# Assignment 3: Architecting the coordination layer

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**To do:** Develop Reo models as requested, and write a report using LaTeX. This report should visual representations of the requested connectors and properties that you verify, and an explanation of the architectural scenario (and variations) used for Exercise 2.

**To submit:** The report in PDF by email.

**To demo:** The result of Exercise 2.

**Deadline:** 27 May 2016 (Friday)

## Questions

**Exercise 1. [Coordination layer]** Consider the two problems proposed in the previous project (airfield and MobilePay). Design for each of them the corresponding coordination layer in Reo. Analyse them using the available Reo tools (via mCRL2).

Based on this experience comment (suggest ways) on how to combine the specification of software coordination layer (as in Reo) with automata subjected to specific constraints (as in Uppaal).

## Demo

**Exercise 2.** Select an architectural style among the following: *Client & Server*, *Publish & Subscribe*, *Peer2Peer*, *Event-bus*, and *Table-driven*, and create an architectural scenario around the chosen style with time critical requirements. Develop a model in Reo for its coordination component. Discuss its design and try out a few variants.