Yusen Tang 260890520 && Xize Jin 260956421

Specification

Database for ticket sales

1. About a single match, it should have enough a specific id to ensure its uniqueness and enough attributes to show its information. The tickets selling website should show all the information for customer's reference.
   - Match id
   - Match name
   - Match team (Home team)
   - Match team (Visiting team)
   - Match date
   - Match time
   - Stadium address
   - Extra program (such as a special guest)
   - Availability
   - Stadium Entrance
   - Parking information
2. Show ticket details.
   - Match details (show on the tickets and website)
     - Ticket id
     - Match name
     - Match team (Home team)
     - Match team (Visiting team)
     - Match date
     - Match time
     - Stadium address
     - Ticket Category
     - Seat's location
     - Price
     - Extra program (such as a special guest)
   - Purchasing details for tickets selection
     - Ticket Category (stadium district, such as normal place, Alcohol free area, Wheelchair User)
     - Ticket Type (for children, adults or old people, age-dependent classification)
     - Ticket Quantity
     - Ticket Price (for single one)
     - Subtotal for purchasing
3. For a single customer, we should use enough information to identify a user, showing his or her details and payment information.
   - Basic information for login account
     - Email address
     - Password
     - First name
     - Last name
     - Live location
     - birthday
     - Address
     - Nationality
     - Preferred language
   - Shopping Cart
   - Purchasing information
     - Customer number
     - Login information
       - Email
     - Personal Details
       - Title
       - First name
       - Last name

- ✧ Data of birth
- ✧ Nationality
  - Your main address
    - ✧ Country
    - ✧ Address
    - ✧ Postcode
    - ✧ Town/City
    - ✧ Province
    - ✧ Phone number
    - ✧ Mobile number
  - Payment information
    - Card number
    - Security code
    - Expiration date

Assumption

1. Each referee may play different role in different games(May play as referee this game and assistant referee next game)
2. One ticket one match (no bundle tickets)

Restriction

1. A match referee group needs 4 common referees and 4 VAR referees. We can't guarantee there are two groups with eight referees.
2. We can't guarantee maximum number of tickets for each match
3. We can't guarantee that there are exactly two teams participating a match
4. It is impossible to guarantee there will be exactly 4 coaches for each team since it is a one to many relation(Every coach belong to exactly one team but it is possible that one team has more than one coaches)
5. We cannot dictate how many tickets a consumer can buy
6. We cannot specify the upper limit of the players and coaches a team could have

Relational translation

Team (<u>country</u>, URL, group, national_association)

Player (<u>pid</u>, name, DOB, shirt_number, general_position,country
      country foreign key references Team(country))

Coach (<u>cid</u>, name, DOB, role,country
      country foreign key references Team(country))

Stadium(<u>name</u>, location, capacity,Entrance_information, parking_information)

Match (<u>identifier</u>, date, time, round, match_length, stadium, Extra_program, availability,
      match_length, match_name,
      stadium foreign key references Stadium(name))

Referees (<u>rid</u>, name, years_of_experience, role, country, match
      match foreign key references Match(identifier))

MatchPlayer (<u>name</u>, attendance, entered_time, left_time, detailed_position_in_this_game,
      yellow_card_number, red_card_number, match
      name foreign key references Player(pid)
      match foreign key references Match(identifier))

MatchGoals (<u>Occurrence, identifier</u> , match, occurred_time, whether_penalty, who_scored,

who_scored foreign key references MatchPlayer(name))

Customer(Customer_number, preferred_language, nationality, live_location, DOB, address, Eaddress, name, password, pronoun, ticket_quantity_in_sCart, sCart_subtotal)

Ticket (tid, price, seat_location, ticket_category, ticket_type, Customer
Customer foreign key references Customer(Customer_number))

PaymentMethod(Card_number, Card_type, Security_code, Expiration_date, customer_number
customer_number foreign key references Customer(Customer_number))

# NOTES：Artificial keys
1.Player(pid)
2.Coach(cid)
3.MatchPlayerList(mpid)
4.Referees(rid)
5.MatchRefereesGroup(mcid)
6.paymentMethod(card number)
7.Customer(Customer number)
8.ticket(tid)