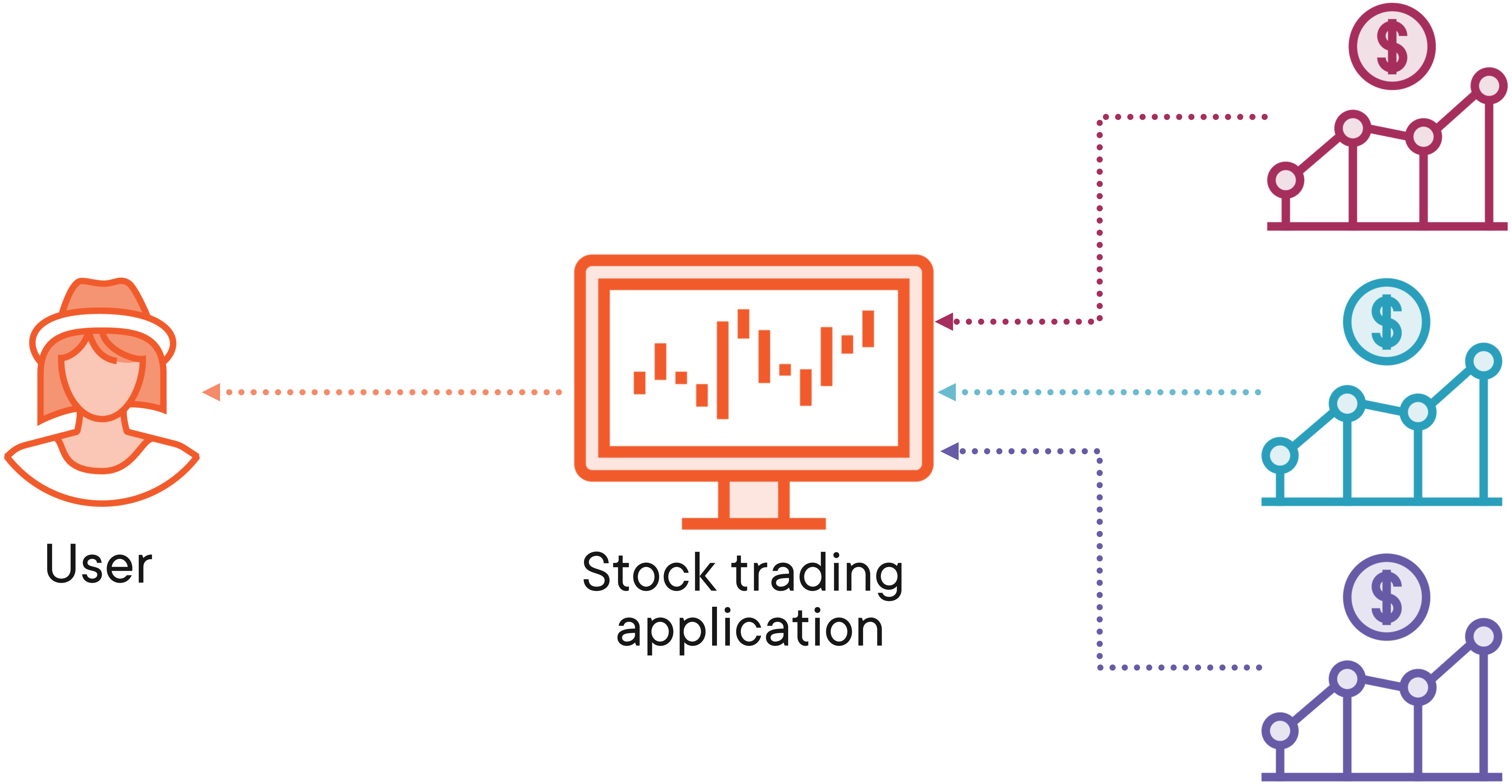
Spring WebFlux



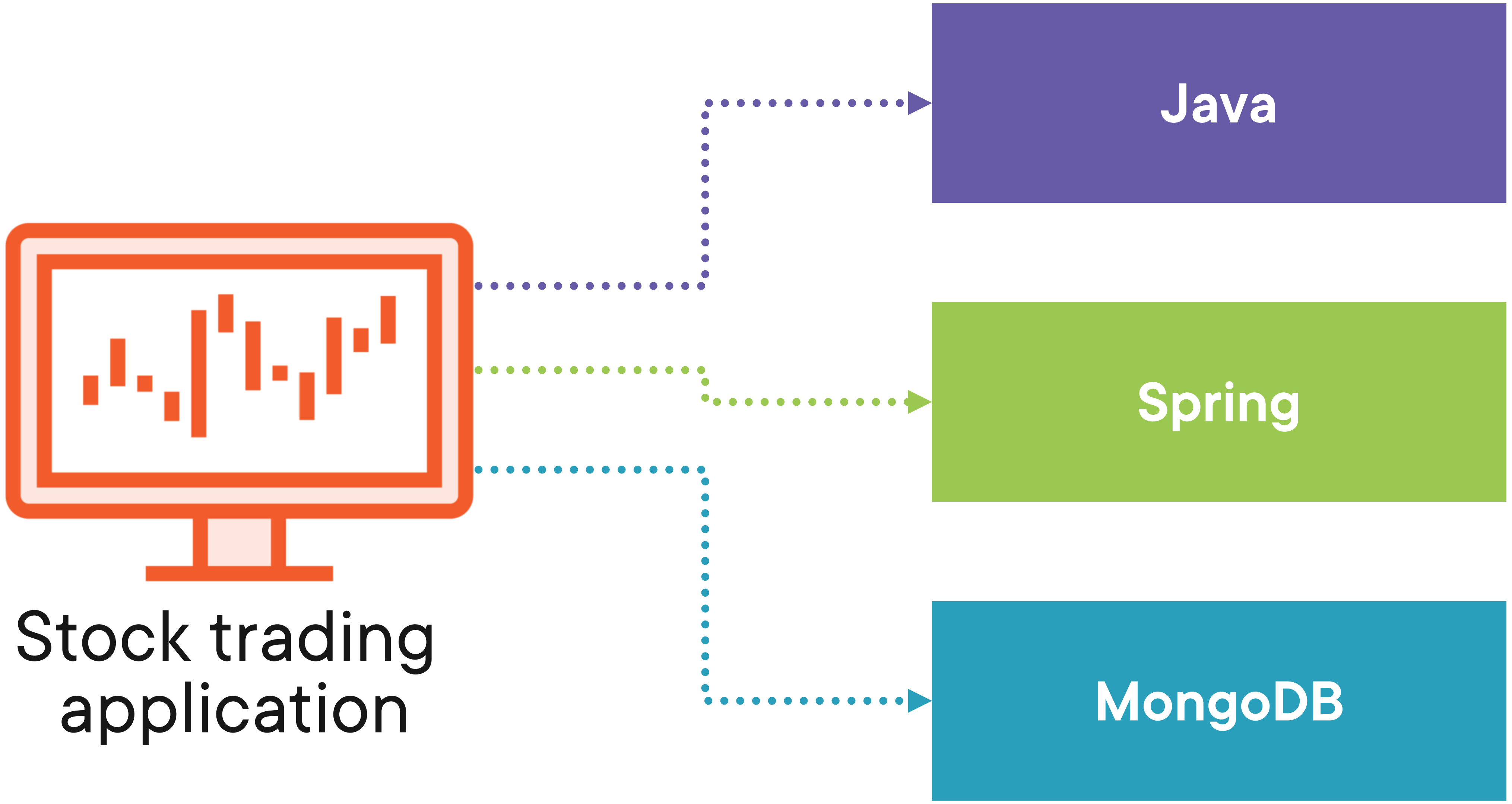
Spring WebFlux in Microservices



Globomantics



Prerequisites



Stock trading application

Java

Spring

MongoDB

Demo

Set up Spring WebFlux 5 project

Build reactive endpoints

Prerequisites:

- Java 17
- Gradle 7

Up Next:
Building Reactive Applications