Database description

Windsurf.dk is a company that offers rental services for windsurfing equipment. The company requires a database management system for its products. The system should make it possible to check all the information about the customers, the employees, the equipment, and to allow making rentals. Therefore it has to keep track of:

* Rentals
* Equipment
* Customers
* Employees
* Payments

The main business rules of the database are:

* Customer rents equipment
* Customer makes payment
* Employees maintain equipment
* Manager supervises employees

Rentals table is the main one, which connects all others. The company has to know about every reservation: its ID, who made it, what was booked, when, until when and what is the current payment status as well as the price for this given service.

Equipment table contains all the data about the equipment the company owns. It stores IDs for every equipment, date when the company purchased it, rent price, availability status and brand.

There are also 3 subtables (Boards, Sails and Wetsuits), which inherit from the Equipment table. Additionally, the Boards and Sails table contains a type field (“Beginner”, “Intermediate” and “Advanced”). The Wetsuits table contains a size field.

In the customers table the company can find all the information about every customer: their ID, name, identification number and date of birth.

Table containing payment methods allows the company to store all the information about both finished and unfinished payments (payment ID, customer ID, method of payment, amount).

Employee table contains data about the company employees (which includes staff members and a manager). The table keeps track of employee’s ID, name, CPR, date of birth, salary and position).

Types of relationships existing in our database:

* 1 to 1: Rental – Payment
* 1 to many: Customer – Rental, Rental – Equipment
* Recursive: Employee
* Many to many: Employee – Equipment (Attributes on relationship are included here)