

IT 775

Database Technology

SQL

Introduction

Structured Query Language

Structured English QUERy Language (SQL) pronounced es'-queue-elle (also pronounced see'-quell, like the word sequel)

ANSI SQL standards

SQL:86—1st version, not very complete

SQL:89—earliest comprehensive standard

SQL:92

- most widely used
- most vendors more/less adhere to this with minor variations

SQL:99, SQL:03, SQL:06

- includes OO features, spatial features, remote query features
- modest vendor support
- beyond scope of this course —

SQL:08, SQL:11

- Legalizes ORDER BY outside cursor definitions
- Adds INSTEAD OF triggers
- Adds TRUNCATE statement
- Enhances temporal databases (time-based)

SQL: Relational Model

DDL

Data Definition (Description) Language (DDL) - is a language for creating and modifying database objects such as tables, indices, and users. DDL statements are used to define data structures, especially database schemas. Common examples statements include CREATE, ALTER, and DROP.

SQL: Relational Model

DML

Data Manipulation Language (DML) - is a language used for adding (inserting), deleting, and modifying (updating) data in a database. A DML is often a sublanguage of a broader database language such as SQL.