**SUMMER CAMP DATABASE PURPOSE**

**Introduction**

We are going to explain why we chose this topic instead of doing the typical database related to hospitals.

In the beginning, we were a little lost trying to imagine what a database was. The concept of the tables and all the connections, the many to one, one to many... all that was confusing at first. We thought of a lot of examples in which a data base is needed for organization´s sake; a football team, a baby nursery, etc.

Finally, we all came together and found the perfect example that was clear to all of us and that we also thought that was very useful: A Summer Camp.

This summer camp is directed towards a young aged crowd. We have tried to model the typical kid’s camp, but have decided to make it for young adults to have more liberty about the choice they have. They can select if they want the SurfCampTM group to be in charge of their accommodation, or wish to find accommodation by their own, they can choose a type of transport or another and they can rent the material needed.

Also, we have adjusted to make the database useful throughout the hole trip, since we have included modifying and deleting options (not like other databases that can only insert or view), so when a camper leaves, or changes his or her mind about any of our services available, the database can be easily updated.

Even though our data base is thematic, and is specialized in water sports such as surfing, we thought this was an easy way to make a first approach of what can later be changed into another theme such as a resort hotel, a hospital, a student residence, etc. We cover the basics of what can be easily stated as "a record of a group of people that are in a stay doing or receiving some sort of services". Accommodation could be translated into room number or floor, instructor into doctor and activity into treatment, for example, if we were talking about a hospital stay. It is a very versatile concept.

**TABLES**

Our database is composed of six entities: a **camper**, an **activity**, an **instructor** and the **accommodation**, **transport** and rental **material** available.

**Camper** is the main entity, so that´s why it´s the one with the most relations. It has a many to many relationship with material (A camper can rent several items), a many to many relationship with activities (they can sign up for many sports), and a one to many relationship with **accommodation** and **transport** (they can only stay in one type of accommodation and take one type of transport).

**Instructor**, we would consider, is the second main entity. It´s also the second entity with the most attributes. It has no relation with the camper (they only are related through the activity the camper takes) but has one to many relationships with accommodation and transport.

**Activity** is related to camper, but it is also related in a many to many relationship to instructor (one instructor can teach many activities and an activity can have several instructors in charge).

**Material**, **Accommodation** and **Transport** are really simple entities. The only attribute they have is the price of the item.

To connect all of this, we have created the following tables:

1. - Camper

2. - Instructor

3. - Activity

4. - Material

5. - Accommodation

6. - Transport

7. - Camper-Material

8. - Camper-Activity

As you can see, many to many relationships have their own table.