## HW 4 AND <br> Solution of HW 3

## Homework 3 solution

- Import an excel file containing the list of countries.
- Add the field «countries» to the suppliers table. (the countries where the suppliers atre located)
- Explain and manage the relationships between the tables.
(Check the file : book store -tables and relationships)


## Rellaitionshinips = Daitaloase Bridges



In order to manage the relationship, it is necessary to check the both directions (because many to many relationships are hidden in one to many relationships sometimes).
Table1 >>> Table2 and Tanble2 >>> table1.

## Our tables are :

## 1-Book details

2-Suppliers
3-Accounting
4-Countries

We can have $\binom{4}{2}=6$ relationships :

| $1 \& 2$ | $1 \& 3$ | $1 \& 4$ |
| :--- | :--- | :--- |
| $2 \& 3$ | $2 \& 4$ | $3 \& 4$ |

If we have to connect four cities, is it logic to construct bridges between each two of them?
İt means 6 bridges !!!
Of course not, because it is a loss of time and energy. So if we have to connect four cities, we can use only 3 bridges instead of 6 .


In order to create a meaningful relationship between two tables they should have a common field.So the relationships that we can have are :

1-Book details \& Accounting
2-Suppliers \& Accounting
3-Suppliers \& Countries

## 1-Book details \& Accounting



Book details
book1
book2
:
booki
ONE

## Accounting

book1
book2
booki
ONE
Accounting
Accounting
book1
book1
book2
book2
\vdots
\vdots
booki
booki
ONE
ONE

Parent (book details)
One to
One to

Child (accounting)
one one

One to One

## 2-Suppliers \& Accounting

| \# accounting |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | ID | $\uparrow$ | book ID | - | book title | cost | - | selling price - | supplier | - Click tc |
|  | $\pm$ |  | 1 | GO01 |  | the goal | 70 |  | 90 | AP |  |
|  | $\pm$ |  | 2 | DE05 |  | Design of experiments | 80 |  | 100 | BH |  |
|  | + |  | 3 | PP02 |  | Production planning and control | 100 |  | 150 | AP |  |
|  | + |  | 4 | MA09 |  | Management Accounting | 45 |  | 60 | AA01 |  |
|  | + |  | 5 | ORO1 |  | Operations Research | 35 |  | 40 | TB |  |
|  | † |  | 6 | 1737 |  | Information thechnology and innovation | 200 |  | 230 | AA01 |  |
|  | + |  | 7 | SM34 |  | statistical modeling | 60 |  | 80 | AP |  |
|  | $\pm$ |  | 8 | DA06 |  | design and analysis of experiments | 50 |  | 60 | AP |  |
|  | + |  | 9 | FA23 |  | financial accounting | 40 |  | 50 | BH |  |
| * |  |  | (New) |  |  |  |  |  |  |  |  |
|  |  |  | Total |  |  |  | $9 \text { 75,555555 }$ | $\begin{array}{r} 5555 \\ 556 \end{array}$ | 40 |  |  |

- We are buying each book from one supplier. We don't buy the same book from different supplier.
- But we can buy many books from a given supplier.

It should be a one to many relationship.

| \% suppliers |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ID | supplier code - | name | surname | tel | payment | email | website | country | Cliquer poun |
| $\pm$ | 1 | AA01 | ahmad | alawi | (0212)-661-145-84-24 | credit card | alawi@hotmail.com | ketab.ma | Morocco |  |
| $\pm$ | 2 | AP | antonio | patino | (0090)-588-352-14-45 | on line | anto@yahoo.fr | book.com | Cyprus |  |
| $\pm$ | 3 | BH | Bernard | hugo | (0232)-661-457-85-12 | dept | bernardo@gmail.com | lire.com | France |  |
| $\pm$ | 5 | SG | serena | gonza | (0852)-147-963-15-78 | other | serena@gmail.com | knowledge.fr | France |  |
| $\pm$ | 4 | TB | Tessa | blair | (0475)-842-158-96-31 | cash | tessa@yahoo.fr | read.com | Turkey |  |
| $\pm$ | 10 | MA | Mohammed | al-durah | (0034)-545-866-78-76 | check | durah@gmail.com | durah.com | Palestine |  |
| * | (Nouv.) |  |  |  |  |  |  |  |  |  |



| Parent (Suppliers) |  | Child (accounting) |
| :---: | :---: | :---: |
| One | to | Many |
| One | to | one |

## 3-Suppliers \& Countries





## HW 4

Let's suppose that we add a new field « Delivery Countries» to the table «suppliers».
This new field contains the countries where a given supplier can deliver books.
One supplier can have many delivery countries.
Explain and manage the relationship between «countries» and «suppliers» in this case.
Send your answers (before 6 november) by email to : khaoula.chnina@cc.emu.edu.tr
The answers will be available on line before the quiz .

## New field : Delivery coutries



