

# OBJECT-ORIENTED Vs. OBJECT-RELATIONAL DATABASES

## OBJECTIVES

- In the history of databases, it is not the first time that a new model challenges the relational model. This, indeed, happened in the late 70s and early 80s when the object-oriented programming languages appeared. Aligned with this movement, a new proposal of object-oriented databases (instead of relation-based, as the ones you learnt) were proposed. The objective of this lab is to learn what object-oriented databases proposed, what happened to these proposals and whether their claims remain in our current days.
  - Learn the concept of impedance mismatch
  - Learn about the object-relational impedance mismatch, the first time the impedance mismatch concept introduced and studied
  - Learn the three kind of mappings between elements of two models: equivalent (or very similar), compatible and conflictive
    - Assess the impact, performance-wise, of such decisions

## REQUIRED KNOWLEDGE

This laboratory session does not require any previous knowledge.

**Your lab mates for this session will be those of the team creation 1 event. You have until the deadline specified in the event to create your own team. Otherwise, you will be randomly assigned to a team.**

## TOOLS

These exercises will be done in paper. Answer the questions posed, generate a pdf and upload the solution to Learn-SQL.

## ACTIVITIES TO DO FOR THIS LAB

- Agree with your teammate how to distribute the following readings:
  - The object-oriented manifesto,
  - The object-relational manifesto
- Discuss with your teammate to be sure you both understand what is proposed in each manifesto.

## **DELIVERABLES**

Answer the questionnaire related to the manifestos you read. Generate a pdf file and upload it to the appropriate event in Learn-SQL before the set deadline.