

The company was approached by Maracana Stadium, located in Rio De Janeiro, Brazil, to create a database for the following (see goal section). Brazil hosted the Summer Olympic 2016, since the Olympic they wanted to get a sense of their customer types and which program had the most turn out.

Goal:

- Increase profits through ticket sales and food sales
- Maracana stadium came to us to provide a better experience for fans and organizers.
- To improve the organization of structures of parking and ticket sales.
- Organize sales, employees, and customer dates.

Products/Services:

- Games
- Food
- Tickets
- Sponsors
- Concerts
- Exhibitions
- Loyalty
- Platforms

User Requirements:

Maracana Stadium (the stadium) wants to know how many employees are needed for these programs. The employees have these types of attributes; primary key employee Id, department, employee name, phone number, employee email, address(street, state, city, zip) and age. For one employee they could There are 3 types of programs; game, concert, and exhibitions. Maracana Stadium can only have one program at a time. The attribute for games is; name, date, program number, game day, tournament names. The following attribute for concerts is; name, date, program number, and concert types. Attribute for exhibitions is; name, date, program number, and themes. The programs are sponsored by one or many sponsors and sponsor can sponsor none or many. For each donation the primary key is sponsor id, the following are attribute sponsor name and donation amount.

Maracana Stadium has seen two type of customers, a customer can be either a member or a special guest. A customer's primary key is booking ID. A member's primary key is member ID and unique attribute membership level. A special guest has a unique attribute of guest type. Both member and special guest have the following attribute are; name, phone, address (street, state, city, zip), email, and age. The customer can go to the counter for an program ticket or concession counter but not at the same counters time. Both the program ticket counter and concession counter the same following attributes; counter number, ticket number (primary key), ticket type, ticket price. The unique attribute for program ticket is; ticket sold and tcounter number. At the concessions counter, there are two type of concessions available food or beverages, but can't happen at the same time. both have the following attributes sales

and counter number. The unique attribute for food is food type and vendor, for beverages it is beverage types and brand. For each program there can be one or many counters, however, every counter there can only be one per program.

There is 3 type of stands in the stadium; regular, VIP, and box seat, a customer can only go one stand based on the price of their ticket. For each counter, there can only be one of the stands and there can only be All three type of stands has the following attribute stand name, and stand number (primary key). Regular stands have the following unique attribute Rseat number, Rrow number, and zone. VIP stand have the following unique attribute Vseat number and Vrow number. Box Seat has unique attribute of box number.

The stadium had built a large parking lot to sustain 80,000 people coming to these programs. Parking area belongs to one stand and one stand belongs to one parking area. Parking has the following attribute; ticket number (primary key), stall number, gate number and level number. There are could be one gate to multiple parking lots. The following is the gate attributes gate number (primary key) and location.