

# Course Intro

Foundations of Data Warehousing (CS 378)  
Second Edition

August 29, 2025

# The traditional data warehouse architecture

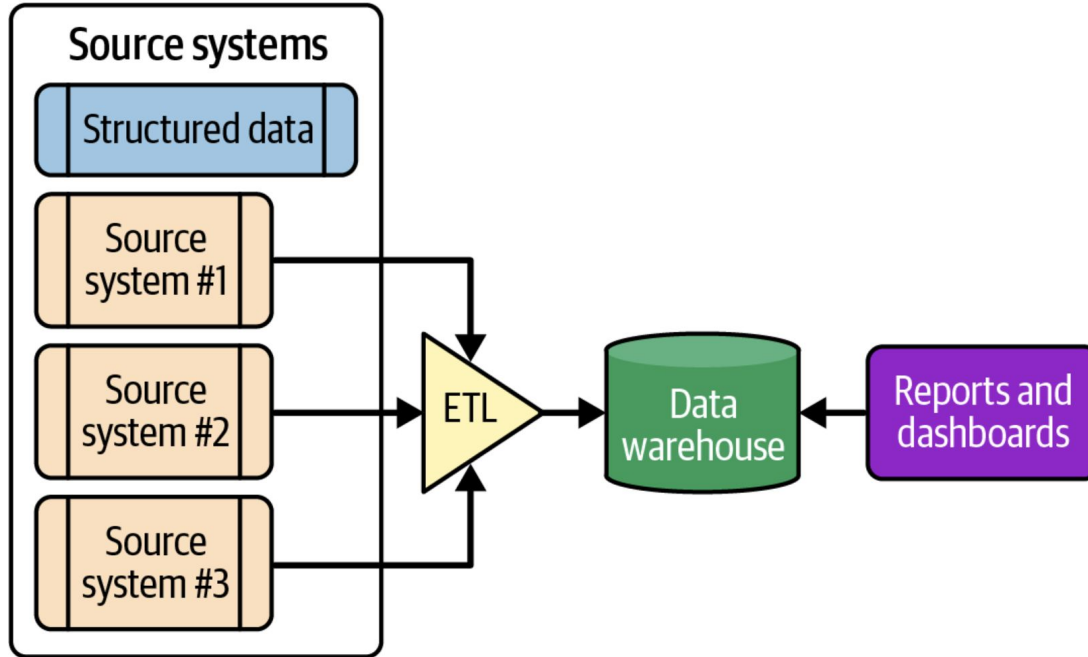


Figure 2-1. Data warehouse architecture

# The traditional data lake architecture

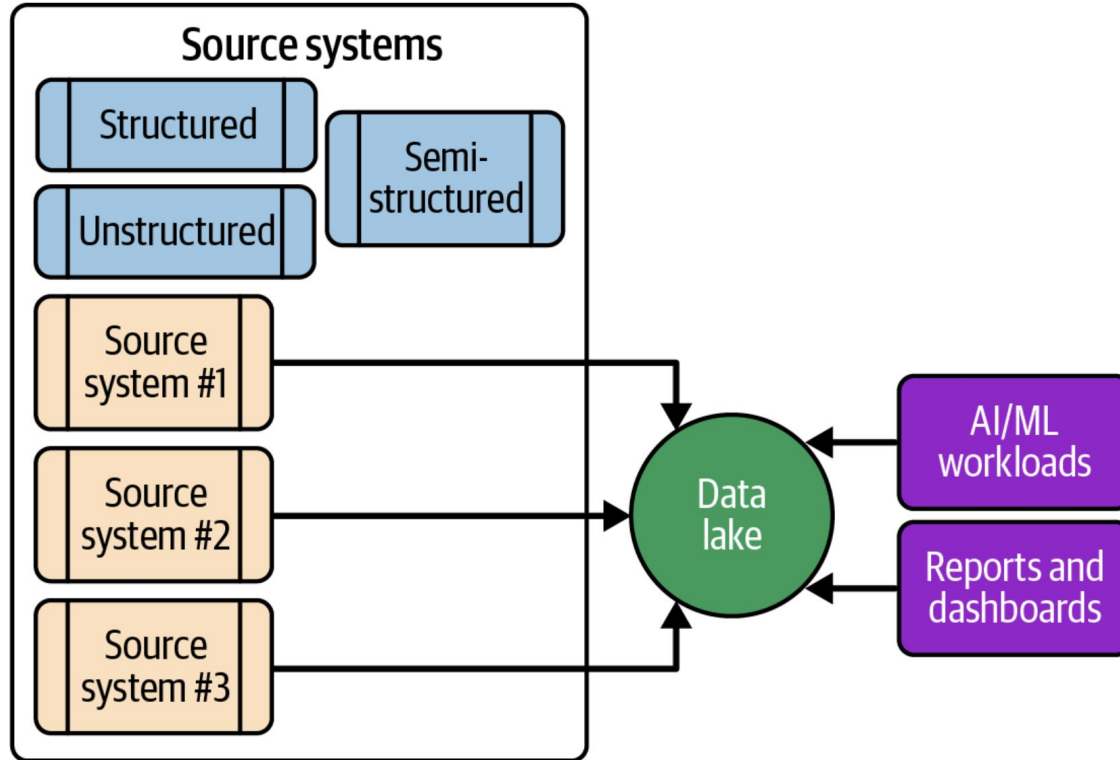


Figure 2-2. Data lake architecture

Source: Gaurav Ashok Thalpati, Practical Lakehouse Architecture, First Edition, O'Reilly, 2024.

# Convergence of warehouse and lake architectures

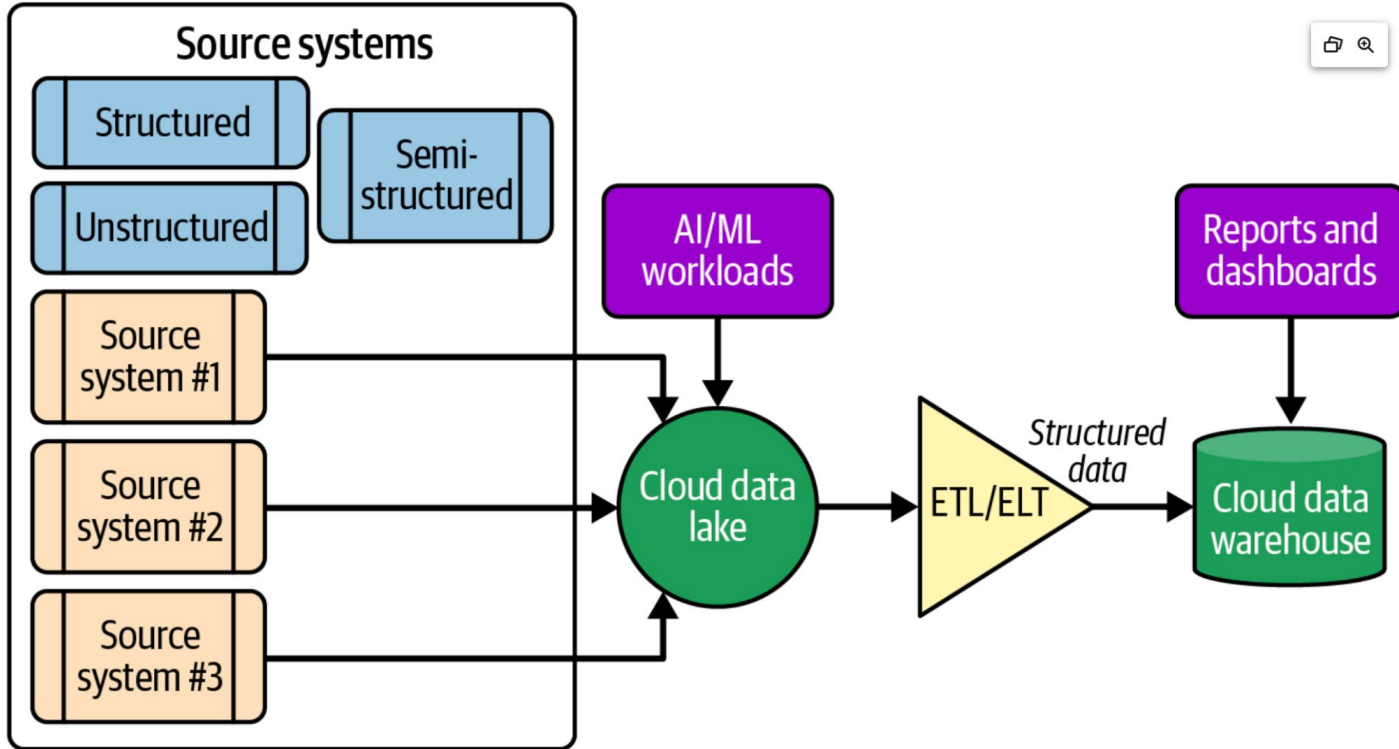


Figure 2-3. Data platform based on a combined architecture (cloud data lake + cloud data warehouse)

# How this class will work & what I expect from you

- Major portions of our class time will be spent on project work, which is why we meet on Zoom
- Be prepared to finish off your project outside of class
- Work collaboratively with your partner on all the projects, which means showing up to class and being present
- If you have to miss a class, email me, the TA, and your partner in advance
- If you are having some collaboration challenges with your partner, email me and/or come to office hours.
- Assignments will come with code samples to help you get started
- Assignments won't come with a complete playbook, you are expected to figure some things out on your own
- We will offer you a resubmission window on most assignments
- Our week-by-week schedule is tentative. It may be adjusted based on the majority needs of the class
- Please use Ed for questions and issues that you run into, just but be careful not to overshare your work
- Share your feedback with me early and often, especially if you feel that you are falling behind or if you feel that we are not moving fast enough