

Architecture & Data Flow





Sources: Neo4j and IndexedDB



Ingestion: Cypher reader and Express endpoint



Metadata: author, studentId, sourceDB, ingestedAt (UTC), tags.



Validated with Compass filters and Mongosh.

Lessons Learned

Changed .env to appropriate cluster to avoid cluster mismatch.

Understanding of data validation

UTC ISO timestamps across systems.

Neo4j seeding via small MERGE batches, one statement per run.

Connecting
different
databases on a
common schema

Challenges & Next Steps



WORKED: CLEAN JSON FROM CYPHER, SIMPLE EXPRESS API FOR LAB-2, EASY DEBUGGING.



CHALLENGES: CLUSTER MISMATCHES, HARD TO MAINTAIN DATA CONSISTENCY B/W MONGODB AND NEO4J.



NEXT: PREVENTION OF DUPLICATES, REAL TIME MONITORING.