

Assuming a coach cannot be a player:

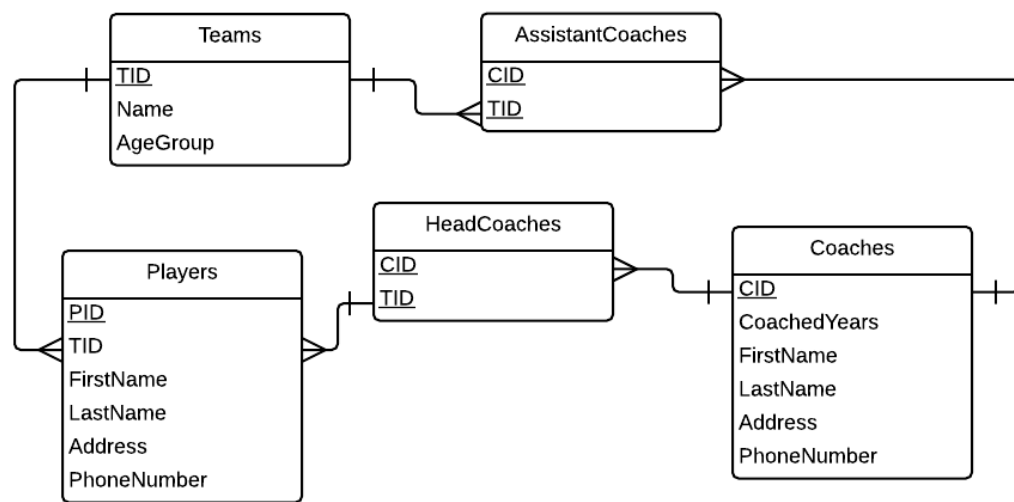
1. Functional Dependencies

Team \rightarrow Age Group

Team, Age Group \rightarrow Coach

Player \rightarrow Team

2. ER Diagram



3. The table is in first normal form because all the attributes in a table are dependent on the primary key and only the primary key, no non-prime attribute is dependent on any proper subset of any candidate key of the table and A relation is in first normal form if the domain of each attribute contains only atomic values, and the value of each attribute contains only a single value from that domain.