

COMP421 Presentation Outline

- **Introduction (5 mins)**
 - Motivation
 - why would you need graph databases
 - maps naturally to a lot of problem
 - basic use cases
 - *mention our app* - why is graph database a good idea
- **Data Model (ch 3) (10 min)**
 - basic definitions
 - difference with rdbms
 - fundamental differences
 - advantages
 - communication with domain expert one-to-one relation with the actual data model and domain
 - schemalessness
 - disadvantages
 - example : use case (maybe northwind stuff)
- **Query Language (cypher) (7-10mins)**
 - basic clauses
 - basic operations
 - labels management
 - relationships management
 - nodes management
 - pattern matching in queries
 - some cool query examples
 - maybe have a table that shows an equivalent query in sql
 - how the query language binds naturally to the use case
 - sql/cypher table
- **APIs and Application --developer point of view (5 mins)**
 - APIs bundled with neo4j

- neo4j browser
 - (show fancy graph from a query)
- shell interface
- **DEMO** (5 mins)
 - technologies used
 - data used
 - basic diagram
- **Internal Structure (ch 6) (10 mins)**
- Q/A and Socratic quizz

TODOs:

- *1-2 question for exams/homework*
- *socratic quizz*
- *cook up another application and implement in neo4j (social network, etc..)*
- *cheatsheet*