

JAVA WITH JDBC COURSE

INTRODUCTION TO SQL



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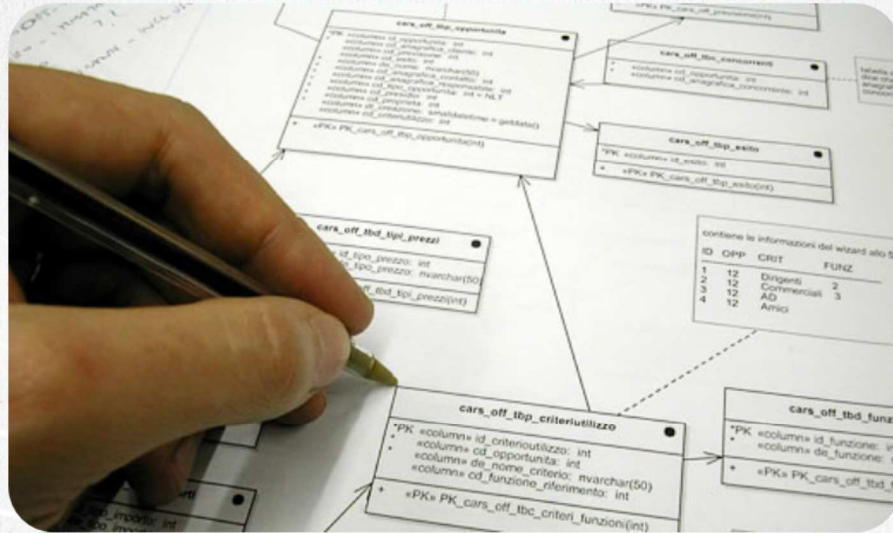
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Hello, Ubaldo Acosta greets you. Welcome back to this Java with JDBC Course (Java Database Conectivity).

In this first lesson we will review an introduction to SQL (Structured Query Language), as well as its basic syntax. This will be the basis of the SQL statements that we will execute using Java with JDBC, and thus learn to interact with a database using Java.

So, if you're ready, so are we. Let's start immediately.

INTRODUCTION TO SQL



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SQL means (Structured Query Language) is a language that allows us to interact with a relational database.

A database engine (RDBMS) allows managing databases.

Examples of databases are MySql, Oracle, SQLServer, Postgresql, etc.

A database contains tables related to each other and each table contains rows and columns that hold certain information, these are just some of the concepts used in the databases, then we will review some examples of SQL statements and we will see how we are doing to manipulate the information stored in a database.

DML SENTENCES IN SQL

DML sentences in SQL:

- ▶ DML (Data Manipulation Language) allows to interact with the data of a Database.
- ▶ The DML statements in standard SQL are:
 - SELECT
 - INSERT
 - UPDATE
 - DELETE

In SQL there are several classifications to be able to interact with a database from managing it, manipulating its data, until it can correct erroneous and incongruent information within a database.

In particular, in order to manipulate the information stored in a database, we need to use what is the concept of DML (Data Manipulation Language).

The DML statements in standard SQL are classified into different statements, such as:

- Select statement: Select records from the database.
- Insert Sentence: Inserts records in the database.
- Update statement: Updates records in the database.
- Delete statement: Deletes records from a database.

EXAMPLE OF SQL STATEMENTS

Example of SQL statements:

1. `SELECT * FROM STUDENTS;`
2. `INSERT INTO ALUMNOS (student_id, name) VALUES (1, 'Jhon');`
3. `UPDATE STUDENTS SET NAME = 'Charly' WHERE student_id = 20;`
4. `DELETE FROM STUDENTS WHERE student_id = 10;`

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Examples of DML statements are for example:

The select statement. In the example shown this sentence will bring us all the records that are stored in the STUDENTS table.

If we want to insert some record we need to use the INSERT statement this sentence will allow us to add a new record in the STUDENTS table.

In turn, the UPDATE statement allows us to update the values stored in the database, in which we will normally restrict the modified records according to how we want to modify the information, with the use of WHERE.

And finally, we can also delete information from a certain table, in this case the STUDENTS table and we are also restricting the records that are going to be modified in the STUDENTS table.

These were some of the examples of the use of SQL statements. Next we are going to install the MySql database and we are going to put into practice each one of these sentences.

ONLINE COURSE

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