Relational Databases

Description

Know how to request relational databases through the SQL language

Learning Objectives and Outcomes

- Understand the relational model and the RDBMS features
- Master the SQL language in its data manipulation part

Course Schedule and Contents

Session#1	DBMS features. Relational model (tables, rows, columns, keys, foreign keys, primary key, integrity constraints). Basic requests: INSERT, UPDATE, DELETE and simple SELECT. Horizontal functions.
Session#2	Aggregations, GROUP BY, and inner joins.
Session#3	Nested queries, outer joins, HAVING and EXISTS, relational divisions.
Session#4	Review of possible difficulties, followed in the second part by an evaluation.

Grading

Final evaluation: 100%

Policies

- Please install before the first session MySQL server and a MySQL client. You can either install a standalone server and mysqlworkbench (this is the client), or a package like wampserver (Windows), xampp (Windows or Mac), or Mamp (Mac), which all include a Web server and the Web client phpmyadmin. **Be sure they work by launching them** (depending on your system, you may have to install additional components).
- Attendance in every class is expected and class participation and discussion are strongly encouraged.
- The evaluation (and exercises as well) is done on computer. Please be sure to have it with you.
- During the evaluation, you will have full access to the course materials and to the correction of the exercises given during the sessions.
- Network communications during the evaluation is forbidden.

Good Luck!