Architecture of Distributed Systems

Homework Assignment 1
2019-2020

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Where innovation starts

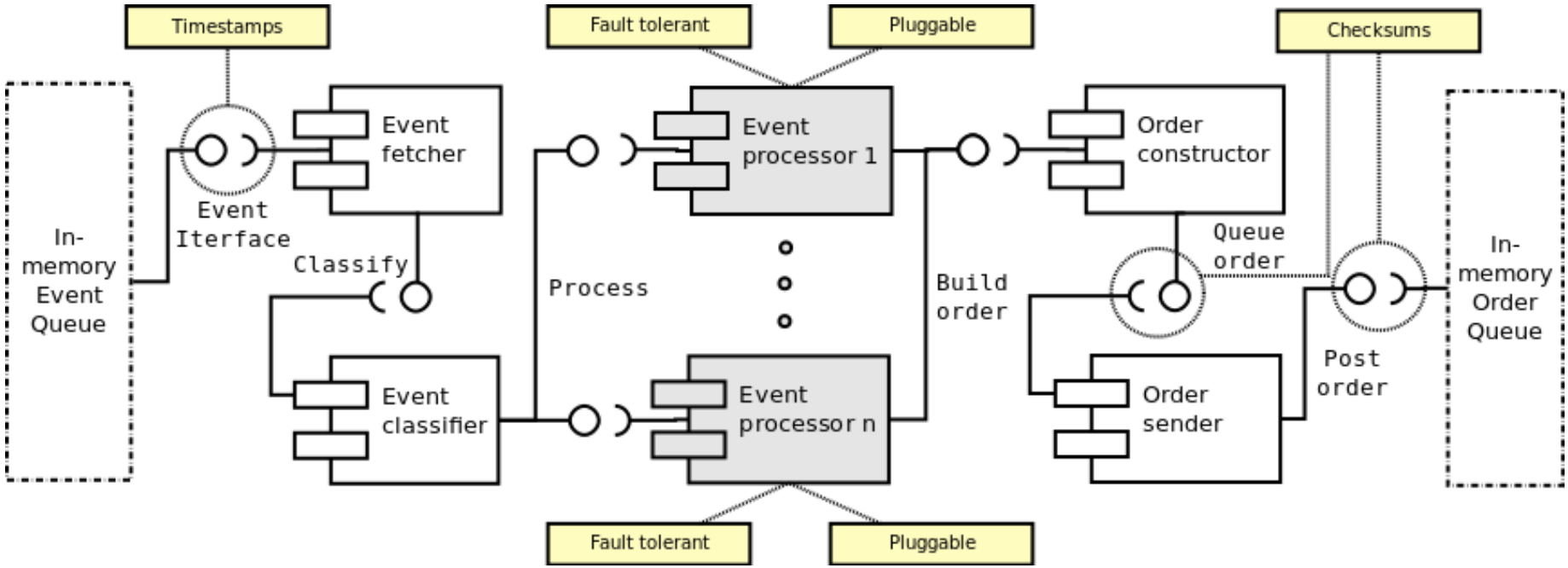
Exercise

Consider the models on the following slides and answer the following questions. Each model is provided with a hyperlink to acknowledge its source and for additional information.

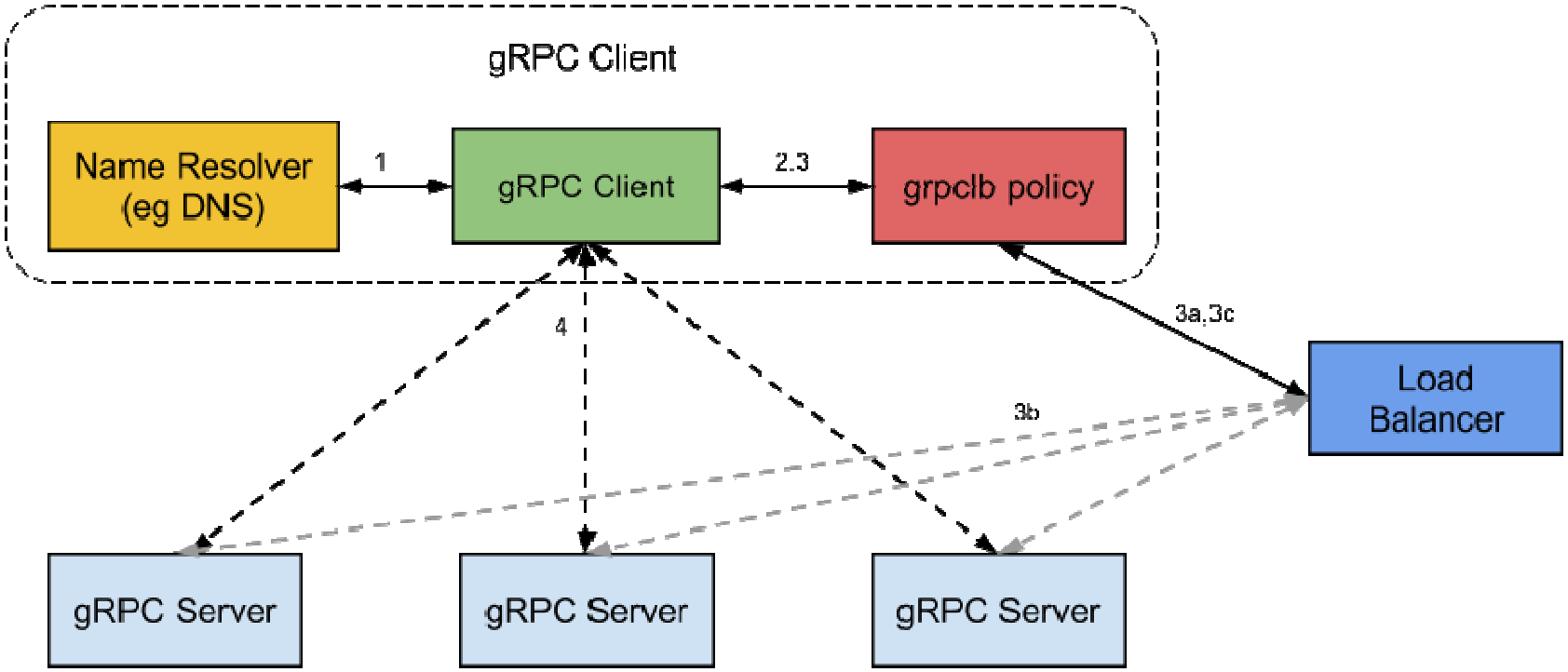
1. What building blocks do you see? What do they represent? Are they conceptual/generic (C) or physical/specific (P)?
2. Same questions as 1, but now for connectors? Do not forget (C) or (P)!
3. To which viewpoints (1 up to 3) does the model belong?
   Motivate why, and identify corresponding stakeholders and their concerns.
   You may choose from both Kruchten and Rozanski-Woods libraries.
4. Which of the following EFRs are addressed (Y + motivation | N)?
   Performance/scalability, availability/reliability, security, maintainability, other?
5. Is there a concept of distribution (Y + motivation | N)?
6. Comment on the clarity/semantics of the diagram
   ☺ | 😐 | ☹ , plus motivation

Keep you answers crisp!

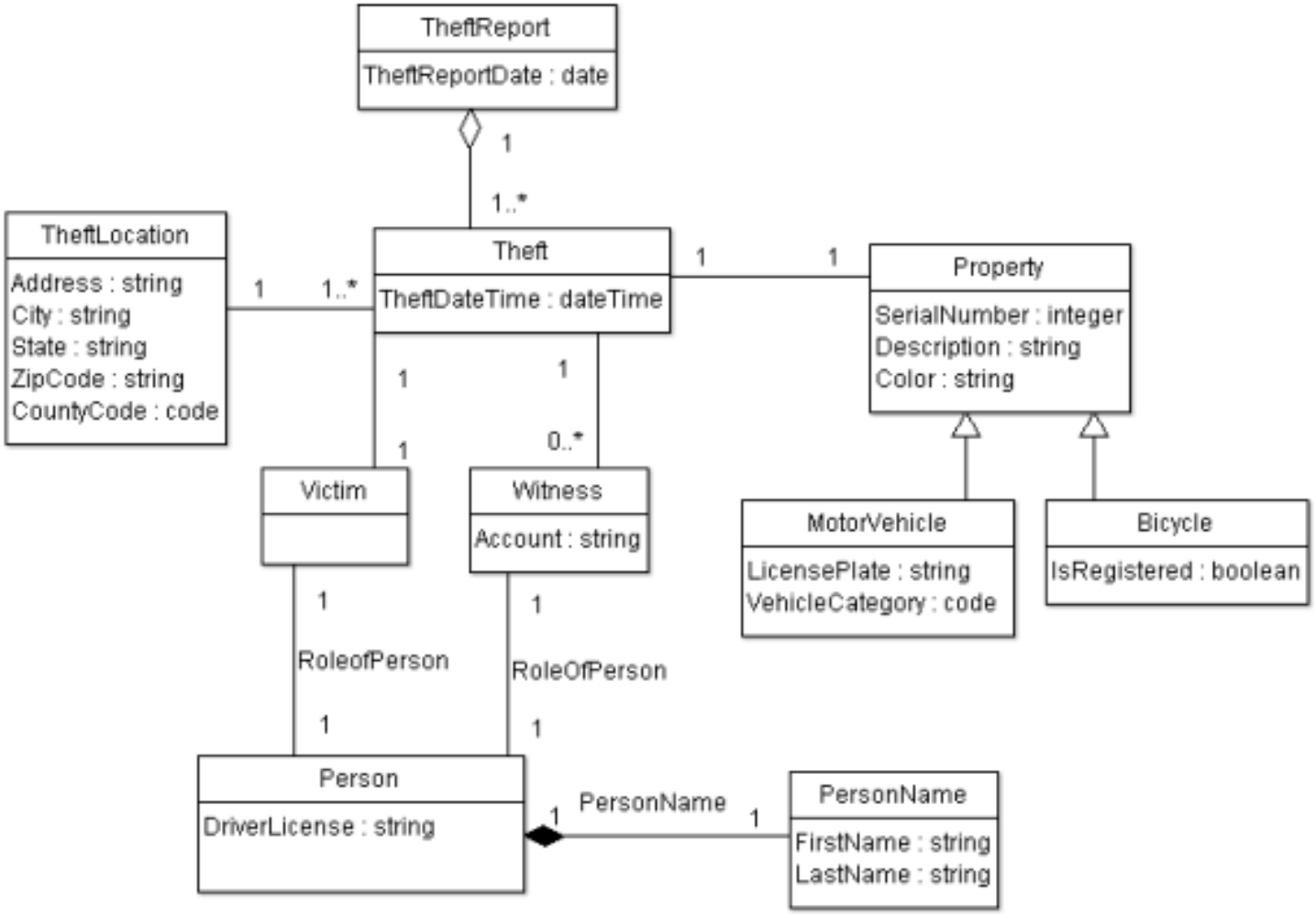
Taken from:
Algorithmic Trading System Architecture



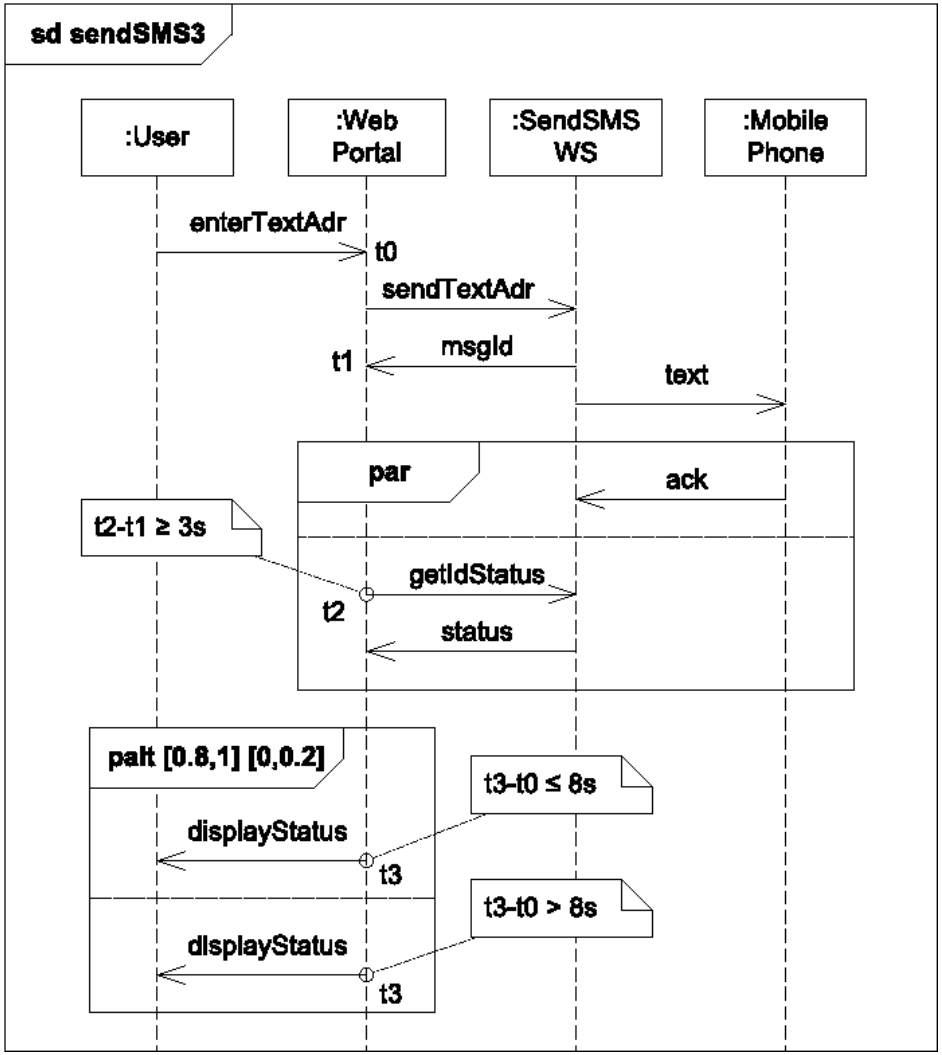
Taken from:
https://github.com/grpc/grpc/blob/master/doc/load-balancing.md



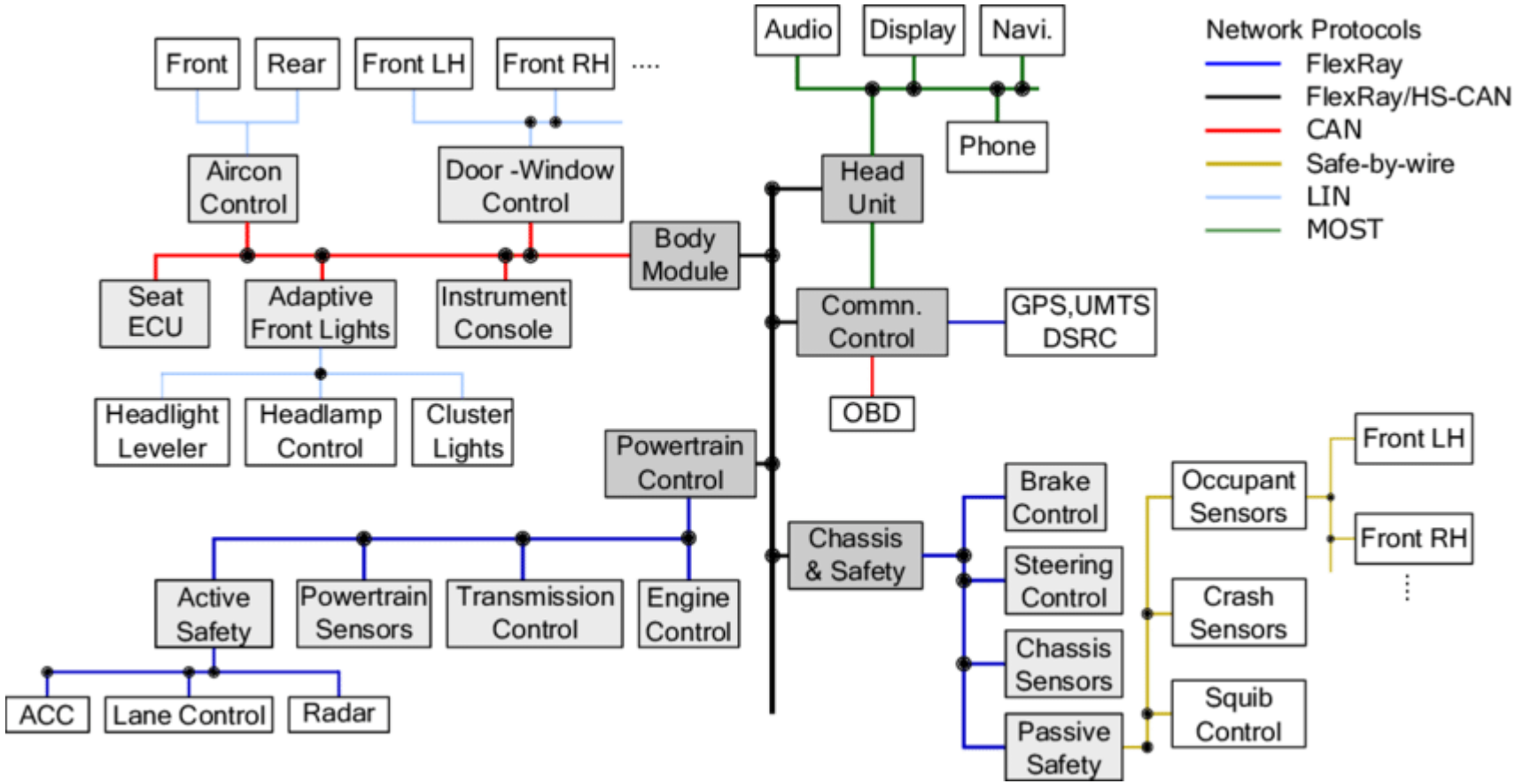
Taken from:
http://www.ibm.com/developerworks/library/x-NIEM1/



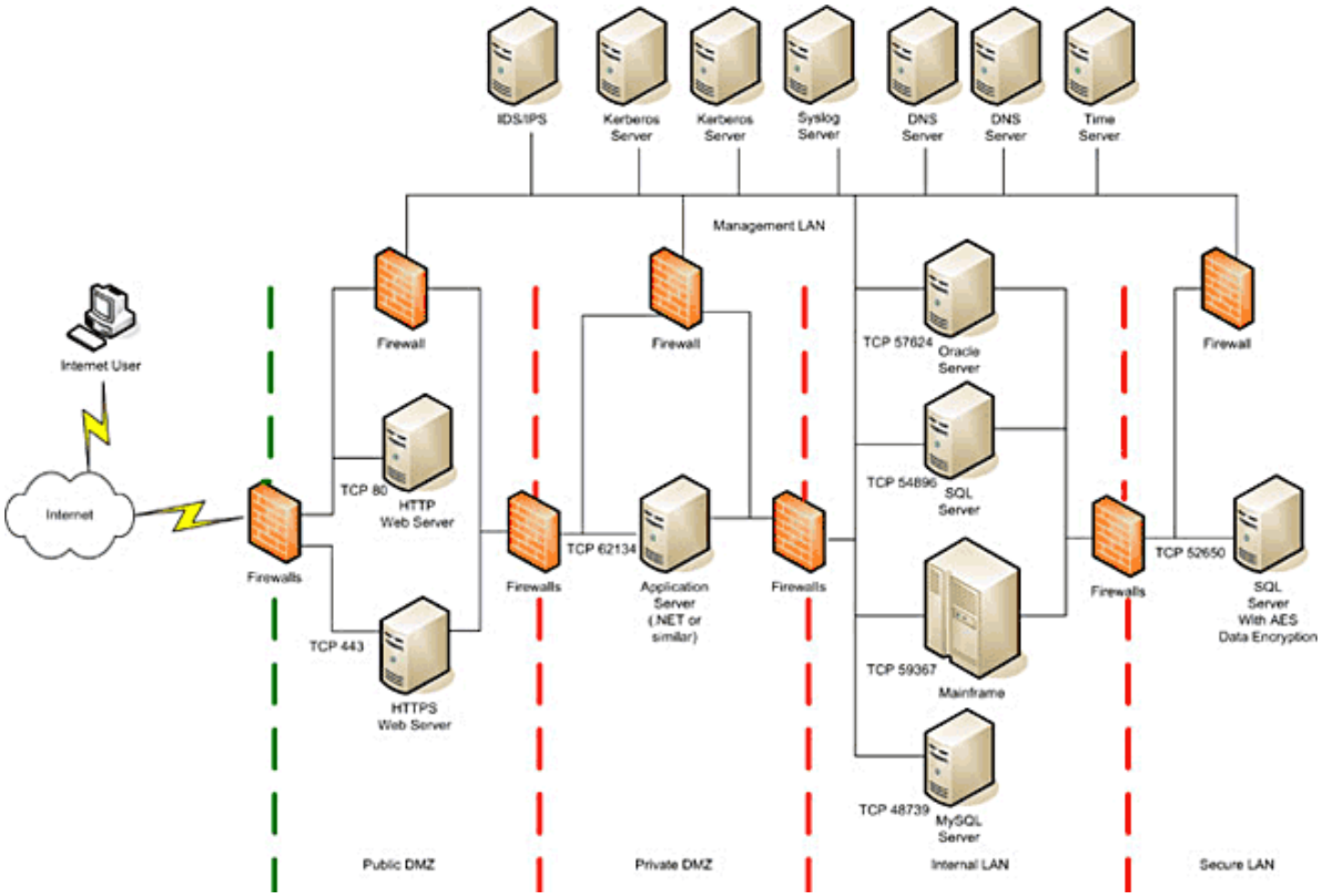
Taken from:
Stepwise refinement of sequence diagrams with soft real-time constraints



Taken from:
Enhancing Automotive Embedded Systems with FPGAs



Taken from:
https://rsmus.com/what-we-do/services/risk-advisory/the-ultra-secure-network-architecture.html



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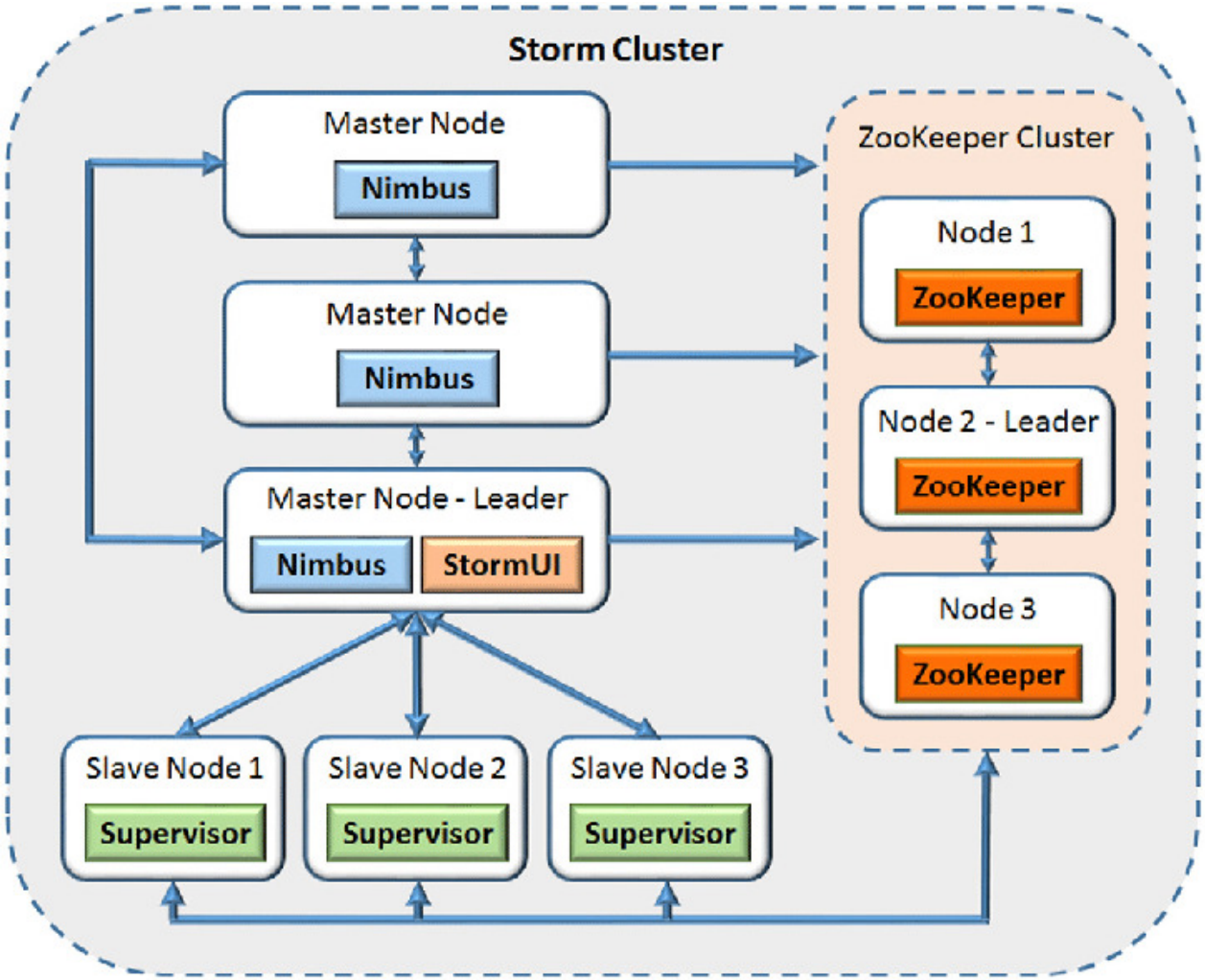
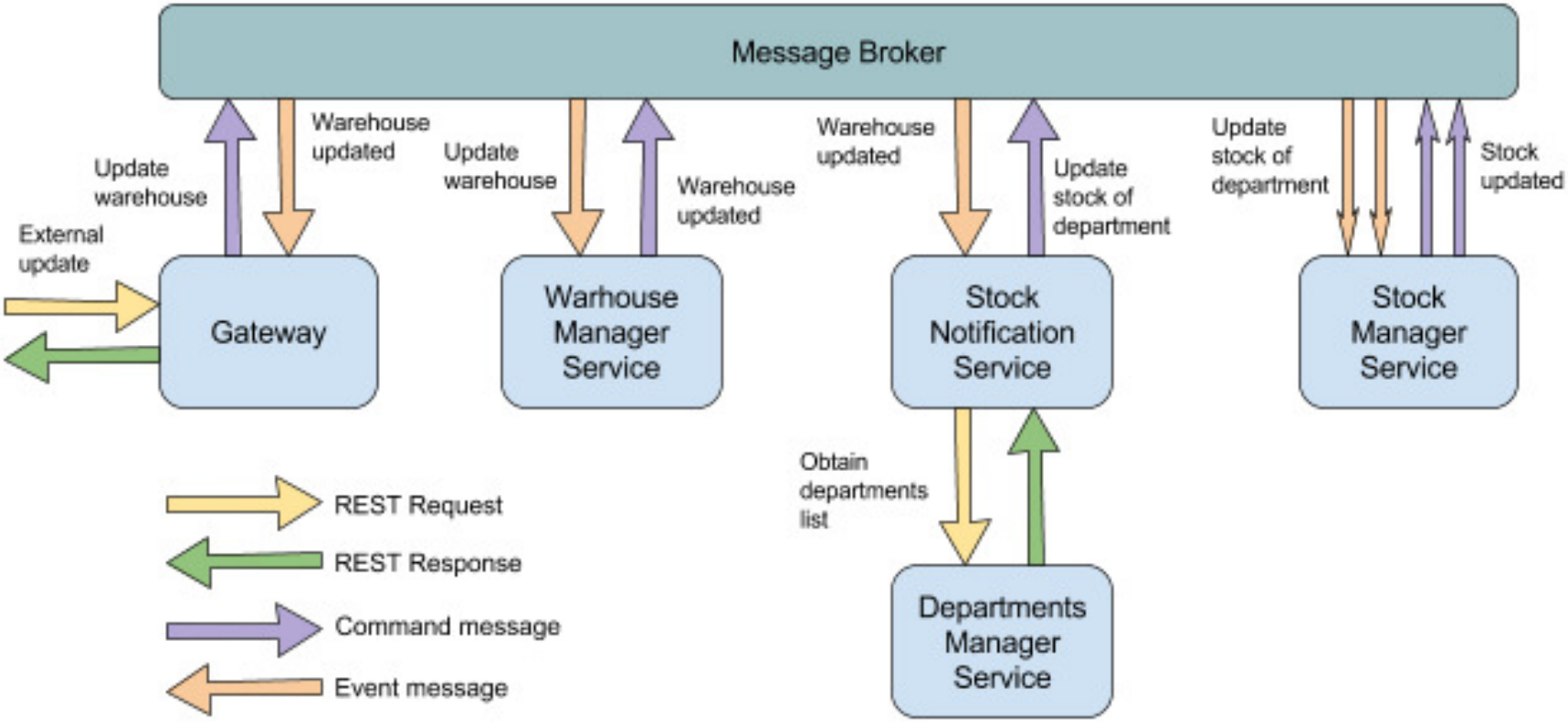
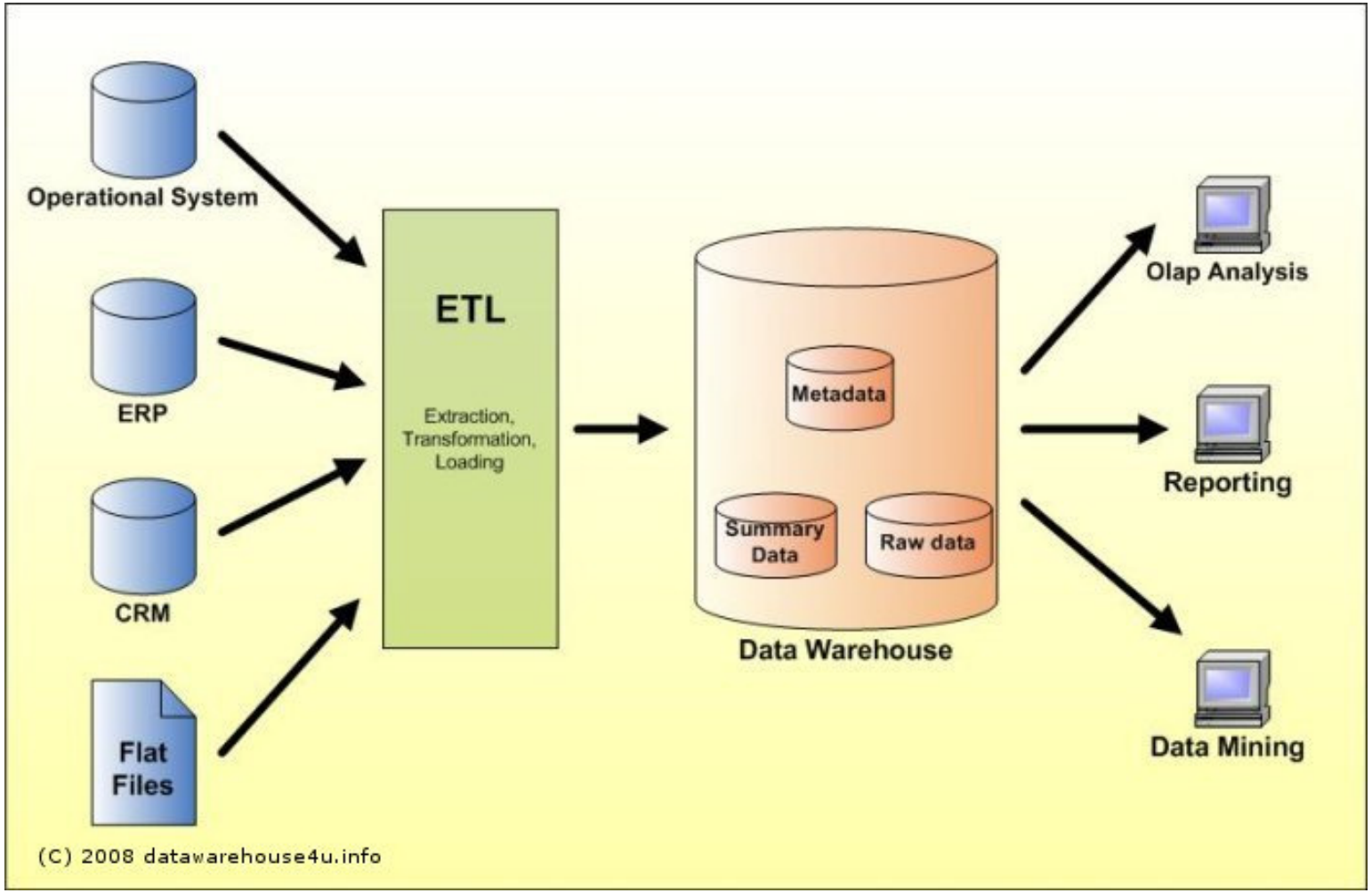
Taken from:
https://doi.org/10.1016/j.future.2017.08.051



Taken from:
https://concisesoftware.com/is-rest-best-for-micorservices-architecture/



Taken from: https://www.datawarehouse4u.info/



Taken from:
https://www.tibco.com/blog/2015/03/23/creating-business-value-by-example/