## Final Project (Pre-announcement)

Introduction to Databases

DataLab

CS, NTHU

## Goal

- This final project tests whether you are capable to do a research on a complex distributed DBMS.
  - We will give you more details in the next lab.

- Three Stages
  - 1. Read assigned papers
  - 2. Trace our Hermes implementation
  - 3. Add your design and test it with experiments

## Timeline

5/20 Announce the assigned reading

**5/27** Announce the details of the Final Project

6/10 Walkthrough the Codebase of Hermes

6/21 . 6/24 Final Project Presentation

## **Assigned Readings**

- VLDB'10 The Case for Determinism in Database Systems
  - To get the main idea of deterministic database systems.
- SIGMOD'12 Calvin: Fast Distributed Transactions for Partitioned Database Systems
  - To know how to implement a deterministic database system.
- SIGMOD'21 Don't Look Back, Look into the Future: Prescient Data Partitioning and Migration for Deterministic Database Systems
  - The target system we need to improve in this project.