

mgray@pivotal.io ~ >>> \$ cat /etc/bootiful\_reactive.m4v

Bootiful Reactive Testing & CDC w/ Spring Boot 2

mgray@pivotal.io ~ >>> \$ whoami

Name: Mario Gray

Role: Developer Advocate / Principal Technologist

Twitter: @mariogray

Code/Github: <https://www.github.com/marios-code-path/bootiful-testing>

Today's Demo: "streamy-09-10-19"

mgray@pivotal.io ~ >>> \$ history | xargs jobs

... more history ...

++++ Plugs

AFA <https://spring.io/blog/2018/02/13/spring-cloud-contract-in-a-polyglot-world>

DIY <https://medium.com/@jshvarts/read-marble-diagrams-like-a-pro-3d72934d3ef5>

mgray@pivotal.io >>> \$ cat /etc/whats\_next

## *Test Driven Development !*

- *Helps prevent Engineering Disease*

## *Reactive!*

- *Helps Flow Control and Async Logic /*

## *Test Slices !*

- *Yummy! - Lightens Surface Area of Integration Tests*

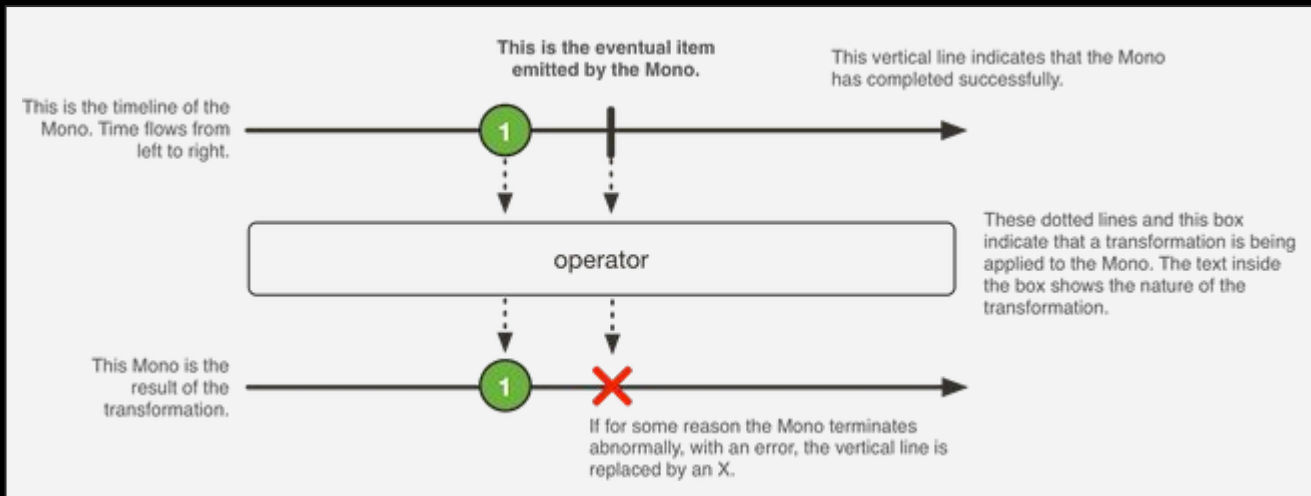
## *Spring Cloud Contracts !*

- *Makes Downstream Consumers Safe and Happy*

mgray@pivotal.io >>> \$ cat /etc/tdd/bobmartin/laws

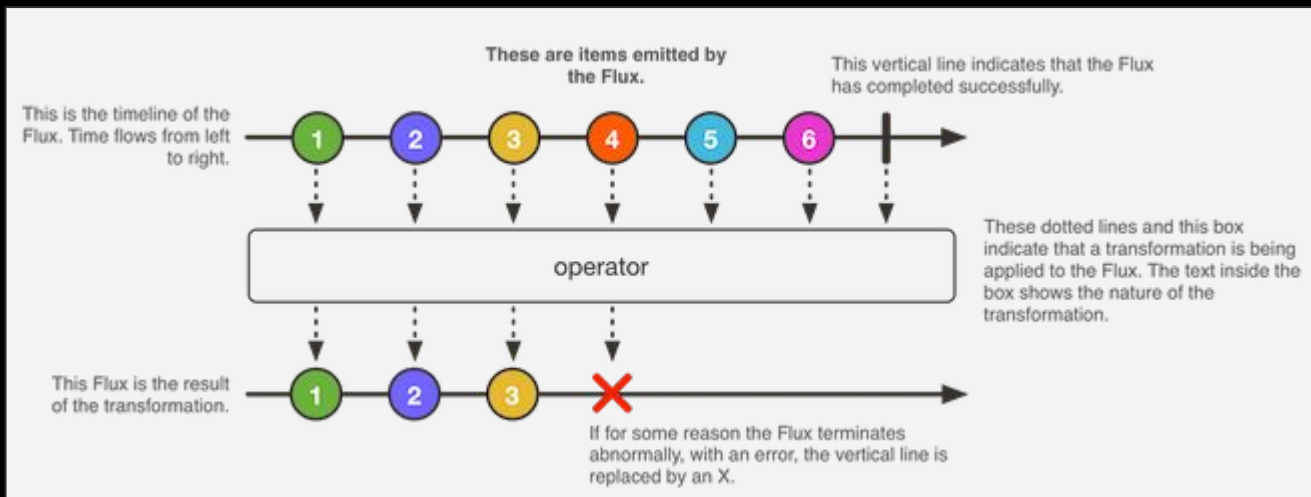
1. *You are not allowed to write any production code unless it is to make a failing unit test pass.*
2. *You are not allowed to write any more of a unit test than is sufficient to fail; and compilation failures are test failures.*
3. *You are not allowed to write any more production code than is sufficient to pass the one failing unit test.*

mgray@pivotal.io ~ >>> \$ cat /etc/reactive/publisher/mono



Source: <https://projectreactor.io/docs/core/snapshot/api/reactor/core/publisher/Mono.html>

mgray@pivotal.io ~ >>> \$ cat /etc/reactive/publisher/flux



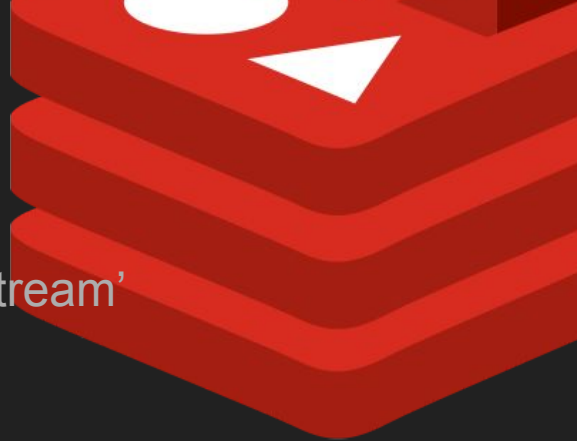
Source: <https://projectreactor.io/docs/core/snapshot/api/reactor/core/publisher/Flux.html>

```
mgray@pivotal.io ~ >>> $ cat /etc/reactive/redis/stream
```

Redis 5.0 introduces a logged data structure known as a 'Stream'

Additional Features include :

- Monotonically incrementing number that provides sub-millisecond write access using sequence numbers.
- Blocking Ops used to wait for new entries in a stream
- Kafka-esq Consumer Groups allowing clients to read from different portions of the stream

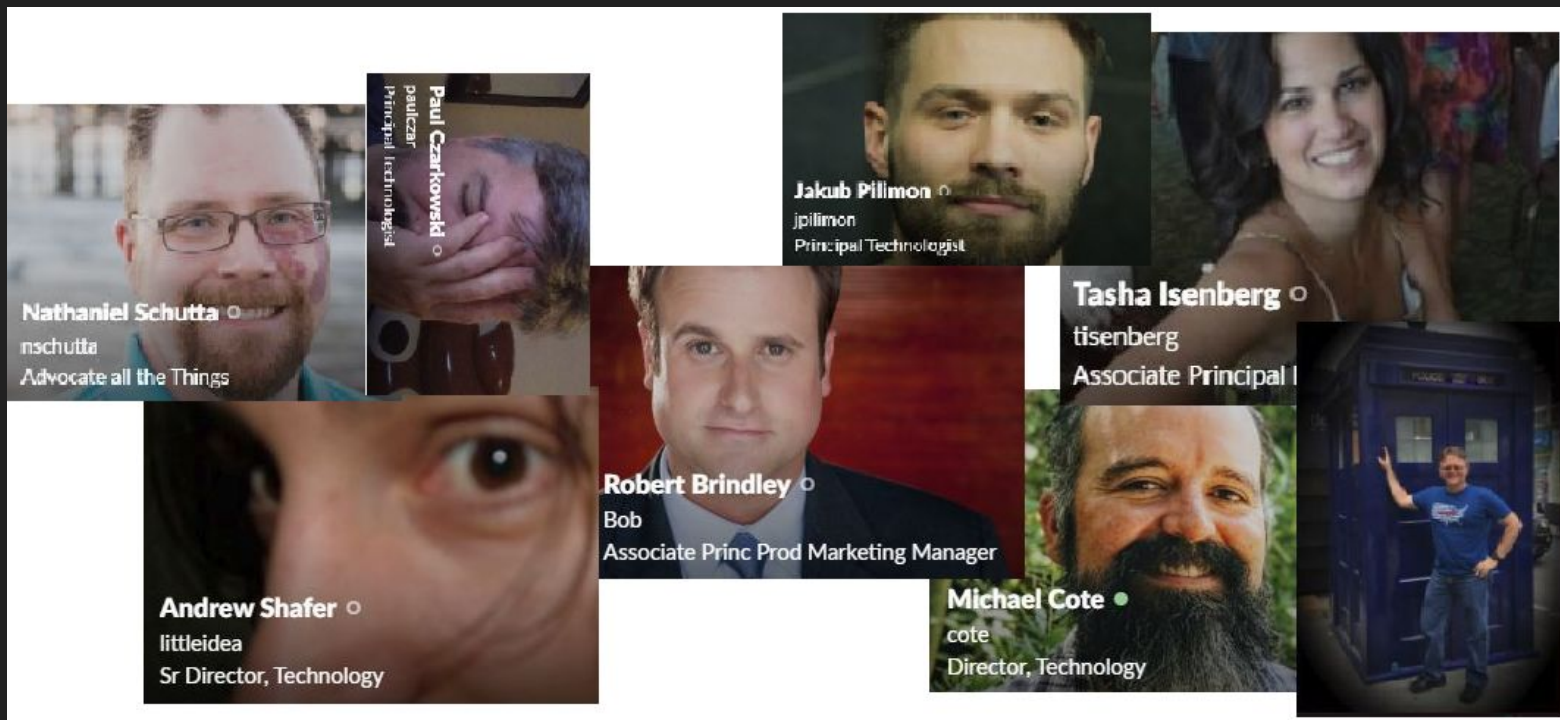


# Demo Time!

(Reactive Data, Web, then CDC)

mgray@pivotal.io ~ >>> \$ cat /etc/issue

Say Hello to V V V (Plus the other “usual suspects”)





```
mgray@pivotal.io ~ >>> $ exit
```

This talk is shutting down in 60 seconds.

Link to this talk: <https://www.github.com/marios-code-path/bootiful-testing>

BLOG: <http://www.sudoinit5.com>

WIP: <http://www.github.com/marios-code-path/demo-chat>

Thanks!

# Questions?

Here are some helpful learning resources:

<https://github.com/reactor/reactor-ipc/blob/master/src/docs/asciidoc/net.adoc>

<https://github.com/reactive-ipc/reactive-ipc-jvm>

<http://www.reactive-streams.org>

[https://cloud.spring.io/spring-cloud-contract/multi/multi\\_\\_spring\\_cloud\\_contract\\_verifier\\_introduction.html](https://cloud.spring.io/spring-cloud-contract/multi/multi__spring_cloud_contract_verifier_introduction.html)

<https://martinfowler.com/articles/201701-event-driven.html>

<http://jonasboner.com/foreword-reactive-design-patterns>

<https://projectreactor.io/docs/core/snapshot/api>

(Marble Diagram Blog POST by: James Shvarts )

<https://medium.com/@jshvarts/read-marble-diagrams-like-a-pro-3d72934d3ef5>

<https://github.com/mkheck/FSRx>

(Intro to Redis Streams!: <https://redis.io/topics/streams-intro>)