INLS 623: Exercise 1

Homework from First day of class (have done for second class)

1. Order your textbook(s)
2. Subscribe to Class listserv during or immediately after the first class
3. Create a personal login to our two class wikis (both linked off of top of course page), again during or immediately after class
    a. Resources
    b. Class Work
4. Read carefully and understand web pages (home page, and schedule)

Finish completing Exercise 1 (below)

Exercise 1:

The class will be divided into several sections. Each section will work this exercise on its own. Each section will be divided into three groups: business owners, users, database consultants. At the end of the first class we'll review relations DB models.

Business Owner: You are the owner of the large bookstore chain, Barns and Nibbles (B&N). You wish to make your books available through an online store. You have called in the database design firm DBdudes to design a complete system that will allow customers to query the contents of the bookstore, place orders for books, purchase their orders, and check status of orders. You may want to consider supporting other interactions as well. Your distribution center stocks over one million book titles. They receive books from multiple different sources.

Users: you are a random sample of people who purchase books from B&N stores currently, as well as folks who have experience with ordering online. You have been selected by DBDudes to help them evaluate the functional requirements for the new B&N online store.

DBDudes (database consultants): Your job is to interview business owner to determine the functional requirements of system. You will also call in and bring to your meeting several users, representing customers.

Responsibilities:

Business Owner:

Complete by end of First Class: Create your fictional bookstore in your mind, and answer questions from DBDudes, describing how you envision your online bookstore operating. You're welcome to use examples you are familiar with as a basis for your store. Each person on the B&N team must make up at least 3 unique DB queries they expect the online DB system to support. Post these to the class listserv by the 12 noon the day after this class but not today (in order to give everyone a chance to sign up for the listserv).

For Second Class: Based on DBDudes relational model (shown at end of first class), write up SQL queries that answer your 3 queries.

Users:

Complete by end of First Class: Be yourself or any person you wish (your mother, a child, grandparent). Consistent with your character answer questions asked of you by DBDudes. Each person on the User team must make up at least 3 unique DB queries they expect the online DB system to support.

For Second Class: Based on DBDudes relational model (shown at end of first class), write up SQL queries that answer your 3 queries.

DBDudes:

Complete by end of First Class: As a team, create a relational model representing the B&N online store application. (You may wish to produce an ER diagram as an intermediate step, but in the interest of time, I suggest you concentrate on producing the relational model). Your relational model should specify the tables and attributes and you should complete it by the end of the class. Email it to the listserv by 12 noon the day after the first class.

For Second Class: Record the functional requirements as you understand them. From your relational model in the first class, flesh out and refine it to produce a well defined relational DB model for the B&N online stores, completely specifying tables and attributes. Try to make sure that your schema will support the queries specified by the users and business owners in your group. Describe how the database would work overall, and give special attention to how it will work via the web. Propose specific database technology that you recommend for implementing this project (make note of any parts of the operation of database system you may not yet know how to implement). I recommend dividing these tasks up among the team members (relational model, functional requirements, discussion/proposal).

Everyone, please identify all your postings by your Name, your Group and identity, for instance, John Smith, GROUP 2, user 3 (identity: Grandma) provides the following 3 DB queries in English, and then in SQL.