

1. Database design

You have to design a database for a online shop:

We sell products and for every product we want to know: code, name, price and description. The products are organized in categories, for every category we just want to know: code and name. A product belongs to only one category.

On the other hand clients buy products (sales). For every sale we want to know: a code, entry_date, served_date, the client who is buying and what products its buying within its amount. For the clients we want to know a code, name, dni, surnames, phone, mail, address, city, postal code and country.



2. Create a new database called “shop” in your VM MySql server.

3. Create all the tables in your “shop” database.

4. Insert the following information in your “shop” database

categories 

code	name
1	Computer
2	TV
3	Tablets
4	Phones

products 

code	name	description	price	category
1	Apple 13-inch MacBook Pro	New processors and graphics	835.00	Computer
2	Samsung ATIV Book 4		724.00	Computer
3	TV LG 42LN540V 42-inch	Full HD LED TV	349.00	TV
4	Samsung UE3LG5000 32-inch	Full HD LED TV	248.00	TV
5	Samsung Galaxy SIII	Sim Free Unlocked	350	Phone
6	Apple iPhone 5S	Unloked	550	Phone

7	Apple iPad Mini 16GB Wi-Fi	White	300	Tablet
8	Google Nexus 7 7-inch	2GB RAM	300	Tablet

Clients

code	name	surnames	dni	phone	mail	address	city	Pcode	country
1	John	smith	12345678K		j@a.com		Palma		España
2	Mike	Garnet	11111111L		m@b.com		Palma de Mallorca		Spain

Sales

1. John Smith on 2014/01/01 buys: 1xApple iPhone 5S
2. John Smith on 2014/02/01 buys: 1xSamsung UE3LG5000 32-inch and 2xSamsung Galaxy SIII
3. Mike Garnet on 2014/02/01 buys: 1xGoogle Nexus 7 7-inch

5. Change clients table as follows:

- dni must be unique
- dni, name and surnames must be not null
- the code must be autoincrement

6. Change products table as follows:

- name must be not null
- add a new column called stock with a default value "0".
- set a stock of 5 items to all products

7. Testing

- Insert next client. After insert select on the table and explain what is happening

code	name	surnames	dni	phone	mail	address	city	Pcode	country
1	Mary	Smith	12345678K		m@a.com		Inca		España

- Insert next client. EAAfter insert select on the table and explain what is happening

code	name	surnames	dni	phone	mail	address	city	Pcode	country
1	Barbara		87654321J		b@a.com		Inca		España

- Insert next client. After insert select on the table and explain what is happening

code	name	surnames	dni	phone	mail	address	city	Pcode	country	stock
	Sussan	Collins	87654321J		s@a.com		Inca		España	

- Insert next product. After insert select on the table and explain what is happening

code	name	description	price	category
9	Apple 15-inch MacBook Pro	New processors and graphics	1200.00	Computer

- Insert next product. After insert select on the table and explain what is happening

code	name	description	price	category
10	Apple 17-inch MacBook Pro	New processors and graphics	1400.00	5

7. Selects

- Show how many products we have for every category
- Show all the clients who have'nt buy anything
- Show for every product the total amount we have sold.
- Show the clients who have bought a phone
- Show all the products for the LG brand. Check the result. Is it correct?. How we can solve this problem. Try to do it.