607 – Project 5

Project 5 is due end of day on Sunday May 10th. *You may work in a small group on this project.*

Instructions

In this project, we'll take a look at use cases for Neo4j as well as give some thought to data modeling.

Part I: Research

Start by learning about use cases for graph databases. Here are two resources to get you started:

- *Graph Databases* by Ian Robinson, Jim Webber, and Emil Eifrem (A link to a PDF file of the book is included in this week's reading. Chapter 5 (pages 99-141) discusses common use cases.
- The Neo4j website: also has use cases: http://neo4j.com/use-cases/

Part II: Deliverable

Your task is to either invent or choose a use case for a graph database and then provide an outline of implementation. In particular, you should provide:

- A high-level description of the business use case you have chosen
- A description of the data model (define the nodes, relationships, and attributes that will be used and how they will fit together)
- A small sample of data to illustrate what the raw data are that will be used (you can create fictional data as necessary, and only need enough rows in your data to complete the last steps below)
- The code for queries to acquire and manage the data in Neo4j
- The code for queries to access and analyze the data for your use case

You do not need to develop a complete implementation. Sketch out the project so we have a fairly complete picture of what you might subsequently implement.