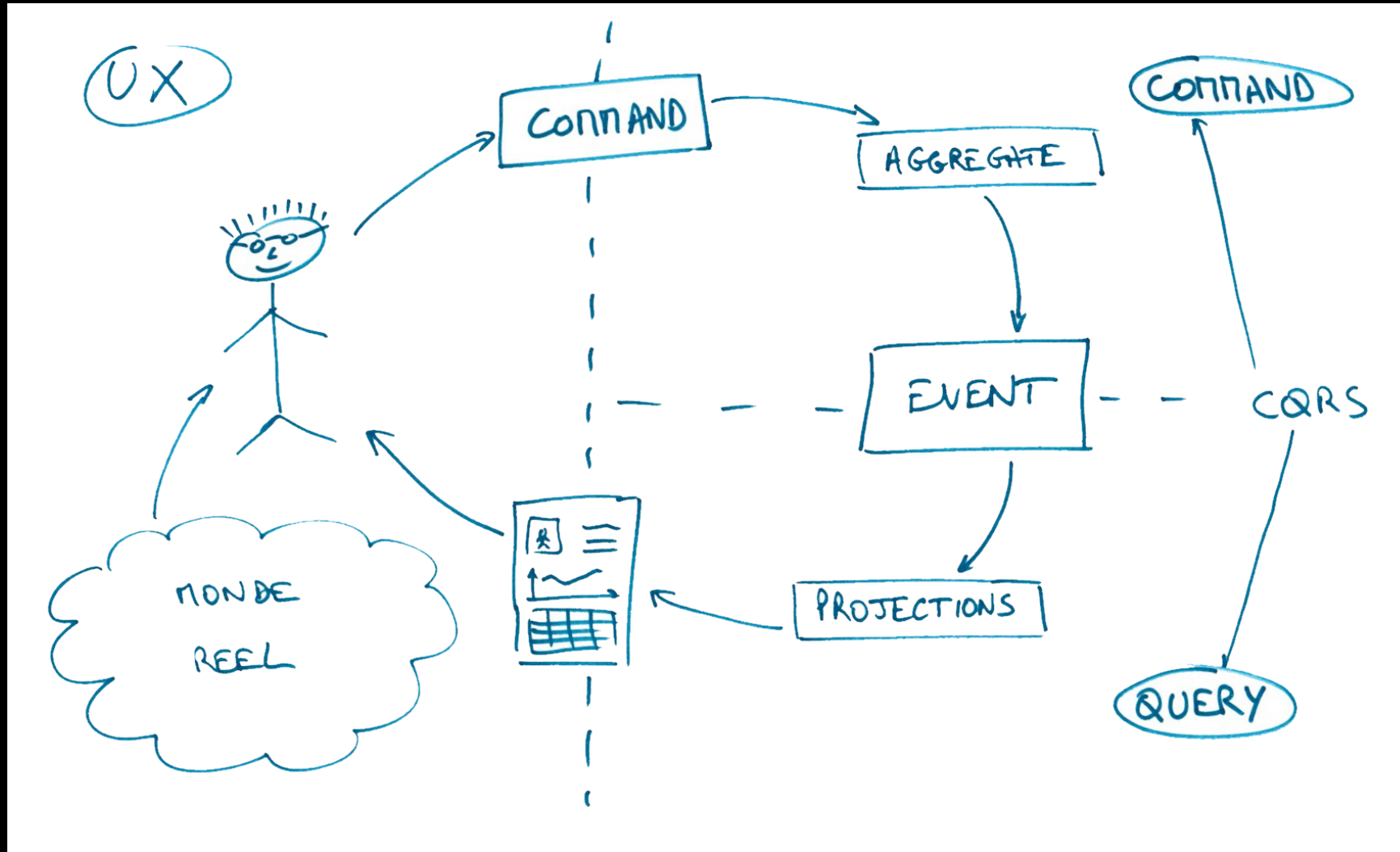


# AGILITÉ PAR LE CODE GRÂCE À CQRS ET EVENTSOURCING

WORKSHOP — #MIXIT15

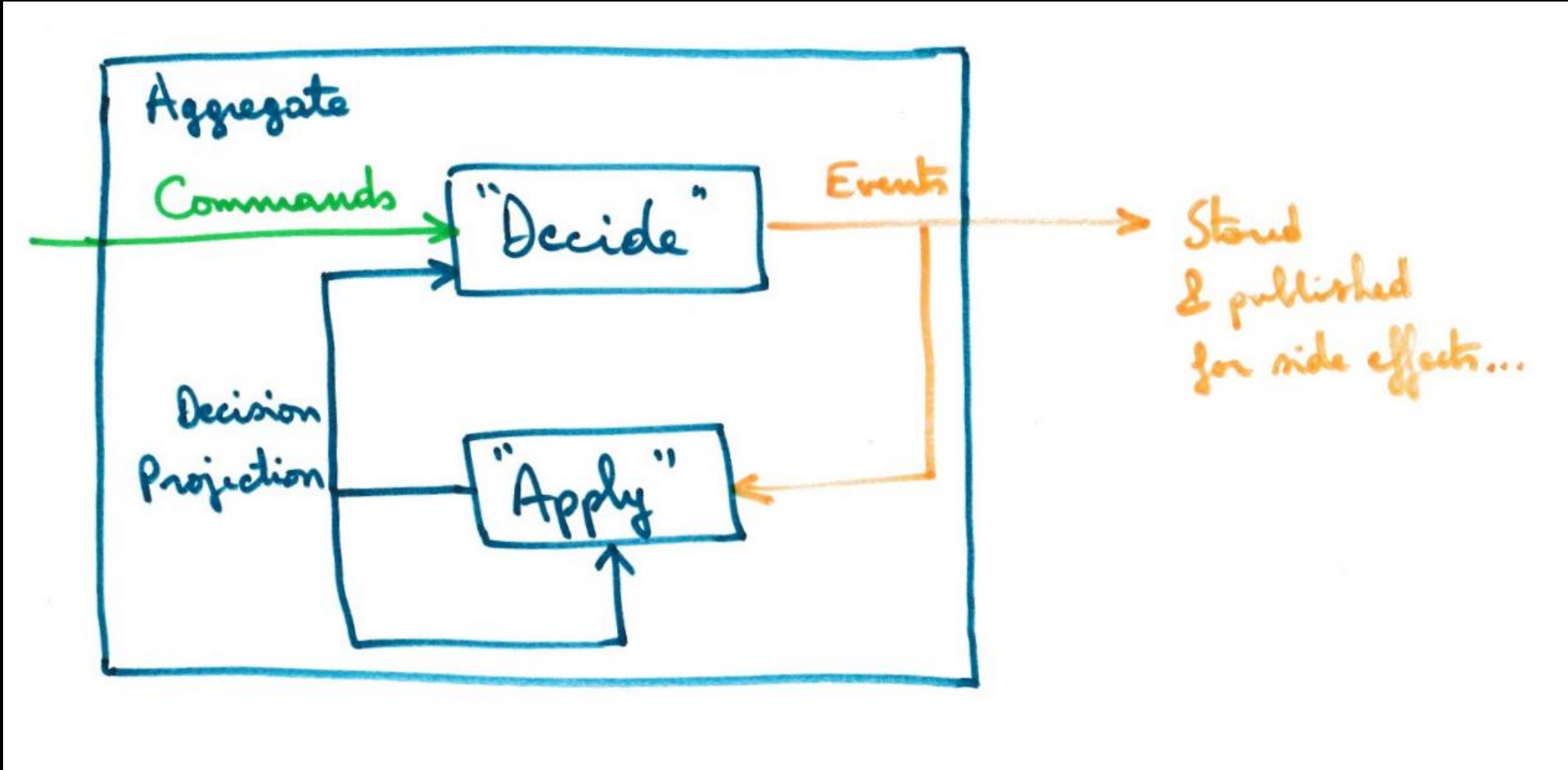
Forent @florentpellet  
Clément @clem\_bouillier  
Jean @jeanhelou  
Emilien @ouarzy

# CQRS CONCEPT



Ref. "Conceptual CQRS" - Alberto Brandolini

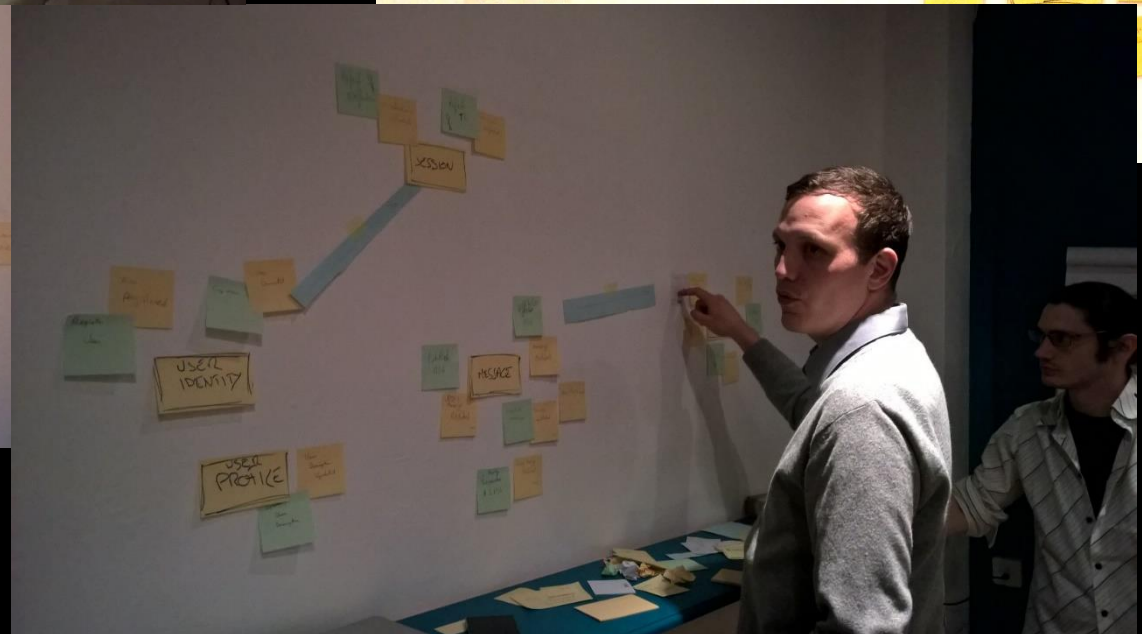
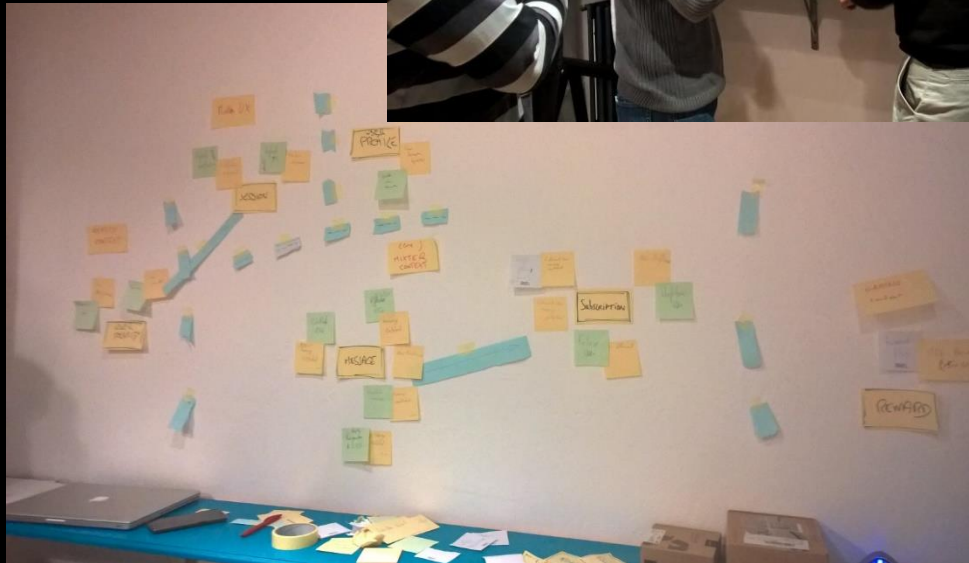
# EVENT SOURCING CONCEPT



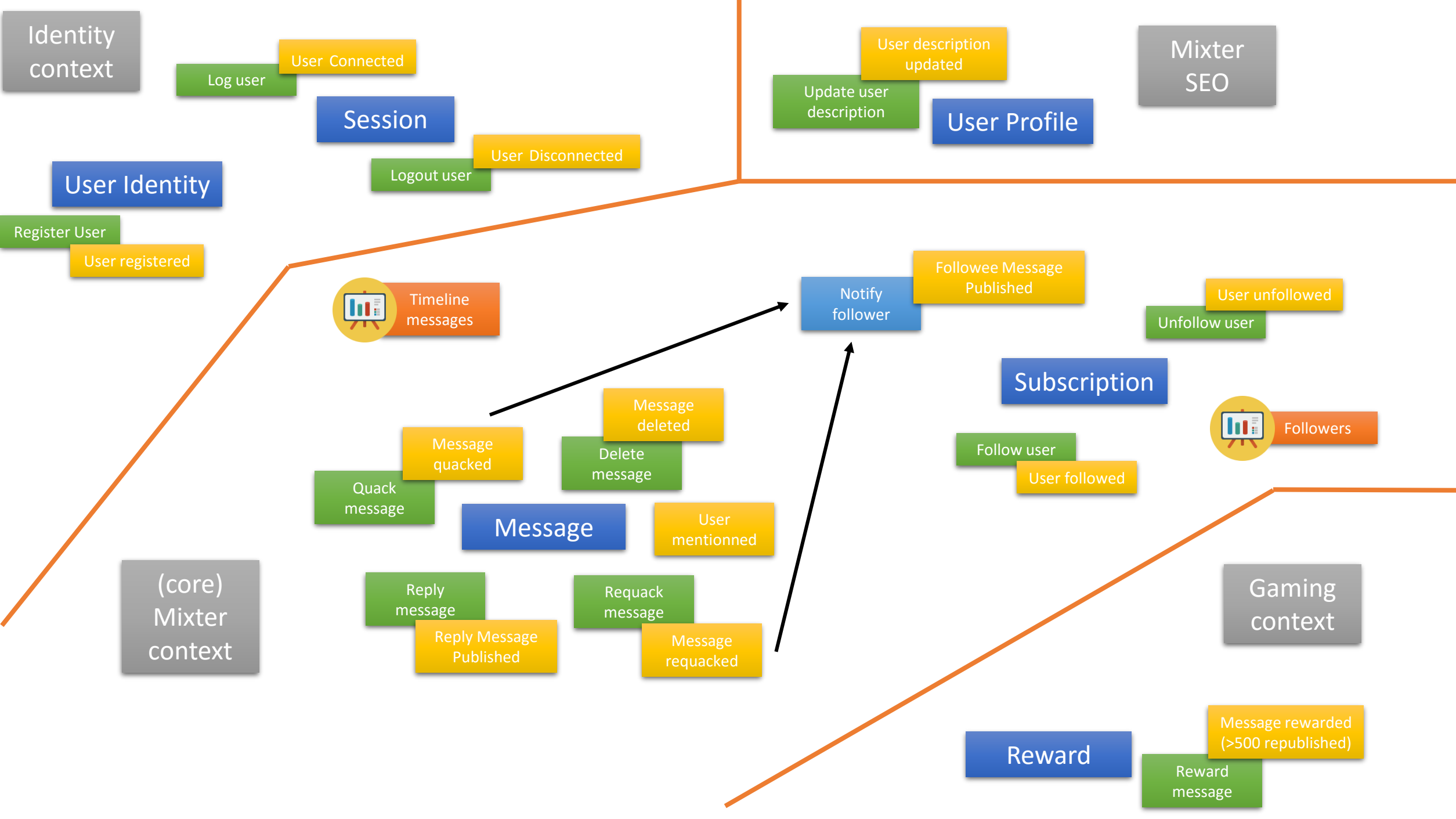
NB : DecisionProjection is also called State

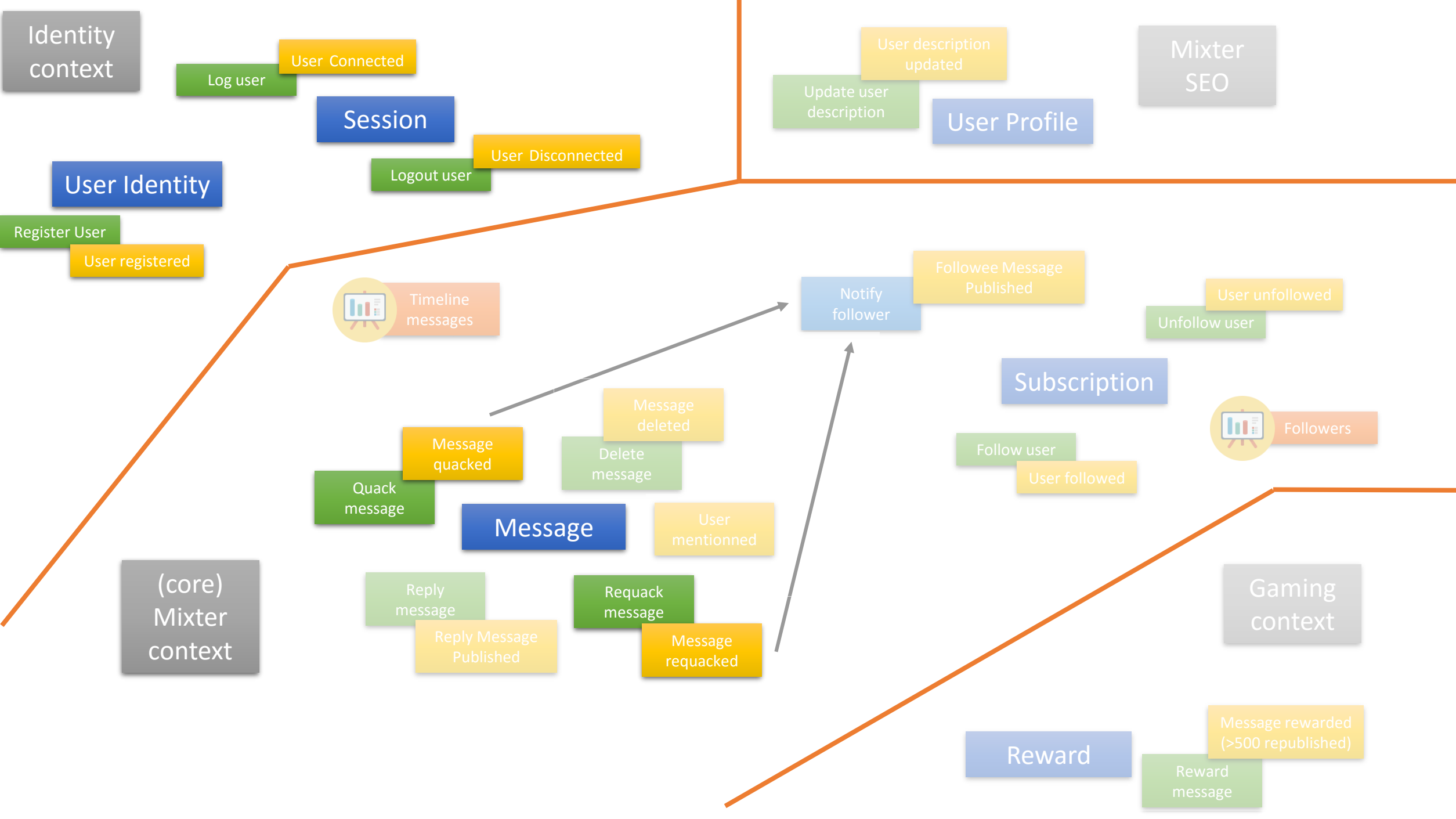
Ref. Jérémie Chassaing

# EVENT STORMING MIXTER



Ref. "Event Storming" - Alberto Brandolini







# ONLY 1H30!

- IT'S SHORT !
- 4 FACILITATORS
  - ANY QUESTIONS => SIGNAL US



Clément



Emilien



Florent



Jean

# TEST DRIVEN WORKSHOP

- WORKING IN PAIRS
- EXECUTE RUN SCRIPT AND READ INSTRUCTIONS
- RED TEST => GREEN TEST
- 3 STEPS (+2 BONUS)
  - COMMAND DELETEMESSAGE
  - QUERY TIMELINE MESSAGE
  - EVENTS IN AGGREGATE



# REPOSITORY GIT

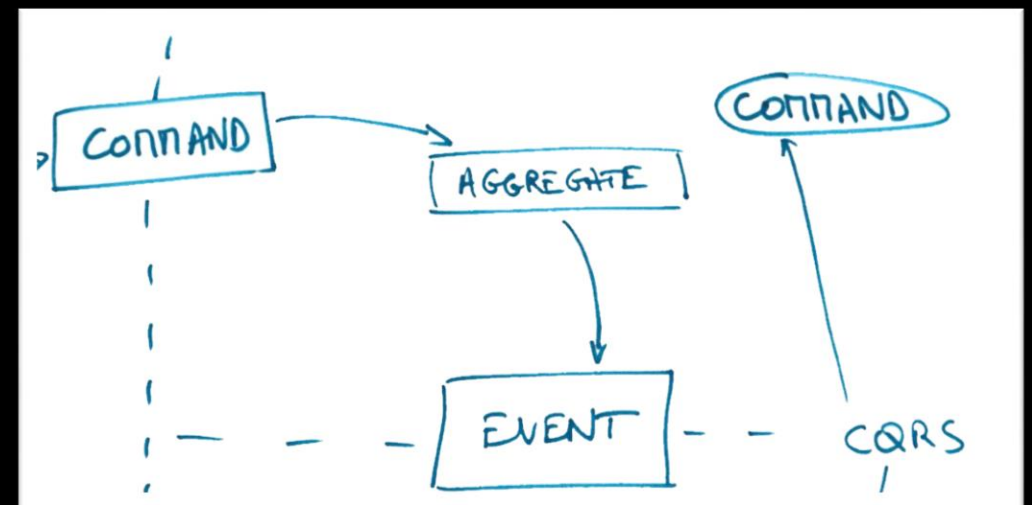
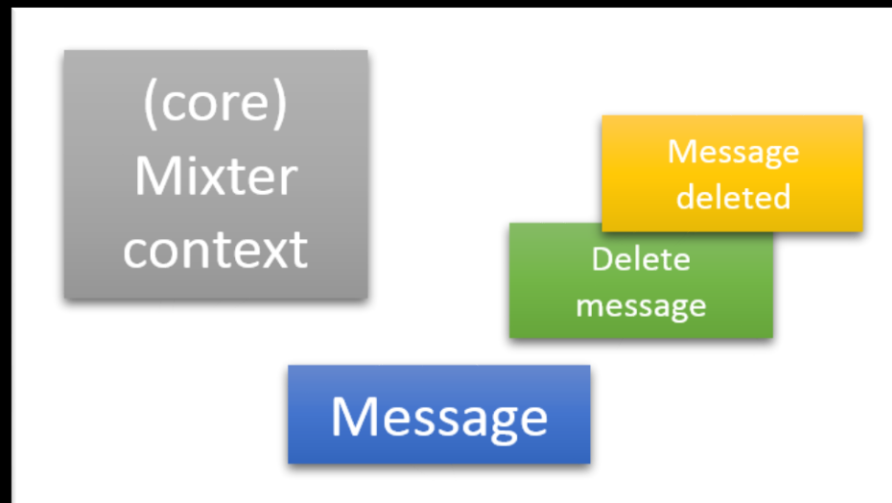
- GIT CLONE [HTTPS://GITHUB.COM/JEANTIL/MIXTER.GIT](https://github.com/jeantil/mixer.git)
  - BRANCHES:
    - CSHARP-WORKSHOP (.NET 4.5.1, VS 2013)
    - JAVA-WORKSHOP (SDK8, MAVEN)
    - JS-WORKSHOP (NODE.JS)
    - PHP-WORKSHOP (5.5, COMPOSER)
- SLIDE : [HTTPS://GITHUB.COM/JEANTIL/MIXTER/RAW/SLIDE/SLIDE.PDF](https://github.com/jeantil/mixer/raw/slide/slide.pdf)

# 1. DELETE COMMAND

## WHAT WE WILL LEARN

- PUBLISH EVENTS FROM AGGREGATE,
- USE PROJECTION FOR DECISION INSIDE AGGREGATE (CONTAINS ONLY "STATE" FOR FUTURE DECISION, DO NOT KEEP ALL STATE LIKE IN AN ENTITY)
- IMPLEMENT "BUSINESS RULES" THAT INSURE AGGREGATE CONSISTENCY (BASED ON DECISION PROJECTION AND COMMAND=METHOD PARAMETERS)

## IN BRIEF : THE C OF CQRS

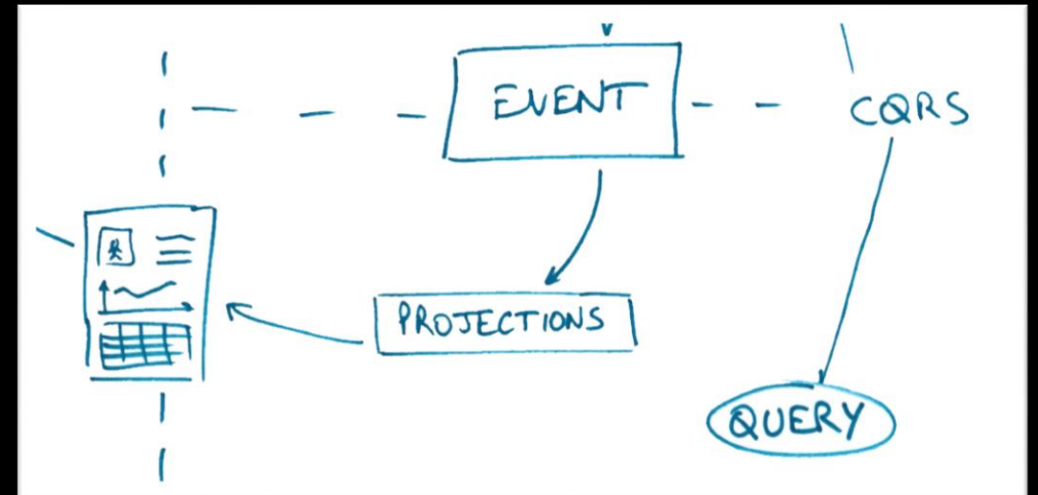
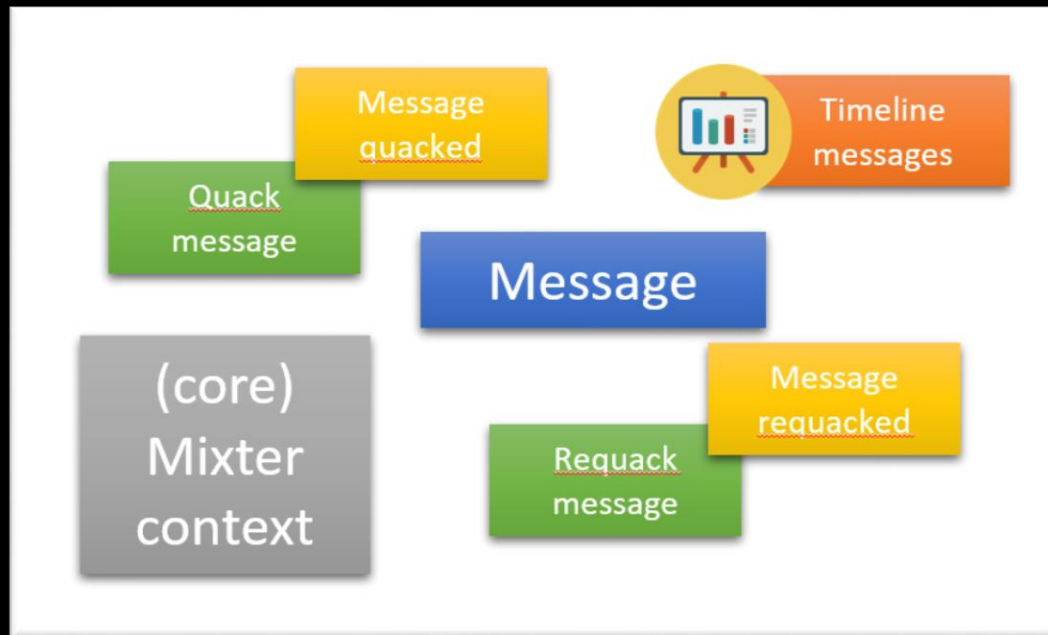


## 2. TIMELINE MESSAGES PROJECTION

### WHAT WE WILL LEARN

- CREATE ANOTHER MODEL FOR QUERY (PROJECTION, TIMELINEMESSAGEPROJECTION)
- TRANSFORM EVENTS IN A PROJECTION MODEL THROUGH AN EVENTHANDLER
- A PROJECTION REPOSITORY (IN-MEMORY) WITH ITS INTERFACE IS GIVEN

### IN BRIEF : Q OF CQRS

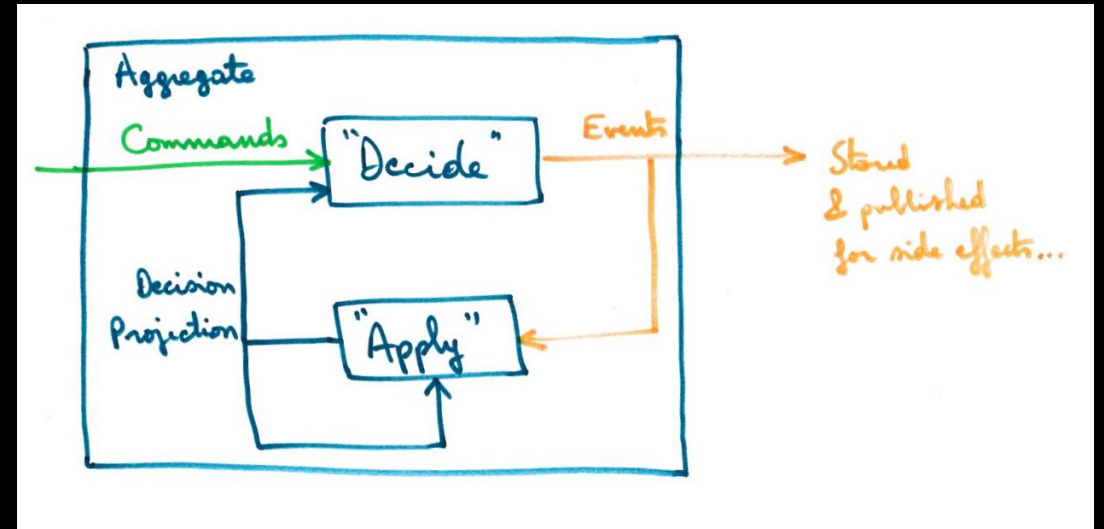
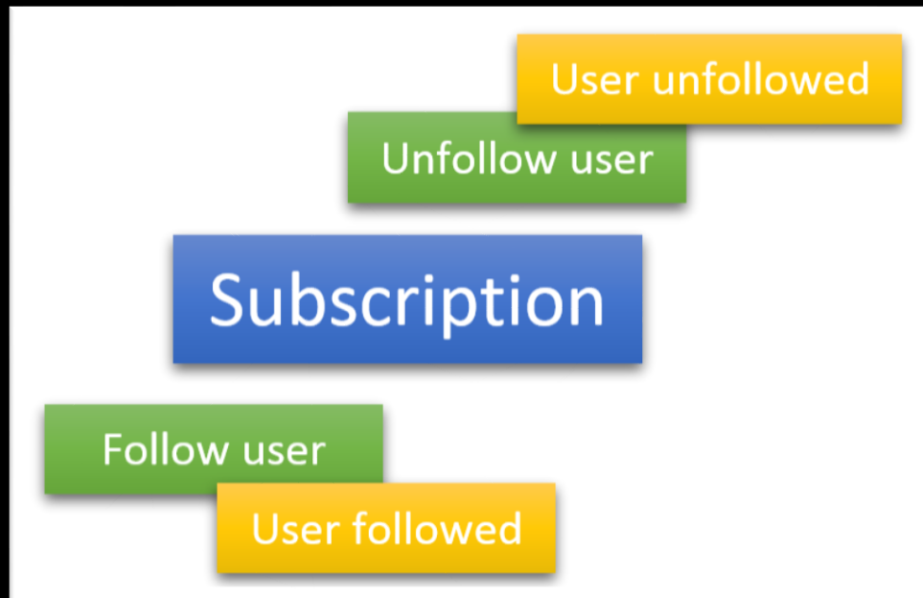


# 3. SUBSCRIPTION AGGREGATE

## WHAT WE WILL LEARN

- CREATE A NEW AGGREGATE (SUBSCRIPTION)
- RAISE EVENTS FROM IT : USERFOLLOWED AND USERUNFOLLOWED
- CREATE A DECISION PROJECTION FOR IT
- IMPLEMENT REPLAY OF EVENTS (EVENT SOURCED AGGREGATE)

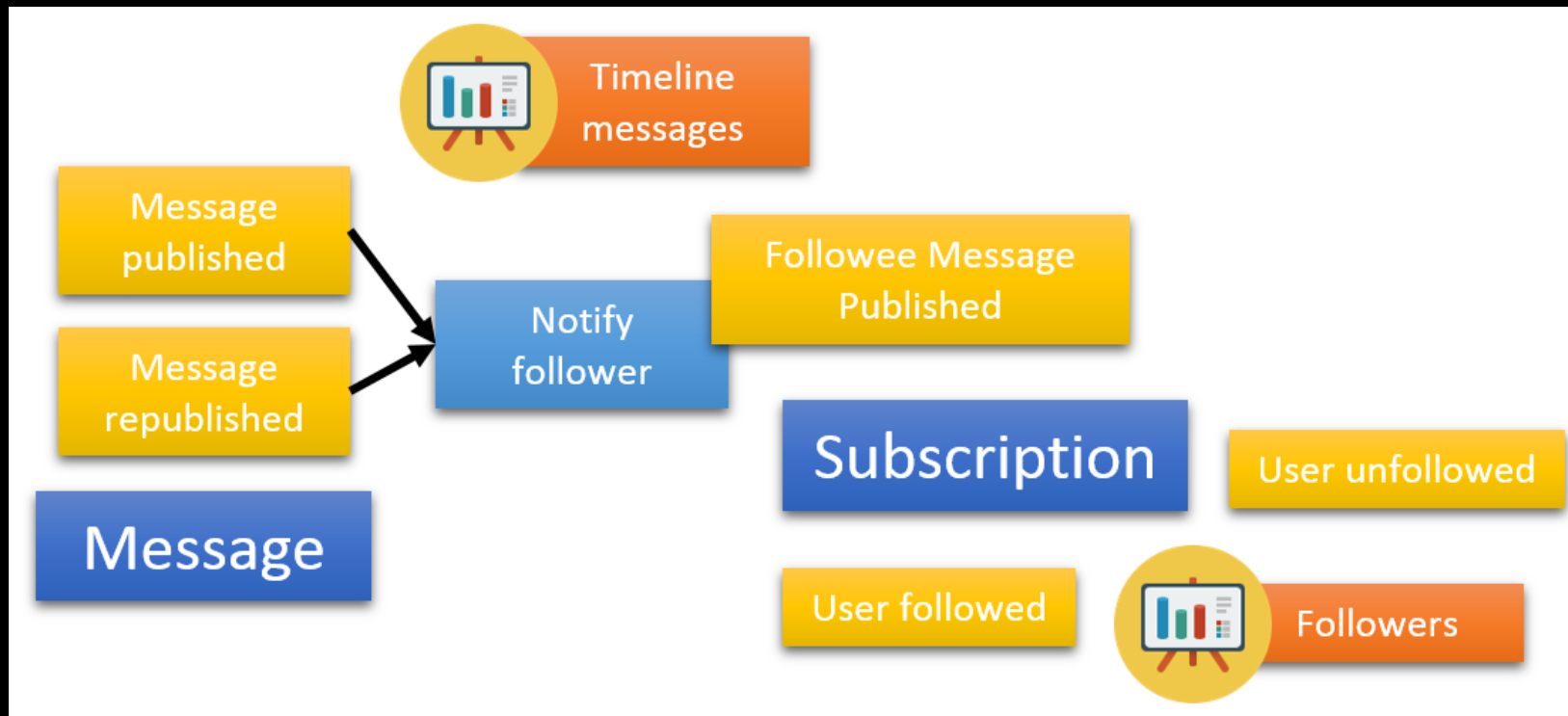
## IN BRIEF : C OF CQRS + EVENT SOURCING



# 4. AGGREGATES INTERACTION

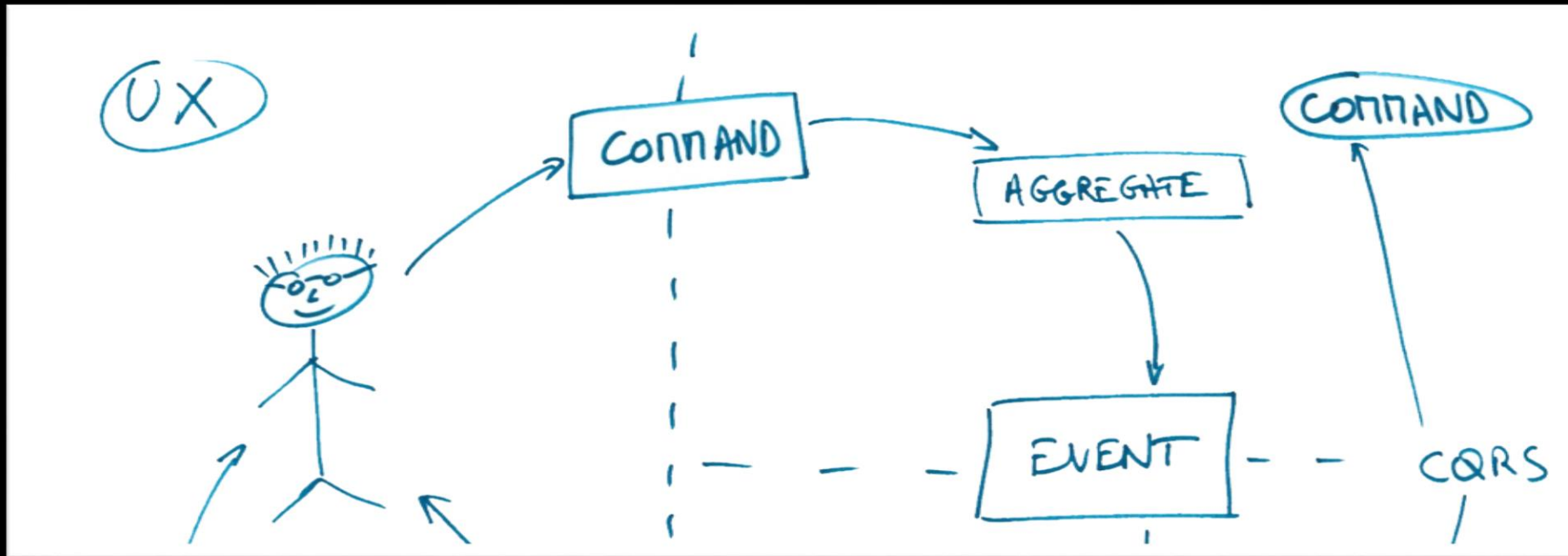
## WHAT WE WILL LEARN

- COORDINATE SEVERAL AGGREGATES TO LIMIT COUPLING
- CONCEPT OF "EVENTUAL CONSISTENCY"



## 5. COMMAND HANDLER

REQUEST REST TO EXECUTE DELETE MESSAGE COMMAND, WITH SESSION VALIDITY VERIFICATION



# AGILITÉ PAR LE CODE GRÂCE À CQRS ET EVENTSOURCING

THANKS!

Forent @florentpellet  
Clément @clem\_bouiller  
Jean @jeanhelou  
Emilien @ouarzy