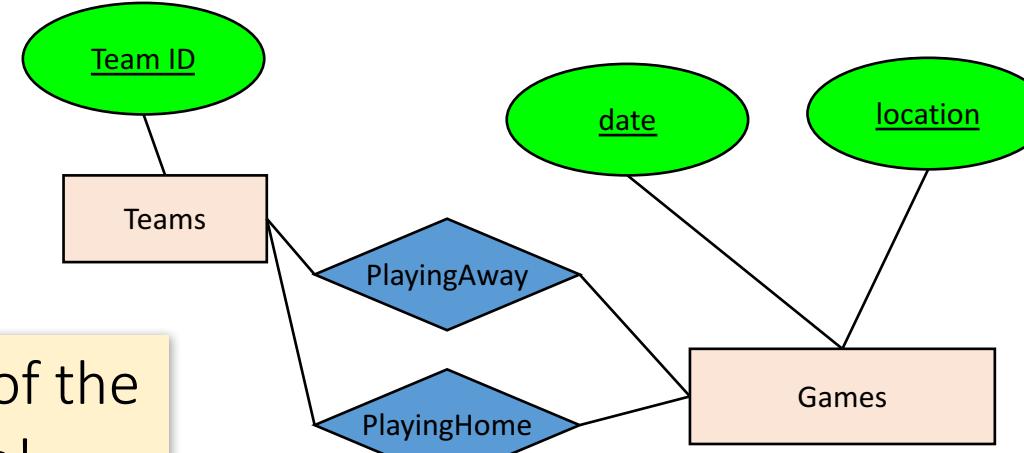


Lecture 4 Activity Solutions

Activity 1

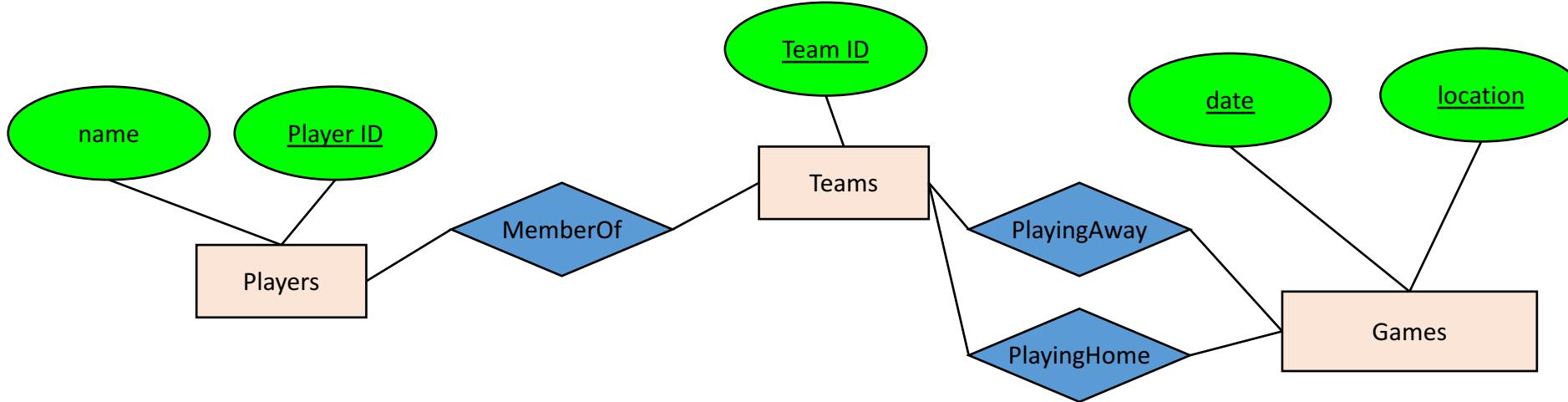
Note that various ER diagrams could work, not just the following one!



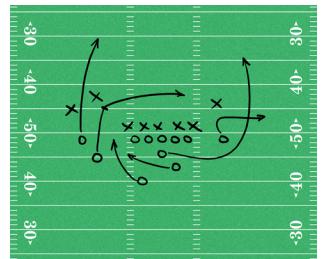
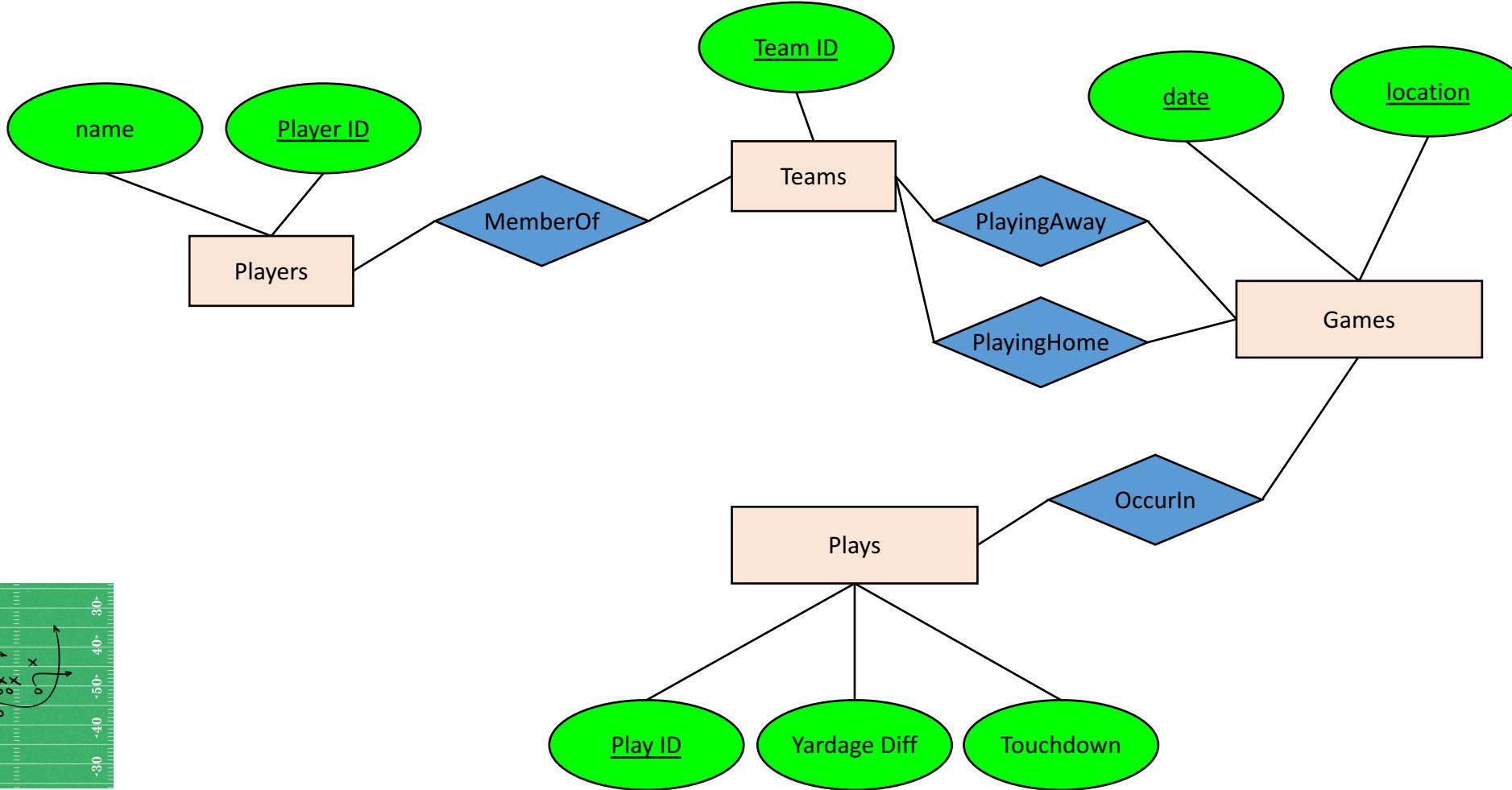
Note two copies of the
Teams entity here!



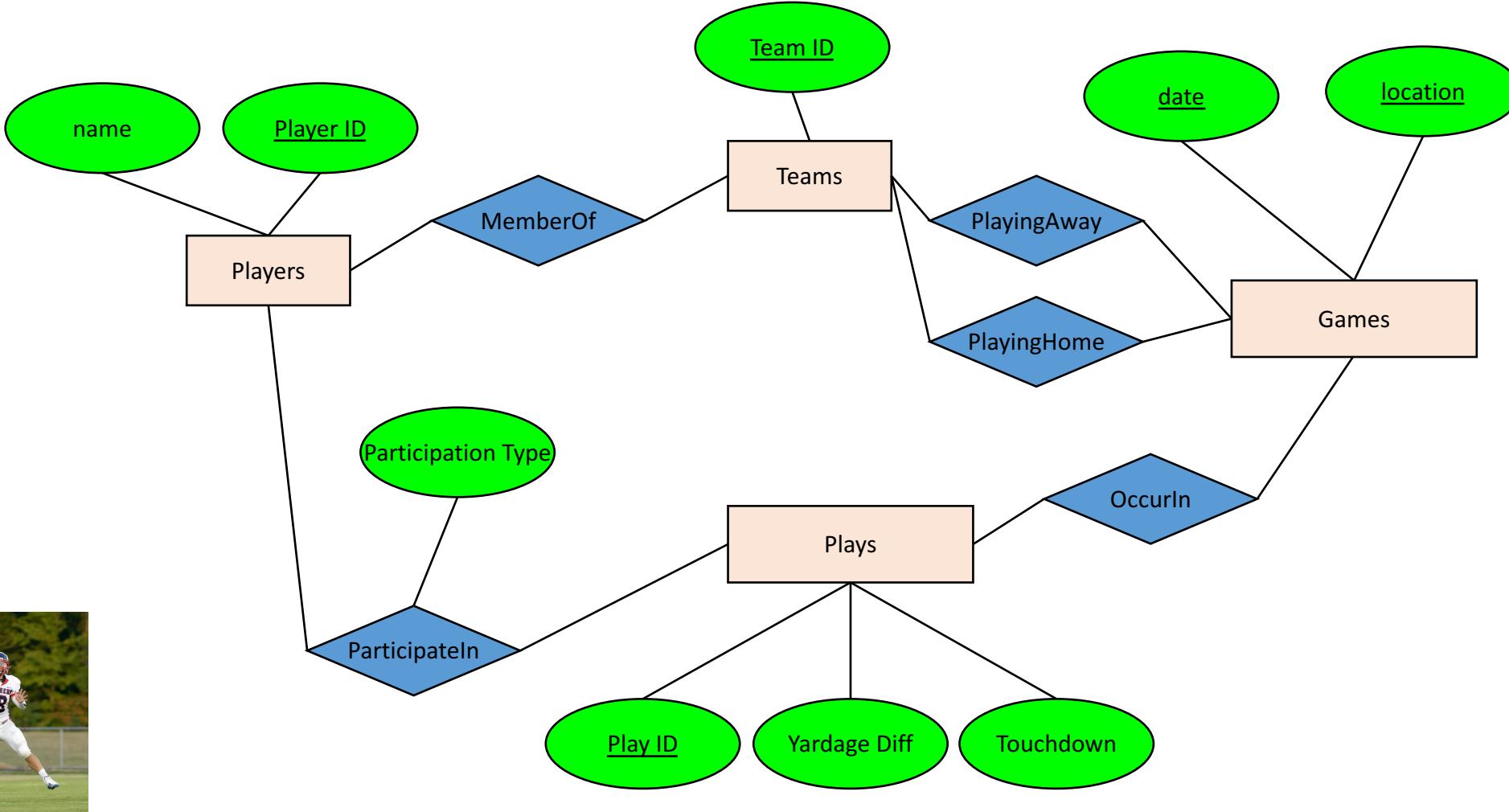
Teams play each other in Games. Each pair of teams can play each other multiple times



Players belong to
Teams (assume no
trades / changes)



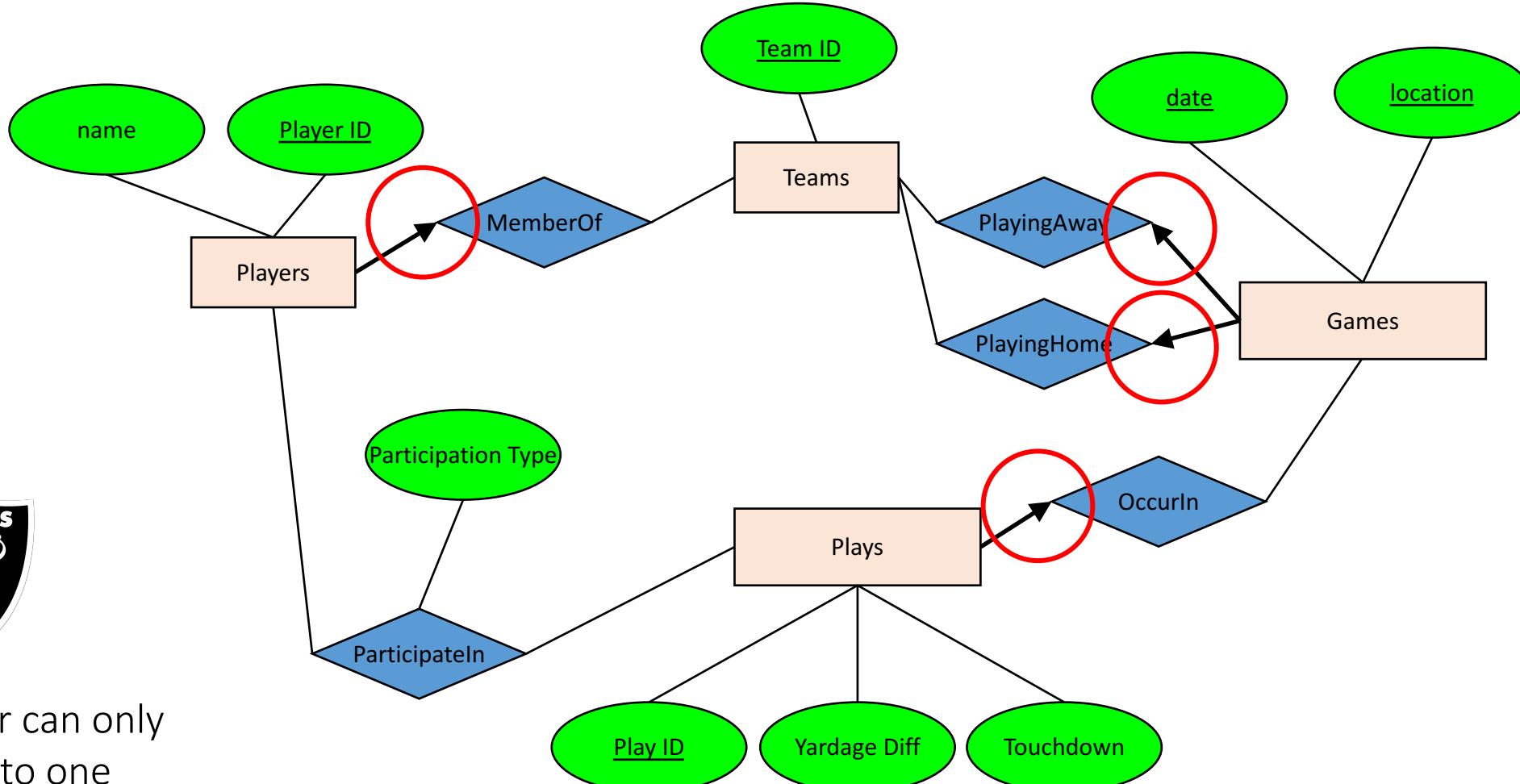
A Game is made up of **Plays** that result in a yardage gain/loss, and potentially a touchdown



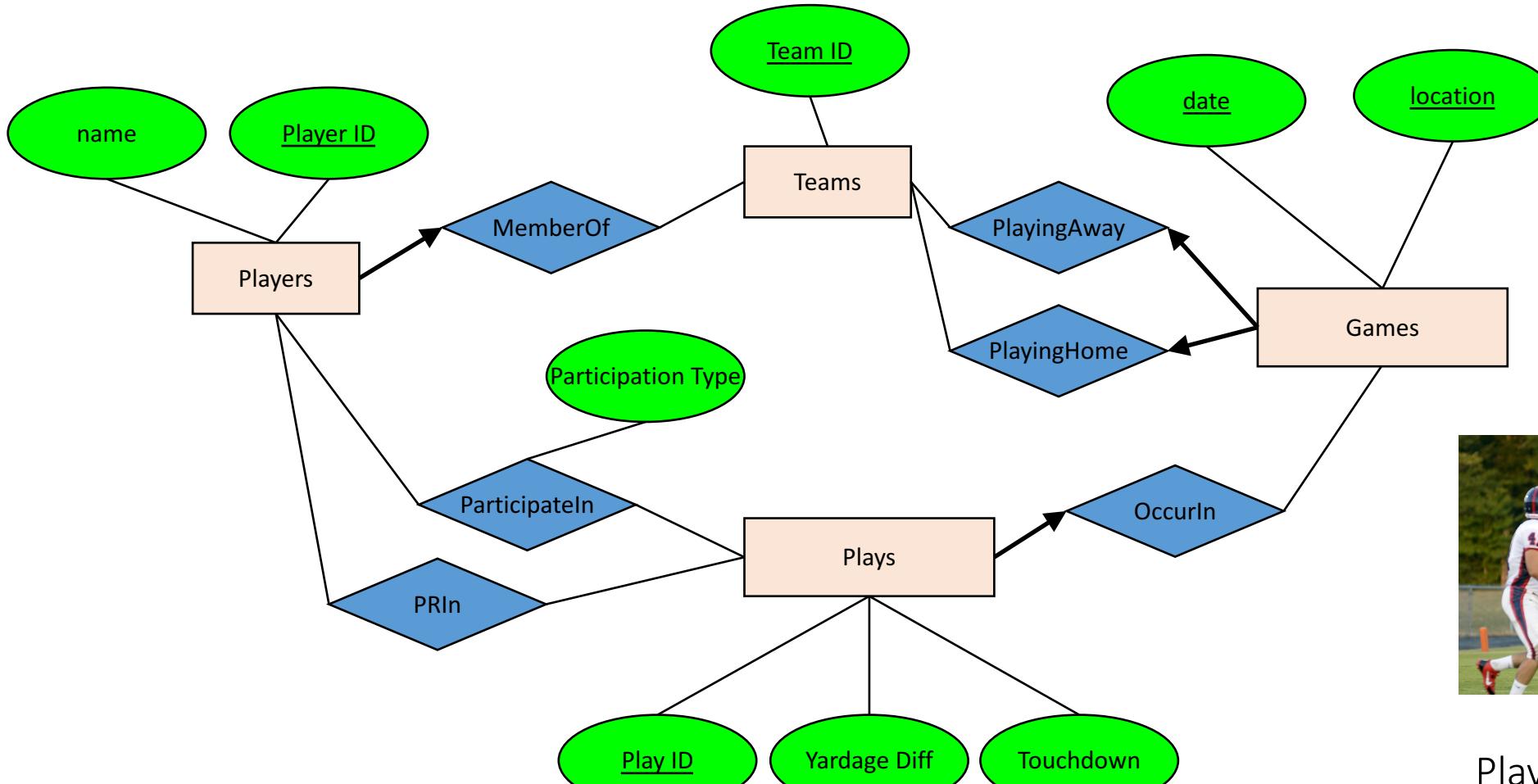
A Play will contain either a Pass from one player to another, or a Run by one player

Activity 2

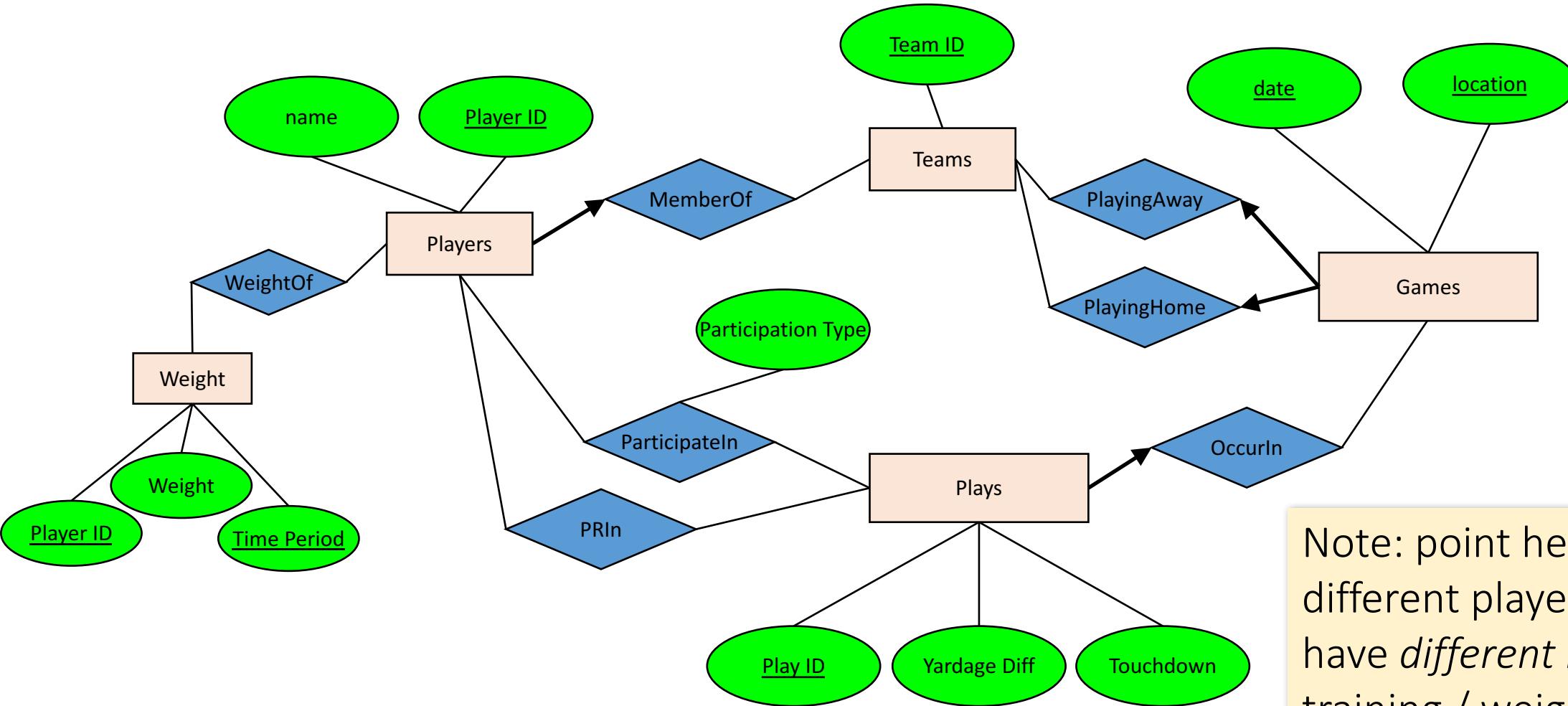
Note that various ER diagrams could work, not just the following one!



A player can only belong to one team, a play can only be in one game, a pass/run..?

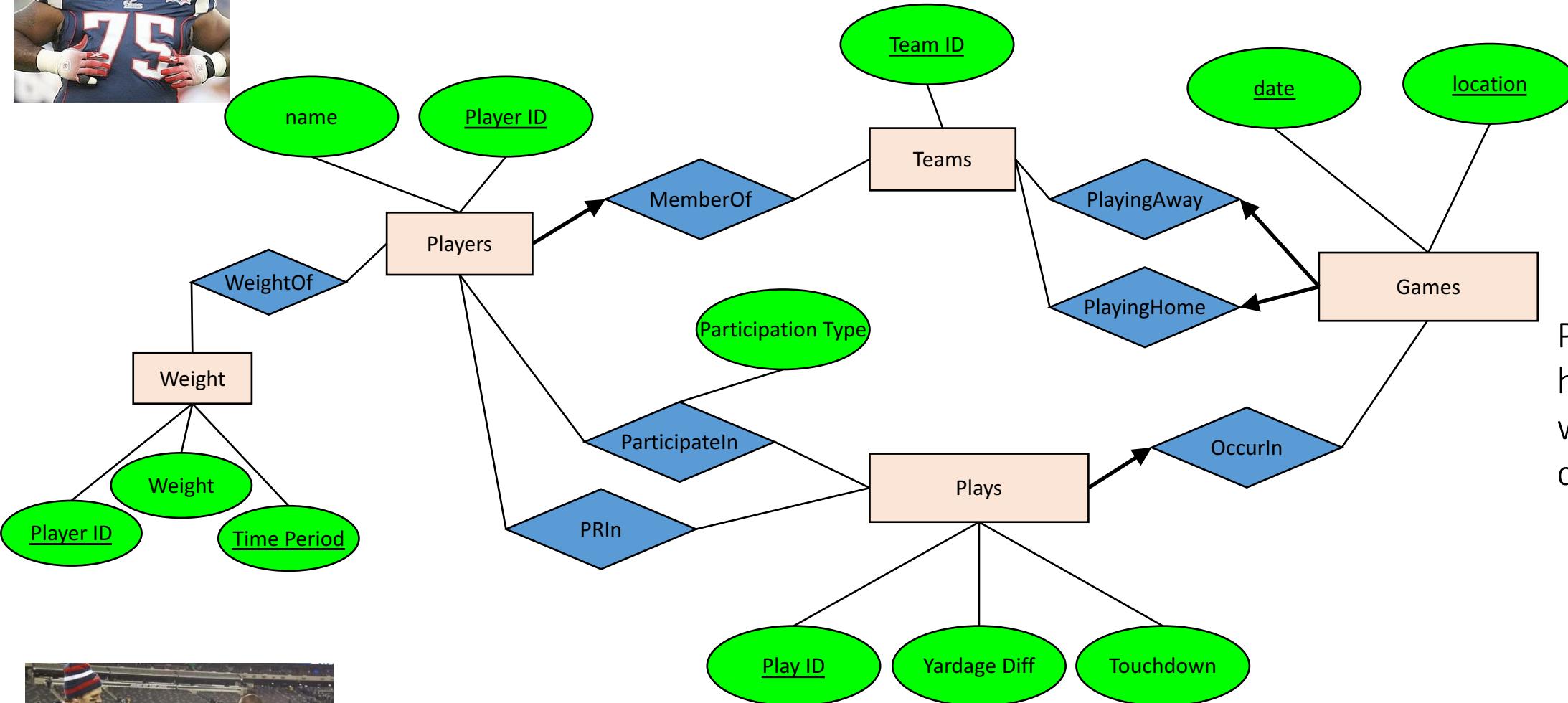


Players can achieve a **Personal Record** linked to a specific Game and Play



Players might have different weights at different times

Note: point here is that different players might have *different numbers* of training / weight phases- hence should represent as new entity!



Players might have different weights at different times



Extra Activity (Not in Lecture)

Note that various ER diagrams could work, not just the following one!

Add in: Subclasses, constraints, and weak entity sets

Concepts to include / model:



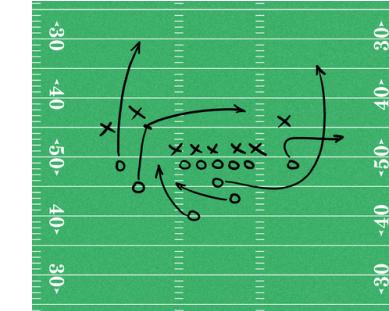
Teams belong to cities- model as ***weak entity sets***



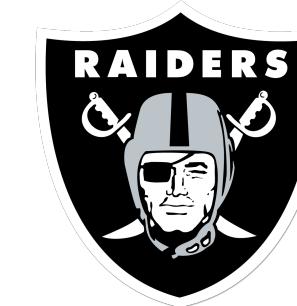
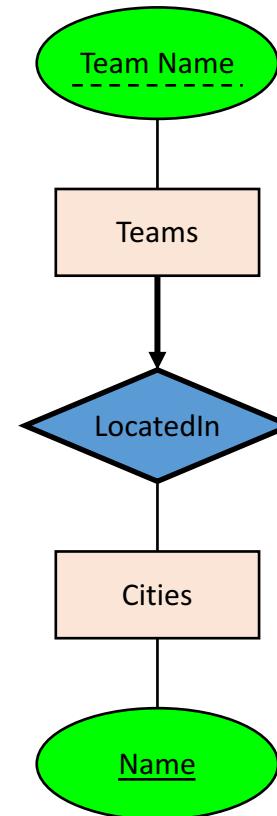
Players are either on Offense or Defense, and are of types (QB, RB, WR, TE, K, Farmer*...)



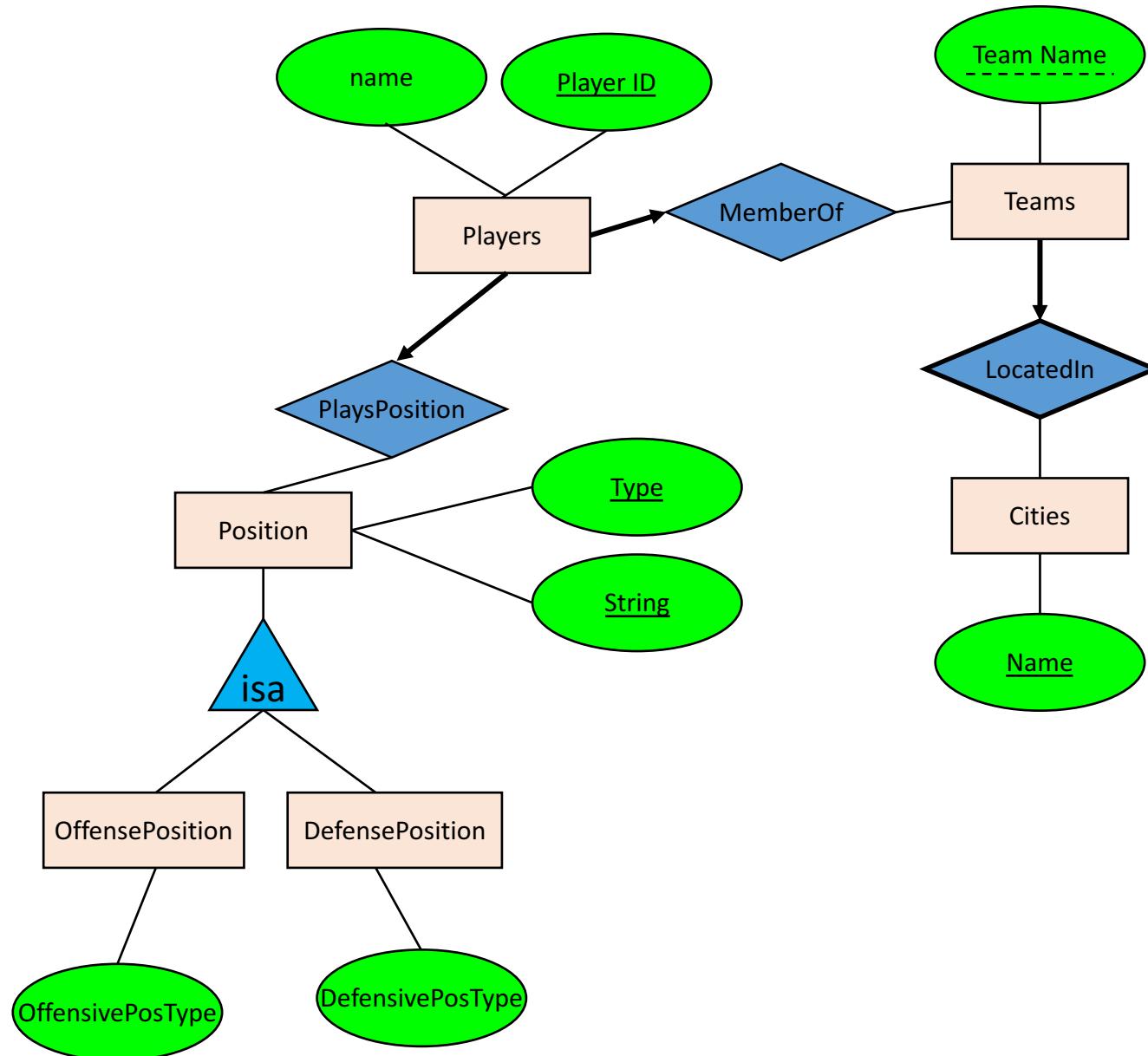
All passes are to exactly one player; all runs include a player



Make sure you have designated keys for all our concepts!



Teams belong to
cities- model as
weak entity sets



Players are either on Offense or Defense, and are of types (QB, RB, WR, TE, K, [Farmer](#)*...)