

CS 155A: Agenda 03

RDB Concepts and Row Filters

In this unit we are spending more time on the concepts of a relational database. I want to give you a reasonable understanding of the logic underlying the RDBMS we use. The concepts we are covering include attributes and constraints and keys. We are addressing this from a logical point of view and we will discuss the syntax details for these concepts later.

In order to meaningfully discuss more complex SQL statements we need to understand about the data types for table columns and the primary key for a table. Nulls are an interesting concept in databases and often need special handling. We will discuss Nulls many times over the semester.

For SQL techniques, we will cover many of the Row filters in this unit and some in the following units.

One issue we need to discuss with MySQL is the level of implementation of these features and storage engines. We will deal with this several times over the semester but we need to touch on this briefly now.

The major topics in this unit are

- The AltgeldMart database tables
- Relational Database Concepts
 - Defining tables, attributes, constraints
 - Candidate and primary keys
 - Nulls
- SQL: Simple Where clauses with Rows filters
- SQL: Row filters: comparison operators, Between, the IS null filter and the IN list filter,
- MySQL storage engines
- Gui clients

Databases:

Starting with this unit, then demos will often use the tables in the Altgeld Mart database. You can download the SQL to create the tables and insert the data from the Download page for this class.

To Do: Reading

- Download the notes for this unit from the DownloadPage.
- In the van der Lans book: read chapter 8 section 8.1, 8.7, 8.9,8.13

To Do: Assignment_03

Download the assignment directions and any sql files needed from the DownloadPage. Complete the assignment. Upload the required files via the assignment tool.