Quizzterm 1 Study Guide

1. Know the various models that we'll be dealing in:

    a. UML class model

    b. Entity Relationship

    c. Relational Model

    d. Relational Algebra

    e. Table model

    f. Structured Query Language

2. Anatomy of a UML class diagram

    a. What it contains

    b. What those symbols mean

3. Keys

    a. What they do

    b. The various types of keys

    c. How they relate: a candidate key is a minimal superkey, a primary key is a chosen candidate key …

    d. Why we do them in the create table statement

4. Set theory

    a. What it tells you about the members of the set

    b. How you tell whether a given element/instance/object belongs in the set/class or not

    c. Everything that we operate on is a set.

    d. Relations are the operands and the output of all of our operations

5. DML

    a. How the insert, delete & update SQL statements work

    b. Why we have a where clause in those statements

    c. Why we include the column names in the insert statement

6. Atomic values

    a. The spreadsheet challenge for database design

    b. How to tell how many concepts you have lurking in a given column

7. The anatomy of the SQL select statement

    a. What are the clauses

    b. What do they do

    c. Which ones are optional

8. Modeling

    a. How to reconcile one model to the next

    b. How to use the graphical symbols

    c. How migrating foreign keys work