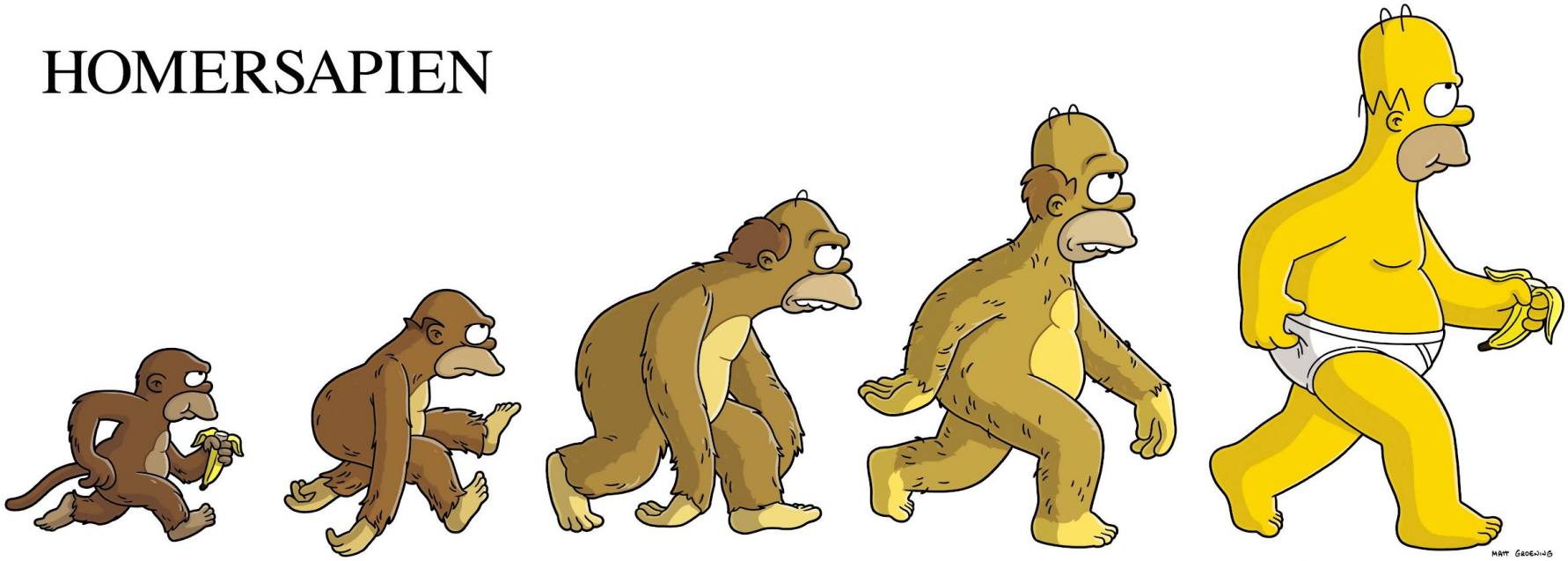
Spring Boot 2.0: Introduction to Reactive Programming

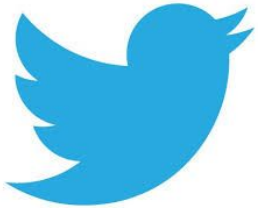
@rob_winch

HOMERSAPIEN

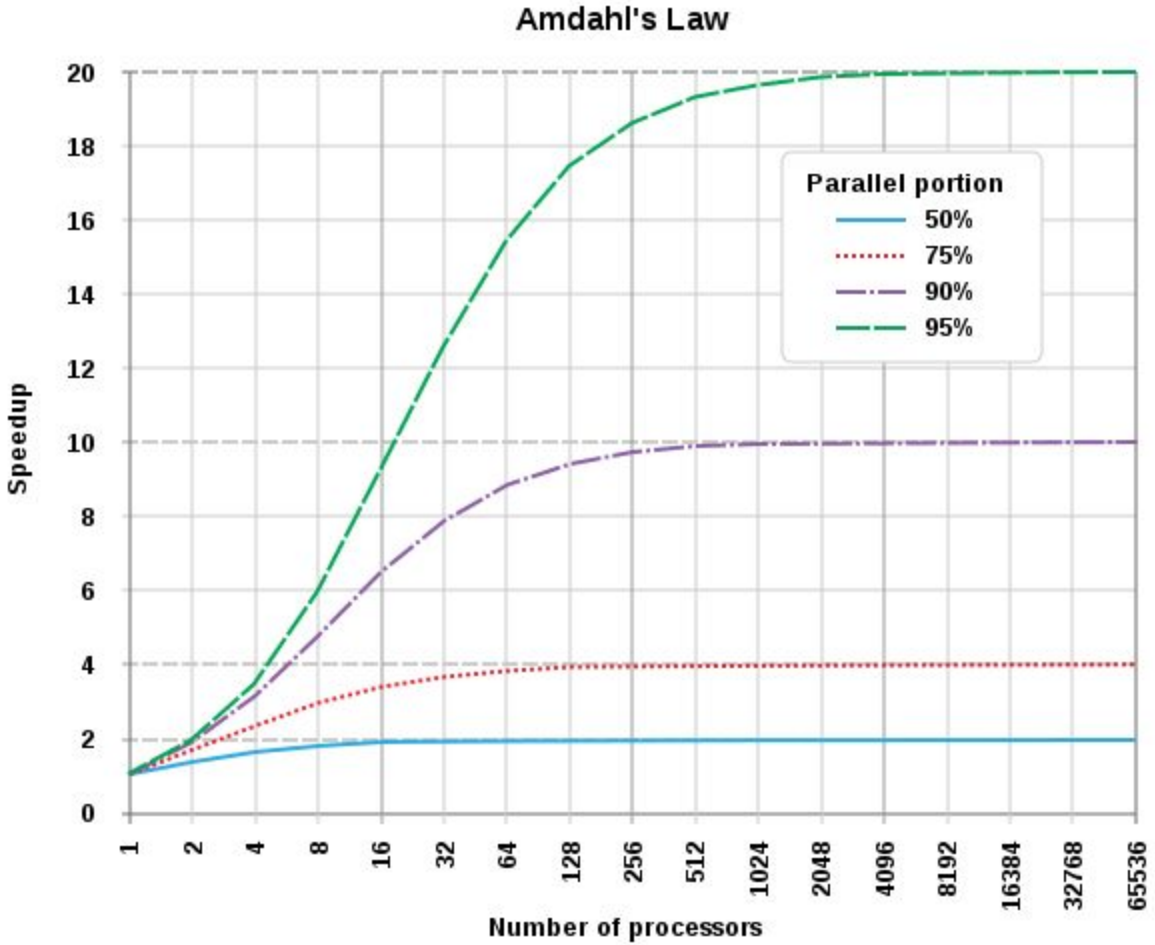


Problems with Threading

- Threads waste resources (memory)
- Context Switching Decreases Performance
- Threads underutilize resources (CPU)



Google Cloud Platform



Adding **blocking code** will impact the performance of your code

Monolithic vs Microservices

Monolithic

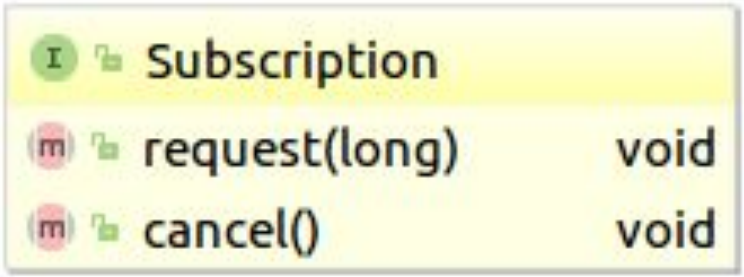
Microservices

What is Reactive?

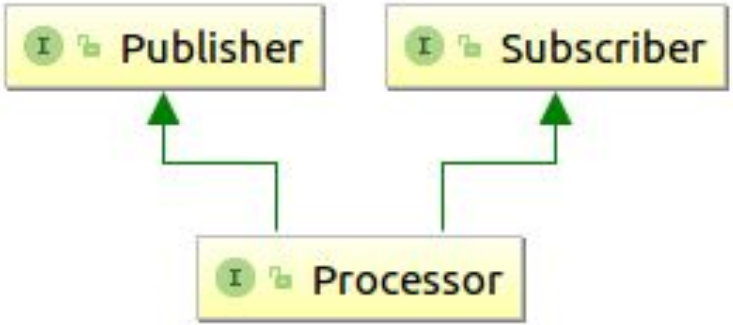
Reactive Manifesto

- Responsive
- Resilient
- Elastic
- Message Driven

Reactive Streams

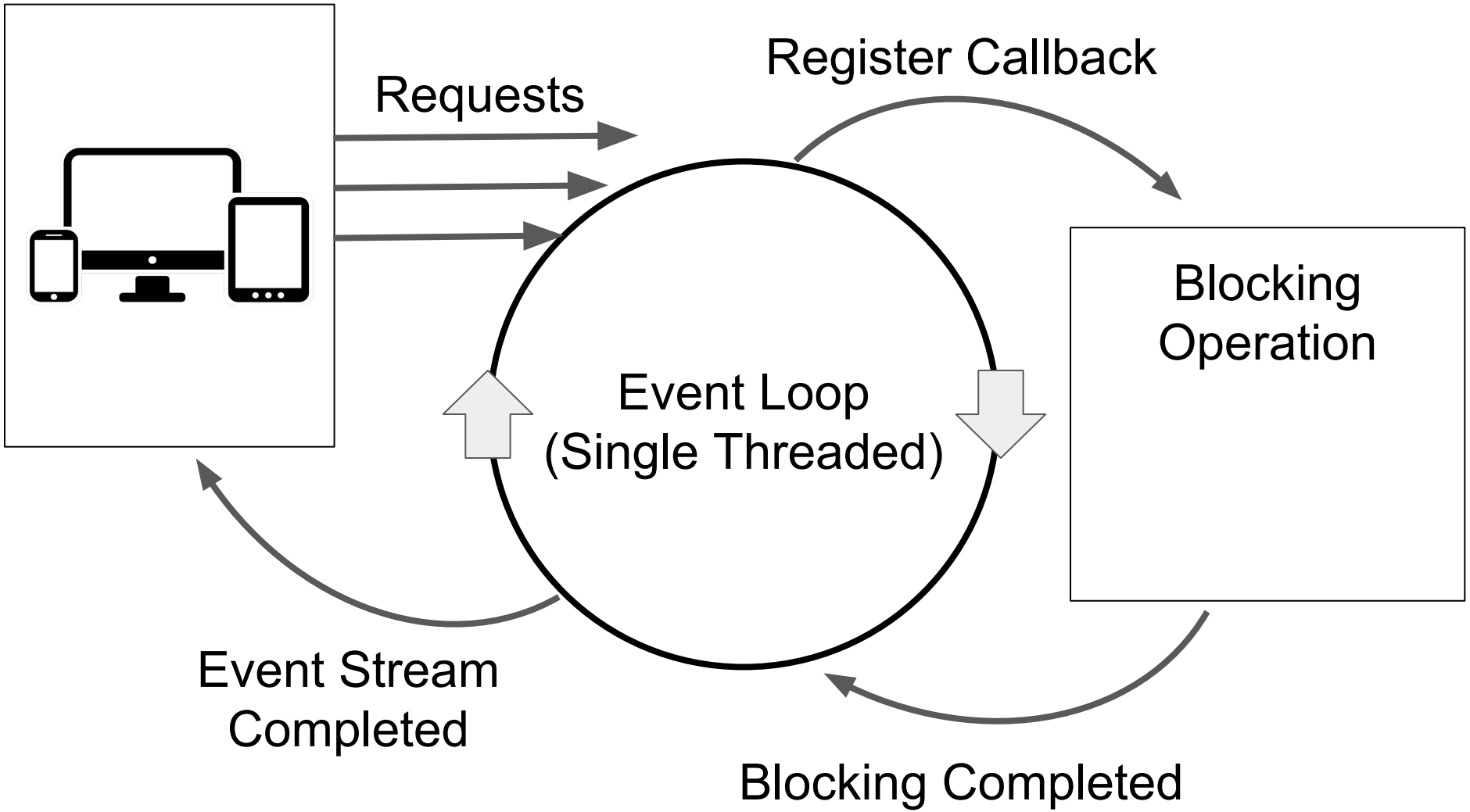


Reactive Streams



Reactive Streams Implementations

- Akka
- MonogoDB
- Ratpack
- Reactive Rabbit
- Reactor
- RxJava
- Slick
- Vert.x


Requests
Register Callback
Blocking
Operation
Event Loop
(Single Threaded)
Event Stream
Completed
Blocking Completed

Demo