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Group B

1. Context and objectives:

We will create a database that records all the information of a match, minute by minute. The data will be information such as player actions (pass, shot, foul, card, etc.), and player characteristics (date of birth, weight, club, jersey, etc.).

Main objective :

Facilitate the recording, storage and querying of sports match data to reconstruct the complete match timeline.

2. Scope of the project:

- **Main entities** :
  - the Players
  - the Matches
  - the Actions
  - the Teams

  -**Process to manage** :
  - the Entering player information before the match.
  - the Recording of match events.
  - the Consultation of the complete chronology of a match (search by player, team, or action).

3. Constraints:

The constraints are in the 'Contraintes.sql' file.

- A match must last a maximum of 90 minutes.
- Jersey_number: greater than 0 and less than 100
- Date_Birth: between 1924 and 2009
- Max weight (we took the weight of the most important professional player) 100kg. - A match can only take place between the date of the 1st day of the championship and the date of the last day of the championship

MCD: cf. "Model_EA" file

MLD:

the Players (**ID_Licence**, Name, First name, Date_Birth, Weight, Club, Jersey_number, Position, **#ID_Club**)

the Matches (**ID_Match**, Date_Progress, Team_Dom, Team_ext, Score)

the Actions (**ID_Action,** Minute_Action, Decisive_pass, Goal, Foul, Yellow_card, Red_card, **#ID_Licence**)

the Teams (**ID_Club**, Club_Name, Coach_Name, Device)

the Participate (**#ID_Licence**, **#ID_Match**)

the Play (**#ID_Club**, **#ID_Match**)

the Unfold (**#ID_Action**, **#ID_Match)**

Normalisation :

For the tables **Player**, **Action**, **Matches** And **Teams** all the attributes are atomic so it respects the 1FN, moreover the attributes outside the primary key depend on the entire primary key so it respects the 2FN, finally the attributes outside the primary key have no dependencies between them so it respects the 3FN.

Inserting data:

The data was generated using a generative AI (Chat GPT) then inserted manually, see the "Dataset.sql" file.