



Institute of Technology Tralee

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Database Concepts

Lab 02 – Writing SQL SELECT Queries

In this lab you will learn how to:

- Write SQL SELECT queries using MS Access

Before You Start:

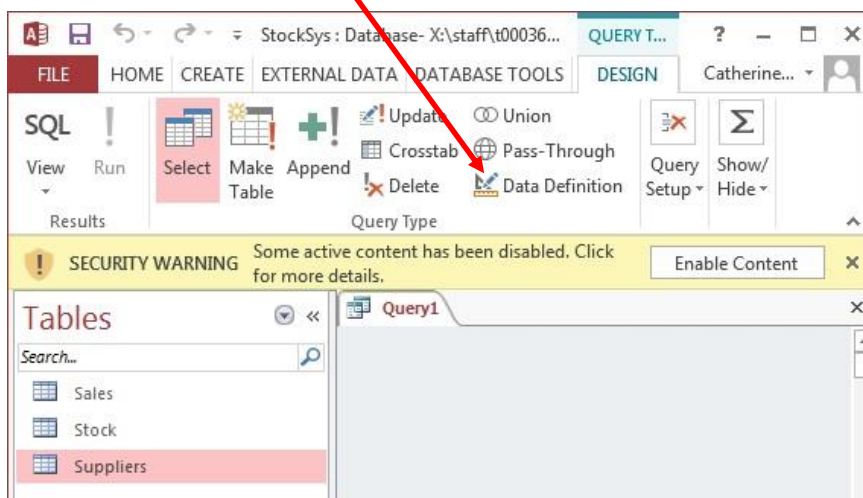
During this lab, you will work with the demonstration database *StockSYS* which you copied last week. Put a copy of this database on your C:\drive.

Writing SQL queries in MS Access

Open the database *StockSYS* (used in the last session).

You can easily write SQL queries in MS Access **without** using the query by example (QBE) grid. To do this, do the following:

1. Select **Create** → Queries → Query Design on the menu bar
2. Close the Show Table dialog box.
3. Click on the **Data Definition** icon on the menu strip



4. You will then be presented with a blank query window where you can write your SQL query.
5. Enter the following query:

```
SELECT *  
FROM Stock;
```

6. Click the **RUN** button. Results similar to the following will be returned:

Query2						
Stock_No	Description	Cost_Price	Sale_Price	Qty	Supp_Id	
1	Levis 501	€50.00	€75.00	100	1	
2	Wrangler Regula	€40.00	€65.00	50	2	
3	Levis 901	€80.00	€105.00	35	1	
4	Pepe Skinny	€45.00	€70.00	20	3	

Exercise.

The syntax for the SQL SELECT statement is shown below:

```
SELECT { * | Col list }  
FROM <table name> [, <table name> (...)]  
[WHERE <condition = true>]  
[GROUP BY ....] [HAVING.....]  
[ORDER BY .....]
```

Using the *StockSYS* database, write SQL SELECT queries to do the following:

1. List all stock in order of Description.
2. List Stock_NO, Description and Sale_Price in order of sale_Price (most expensive first).
3. List all Sales in order of descending Sale_Value.
4. List all sales in excess of €300.
5. List all stock whose quantity has fallen below 10.
6. List all sales which occurred in August 2010.
7. List all sales which occurred after 15th August 2010.
8. List the StockNo of all stock which has been sold.

Amend your query so that only one instance of each StockNo is listed
(Hint: use DISTINCT).

9. List Stock_No, Description and Cost_Price for all stock in descending order of Cost_Price.

10. List Supp_Name and Tel_No in alphabetical order of Supp_Name.

11. Write an SQL SELECT query to produce the following result set:

Sale_Value ▾	Sale_Date ▾	Qty_Sold ▾	Stock_No ▾
€130.00	01/08/2010	010	002
€150.00	02/08/2010	002	001
€315.00	08/08/2010	003	003
€375.00	15/08/2010	005	001
€150.00	16/08/2010	002	001
€195.00	21/08/2010	003	002
€150.00	01/09/2010	002	001
€420.00	02/09/2010	004	003
€225.00	06/09/2010	003	001

12. Find the smallest, largest and average Sale_Price (for all sales).

13. Show the Stock_No, total sales value and number of sales for each stock item sold.