

# The Science Project



# Objective

A full application with

- a web server with Akka HTTP
- Kafka
- Spark Structured Streaming



# A Scientific Study

The effects of alcohol/substances/Scala on reflexes and response times

## The mechanism

- the test subject sees a red square on a browser window, must click it as fast as possible
- when test subject clicks on the square, it will reset randomly on the screen
- repeat x 100

## The data gathering

- on every click, the deltaTime is sent to the web server
- the web server sends the deltaTime to a streaming pipeline
- deltaTimes are aggregated on a rolling average of the past 10 values

## Tech Stack

- a simple HTML/JS interface
- a web server with Akka HTTP with a REST endpoint
- Kafka
- Spark Structured Streaming

# Spark rocks

