



Event streaming applications With Kafka Streams, Spring Kafka and Actuator



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Developer @



You will learn

How to:

- Produce / consume messages --> spring-kafka
- Process big data --> kafka-streams
- Create proper monitoring --> actuator

WARNING

This meeting will contain live coding,
so everything could (potentially) go wrong.



The story.....

IT WAS A NIGHTMARE

TO BE A DEVELOPER (in the 90's)



CORBA

SOAP



REST

but it's slow.....



Let's do async

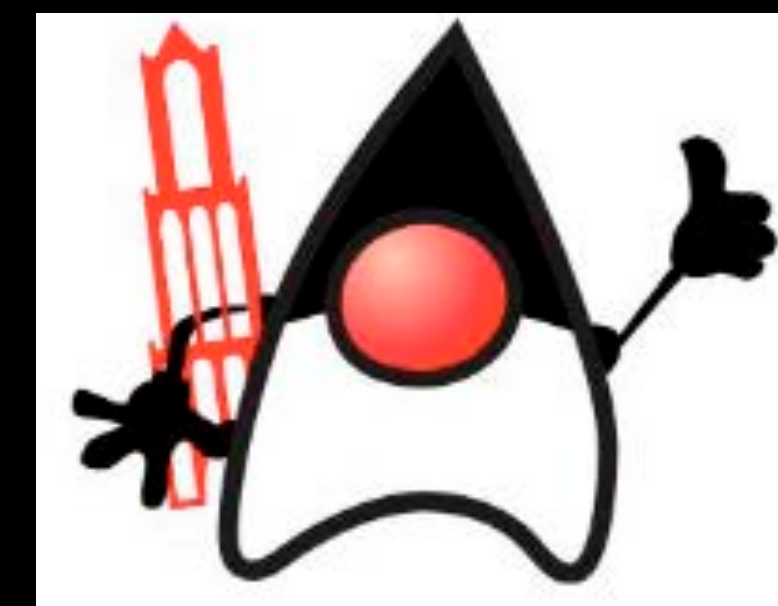
With Apache Kafka!

EVENT STREAMING APPLICATIONS

With Kafka Streams, Spring Kafka and Actuator

MARRIED

WITH
CHILDREN



@KOTURK77

but first, why???

event streaming

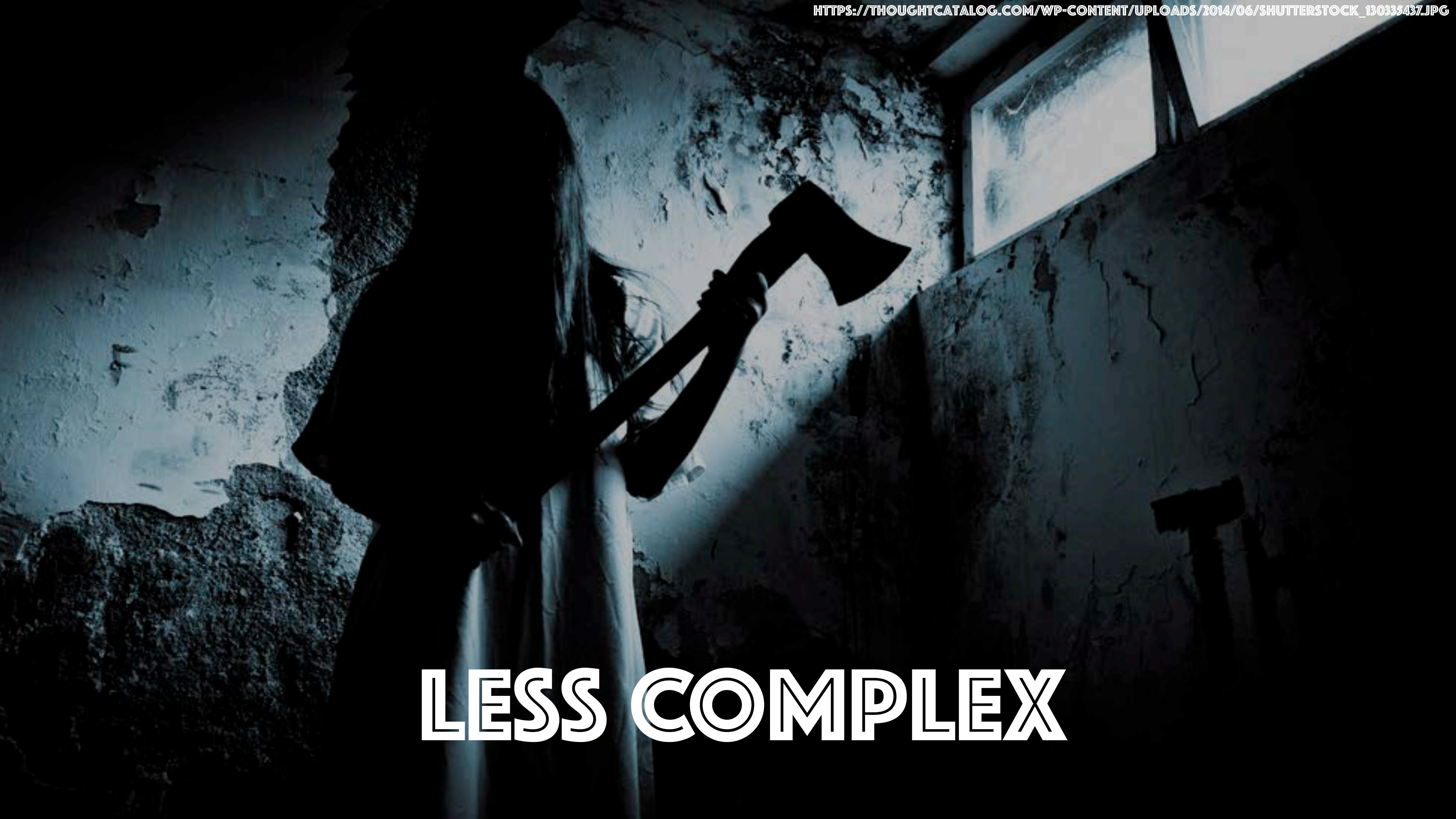


EVENTS



A cinematic still from the movie 'Ghost Rider'. The character, a skull with glowing red eyes, is riding a chrome motorcycle at night. He is wearing a black leather jacket and has flames coming out of his mouth and hands. The background is a dark, wooded area with tombstones visible in the distance. The lighting is dramatic, with the fire providing a warm glow against the cool blue tones of the night.

SOMETHING FAST

A person with long hair, seen from the side, is holding a large, dark axe. They are standing in a dark, dilapidated room with peeling walls and a window in the background. The lighting is dramatic, with strong shadows.

LESS COMPLEX



FAULT TOLERANT



REPLAYABILITY

For that we have





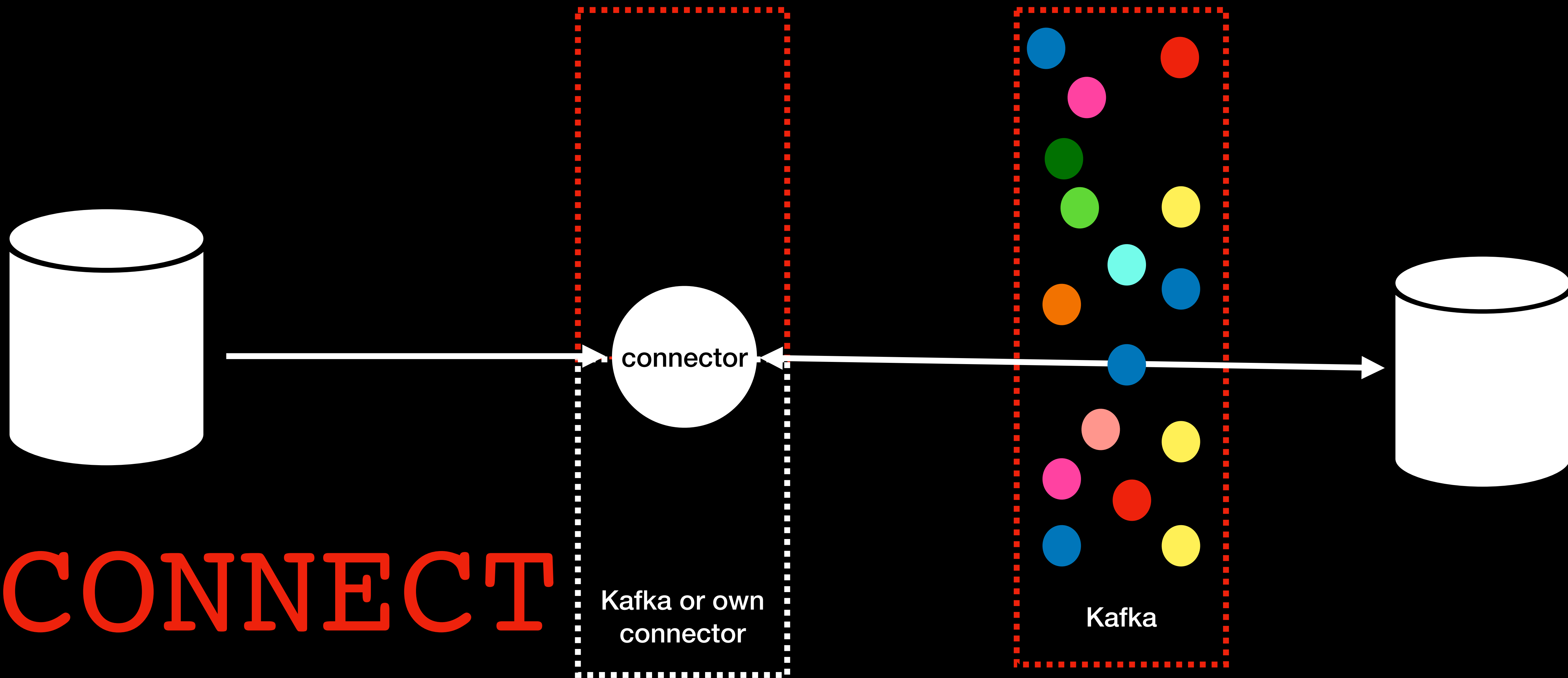
But why not using

RABBITMQ



A photograph of three clowns standing in a hallway. The clown on the left has a yellow and orange flame-like wig, blue face paint, and a large green and yellow collar. The clown in the center has a red pointed collar, blue face paint, and a pink ruffled collar. The clown on the right has a red spiky wig, blue face paint, and a pink ruffled collar. The text "THREE FLAVOURS" is overlaid in white with a black outline across the middle of the image.

THREE FLAVOURS





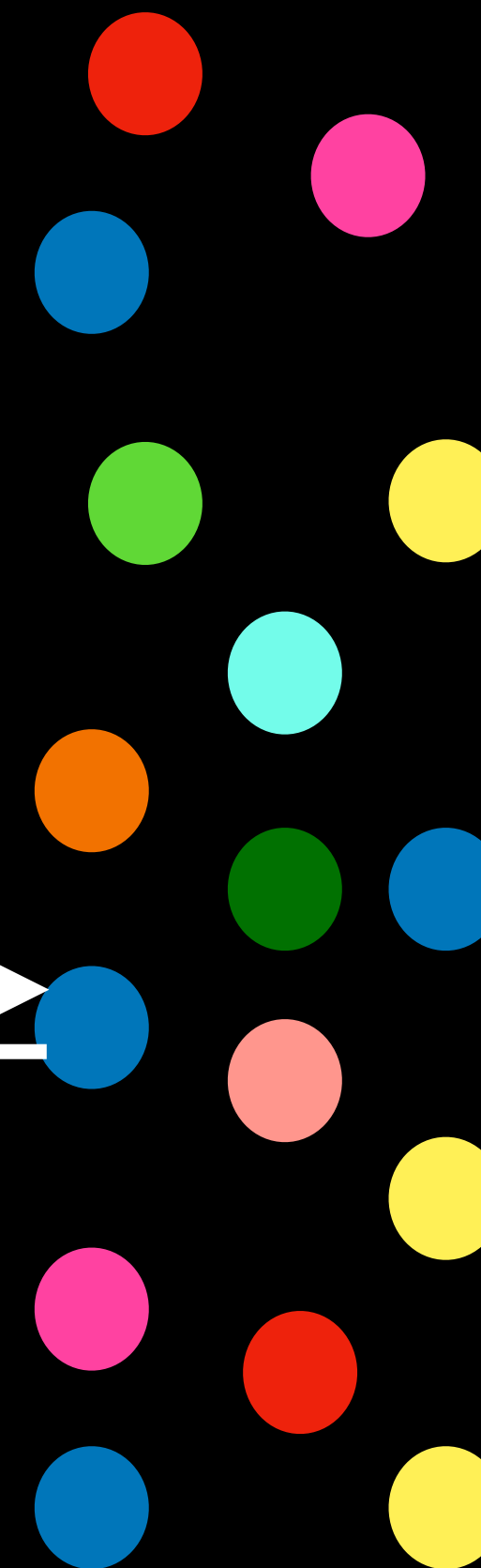
rest

SIMPLE

basic

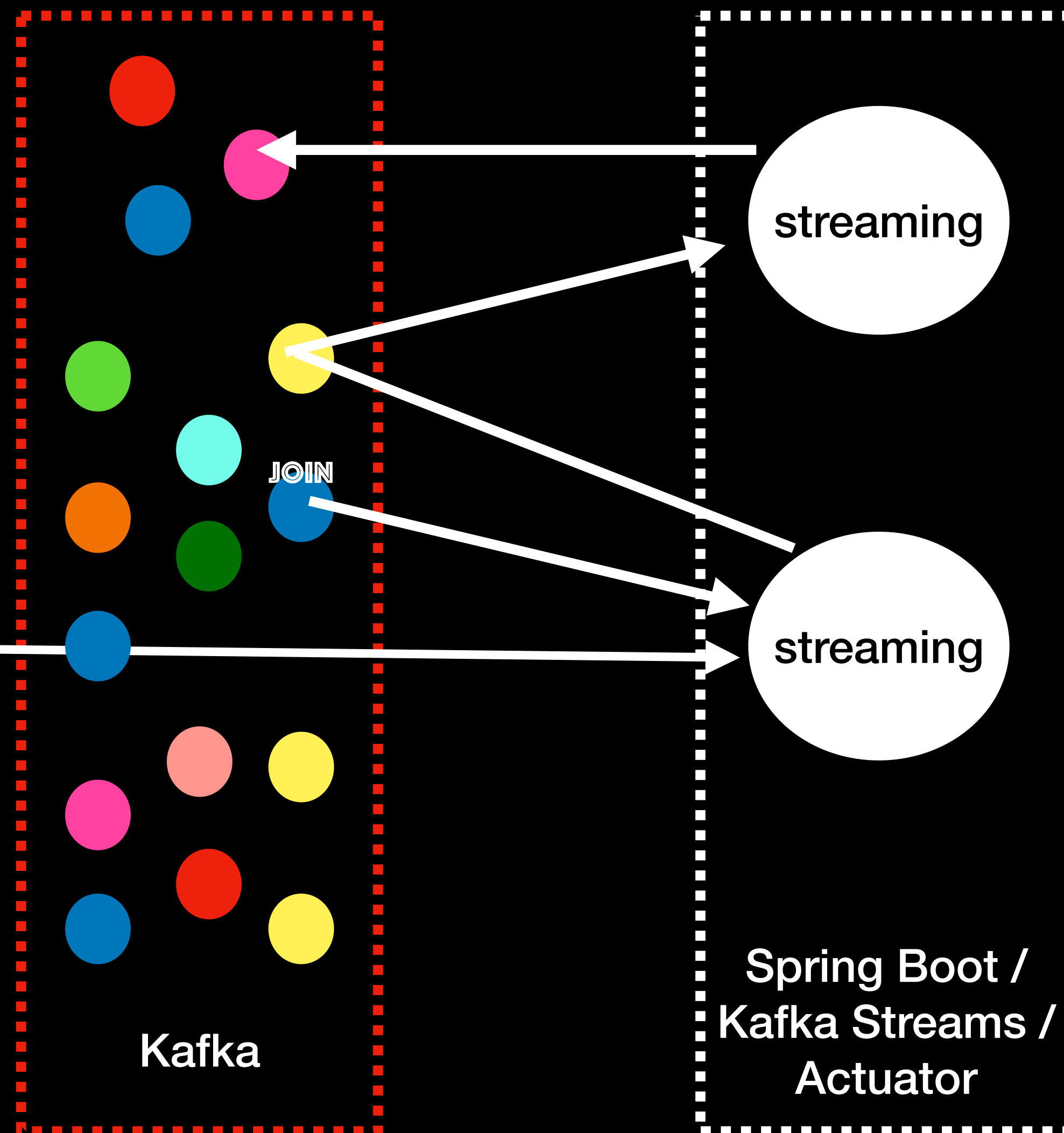
Spring Boot /
Spring Kafka /
Actuator

Kafka





BIG DATA



LET'S EAT SOME CODE



You learned

How to use:

- Consumer -> `@KafkaListener`
- Producer -> `KafkaTemplate`
- Streams -> `StreamsBuilder`

Learn to create metrics (actuator)!!

REFERENCES

for more fun

- spring-kafka
<https://docs.spring.io/spring-kafka/docs/current/reference/html/#preface>
- kafka-streams
<https://developer.confluent.io/tutorials/>
- spring-boot-starter-actuator
<https://youtu.be/UNszkYpaMZc?t=688>

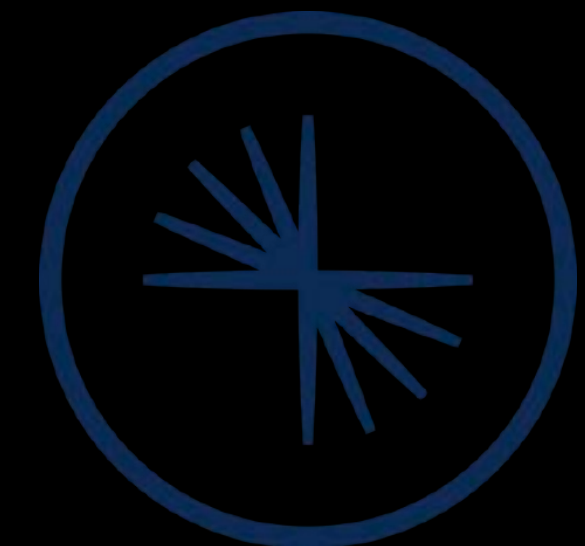


IMAGE FROM:
[HTTPS://RUINMYWEEK.COM](https://ruinmyweek.com)



Thank you

Slides + code (branch 'solution'): <https://github.com/KoTurk/Kafka/tree/main/JBCNConf>
Follow me at Twitter: [@KoTurk77](https://twitter.com/KoTurk77)