Database Design Project

Oracle Baseball League Store Database

Project Scenario:

You are a small consulting company specializing in database development. You have just been awarded the contract to develop a data model for a database application system for a small retail store called Oracle Baseball League (OBL).

The Oracle Baseball League store serves the entire surrounding community selling baseball kit. The OBL has two types of customer, there are individuals who purchase items like balls, cleats, gloves, shirts, screen printed t-shirts, and shorts. Additionally customers can represent a team when they purchase uniforms and equipment on behalf of the team.

Teams and individual customers are free to purchase any item from the inventory list, but teams get a discount on the list price depending on the number of players. When a customer places an order we record the order items for that order in our database.

OBL has a team of three sales representatives that officially only call on teams but have been known to handle individual customer complaints.

Section 2 Lesson 3 Exercise 2: Entities and Attributes

Identifying Attributes (S2L3 Objective 2)

To gain a better understanding of the system a meeting was held with the manager of the Oracle Baseball league store. The following transcript details the conversation that took place:

Meeting Transcript

Interviewer: In the information you provided you state that you have two types of customer, individual and team; what information do you store about customers and how do you distinguish between the different types?

Manager: For all customers the store tracks their full name, address, phone number, email and what, if any team they belong to. The current balance owed by the customer is also tracked in our system

Interviewer: You say that customers can order any item from the inventory list. What types of items can they purchase?

Manager: Individual customers can purchase items like balls, cleats, gloves, shirts, screen printed t-shirts, and shorts. Additionally, teams can order an entire set of uniforms as well as balls, warm-up and team t-shirts and may get a discount on the list price depending on the number of players within that team. When a team purchases items from the store, we require that the registered customer for that team places the order for the named team.

Interviewer: Do you have any specific information about the items that you sell that you want recorded on the system?

Manager: Customers never purchase items sight-unseen, so there is always a description and price available. The tracking of inventory items is a very important part of the business, as well as the description and price we currently track the item name, color (if applicable), size (if applicable) and item category. There are three item categories that we use: clothing, equipment, and miscellaneous. For our inventory we also track the wholesale cost of the unit as well as the number of units on hand; when no units are on hand a zero is recorded in the system.

Interviewer: How do you record what items have been ordered by your customers?

Manager: When a customer places an order, we record the following purchase details, the date, items purchased, item size, color, number of units, and the price for each unit. We would also like to store the total order price for all of the items ordered.

Interviewer: You have three sales representatives in the company, what is their role?

Manager: Every team customer is assigned their own sales representative as the salespeople work on commission, two salespersons would never be allowed to call on the same customer. Although sales reps normally only call on teams, they have been known to handle individual customer complaints.

Interviewer: How do you record the details of the sales reps on your system?

Manager: For each of the three sales reps the store keeps track of their name, address, phone, email, total commission and commission rate.

Using text analysis on the given scenario identify any potential attributes that will be used to store information about the previously identified entities. Attributes are normally found by identifying nouns that describe other nouns (our entities).

Potential Entities

- Customer
- Team
- Sales Representative
- Order
- Item
- Inventory List