Entity Relationship Model

# Problem 1: Articles and orders

A database for a small business should contain information about customers, items, and orders. So far the following data is recorded in various documents:

• For each customer: Customer number (unique), Shipping addresses (several per customer), Balance, Credit limit (depends on the customer, but in no case should it exceed 3,000,000 pts), Discount.

• For each item: Item number (unique), Factories that distribute it, Stock of that item in each factory, Item description.

• For each order: Each order has a header and the body of the order. The header consists of the customer number, shipping address and order date. The body of the order consists of several lines, in each line the number of the ordered item and the quantity are specified.

In addition, it has been determined that the information of the factories should be stored. However, given the use of distributors, the following will be used: Factory number (unique) and Contact telephone number.

And you want to see how many items (in total) the factory supplies. Also, for strategic information, information on alternative factories could be included with respect to those that already manufacture articles for this company.

Note: An address will be understood as Street No., State and City. A date includes time.

You are asked to make the ER diagram for the database that represents this information.

# Problem 2: Esports teams

A database for an esports application that stores the existing DOTA teams with its corresponding players.

The teams are composed of the number of team members and the brand of the team.

The players have a name, an age and a preferred character.

Additionally the application can track the matches played by the teams and the idea is to display all matches with the outcome and the teams that participated.