

# CASE STUDY

G. Molines

2018-2019



# ARCHITECTURE – WHY?

# Architect deliverables – why?

- Common myths
  - Architects can't code
  - Ivory tower syndrom
  - The doc is the code, so the architecture is the code too... Aka, we don't need diagrams
  - Agile says “solve problems only when they occur”

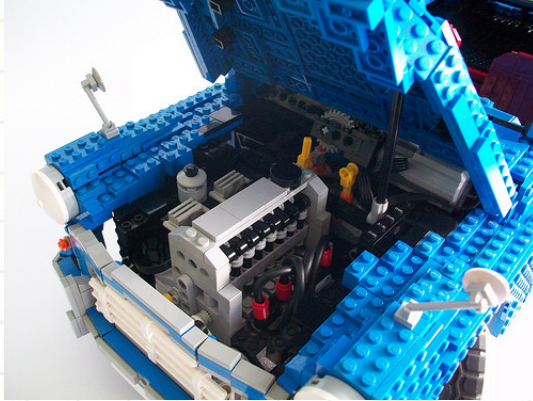
# Architecture evolves !

- Do you think architecture is established once and doesn't evolve?
- Break free from Waterfall !

# Architect vs dev.: horizon



Developer



Architect





# ARCHITECTURE – GOALS

# We need software architecture for

- Decoupling systems
- Honoring technical constraints
- Integrating with partner technology
- Guaranteeing SLAs

# SLA

- Service Level Agreement
- = contract for the service
- Need be measurable, typically some kind of speed metric
  - MTBF
  - MTTR
- Originally a telco concept, but need be understood in a broader sense today
  - Eg: cloud offering availability



# But also

- Dividing complex systems in simpler-to-handle pieces
- Delegating / subcontracting
- Interfacing with external systems
- Buy vs build

# CASE STUDY

# Goals

- You are the architect of a small company responding to a prospect's RFP.
- Your goals are:
  - To fill the technical section of the proposal
  - Provide the implementation team with an architecture
- In this session, we build the technical solution together on the whiteboard.

# Organization

- Customer request described in the handouts
- Customer representative
- You can (and should) ask him additional questions about the customer need
  - But not about the technical solution, since you are the experts
- What we are interested in today is:
  - What are the questions that you need to ask yourselves / the steps you'll have to perform to get to an RFP?
  - Not a debate about the best technical solution

# Sample questions

- Who provides the hardware?
- What assumptions can we make about the infrastructure (Eg: to drive the scoreboards)?
- What interface with media channels?
- What security concerns (Eg: access rights)?

# Approach

- ...



# Approach

- Who are the users?
  - Roles?
  - How do they interact with their part of the system?

# Approach

- What UIs?
- Where?
  - Network
  - Data location - volumes

# Approach

- Identify system components
- Then interfaces

# Approach

- Keep drilling

# Approach

- Think about functions, user requirements
- scope

# Approach

- Then non-functional requirements



# Approach

- Now, technology
- Risk areas
- inception



**QUESTIONS?**





# APPENDIX