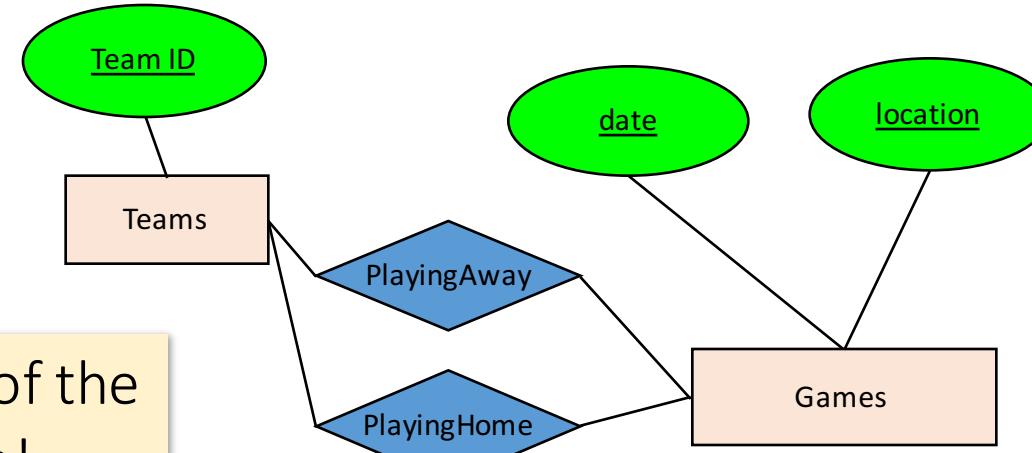


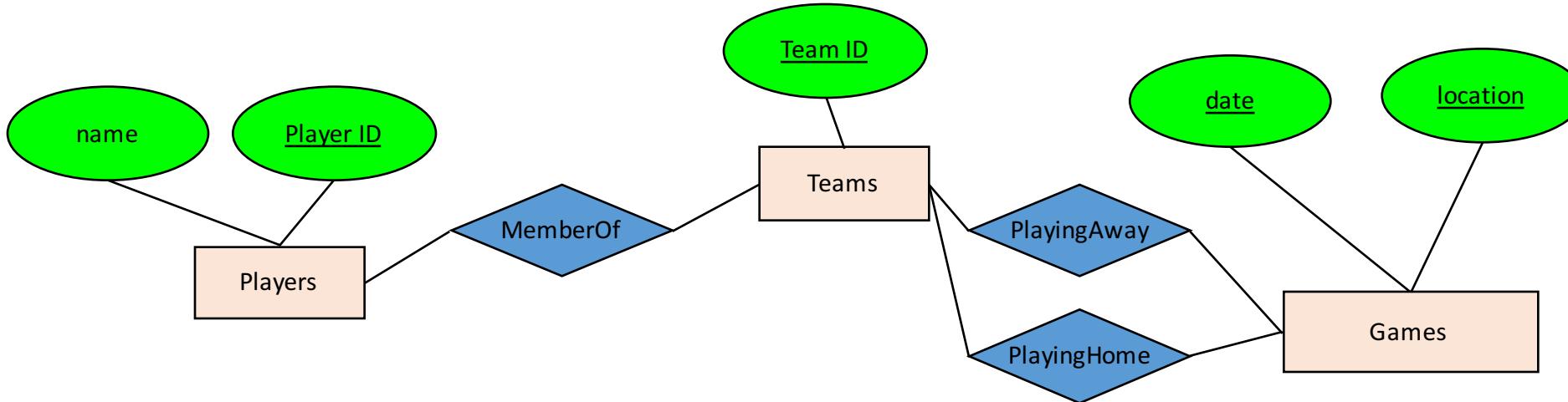
Lecture 4 Activity Solutions

Activity 1

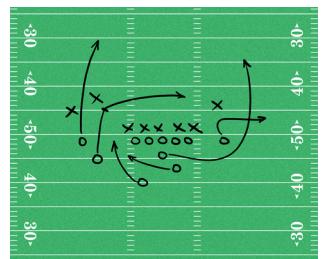
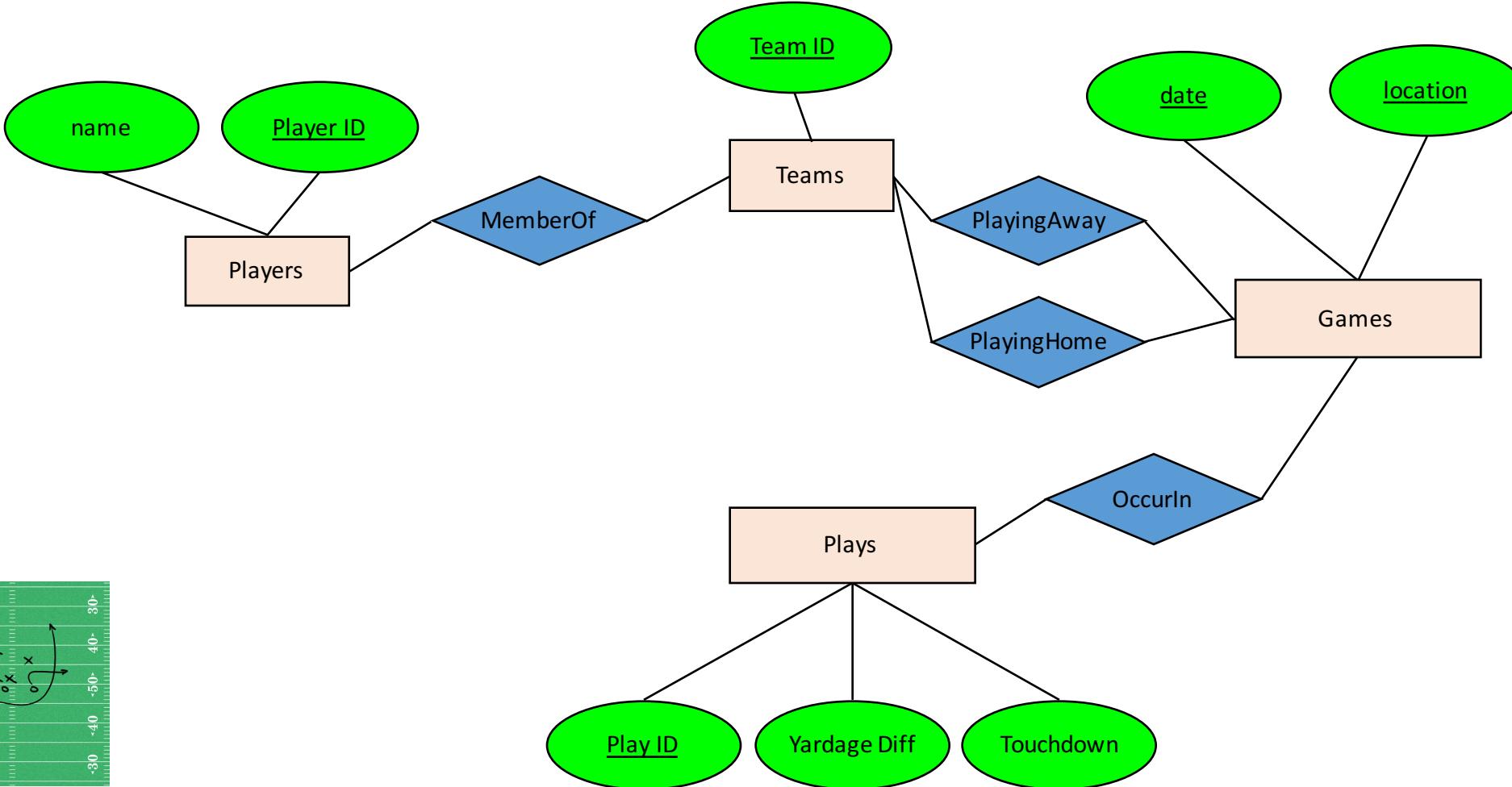
Note that various ER diagrams could work, not just the following one!



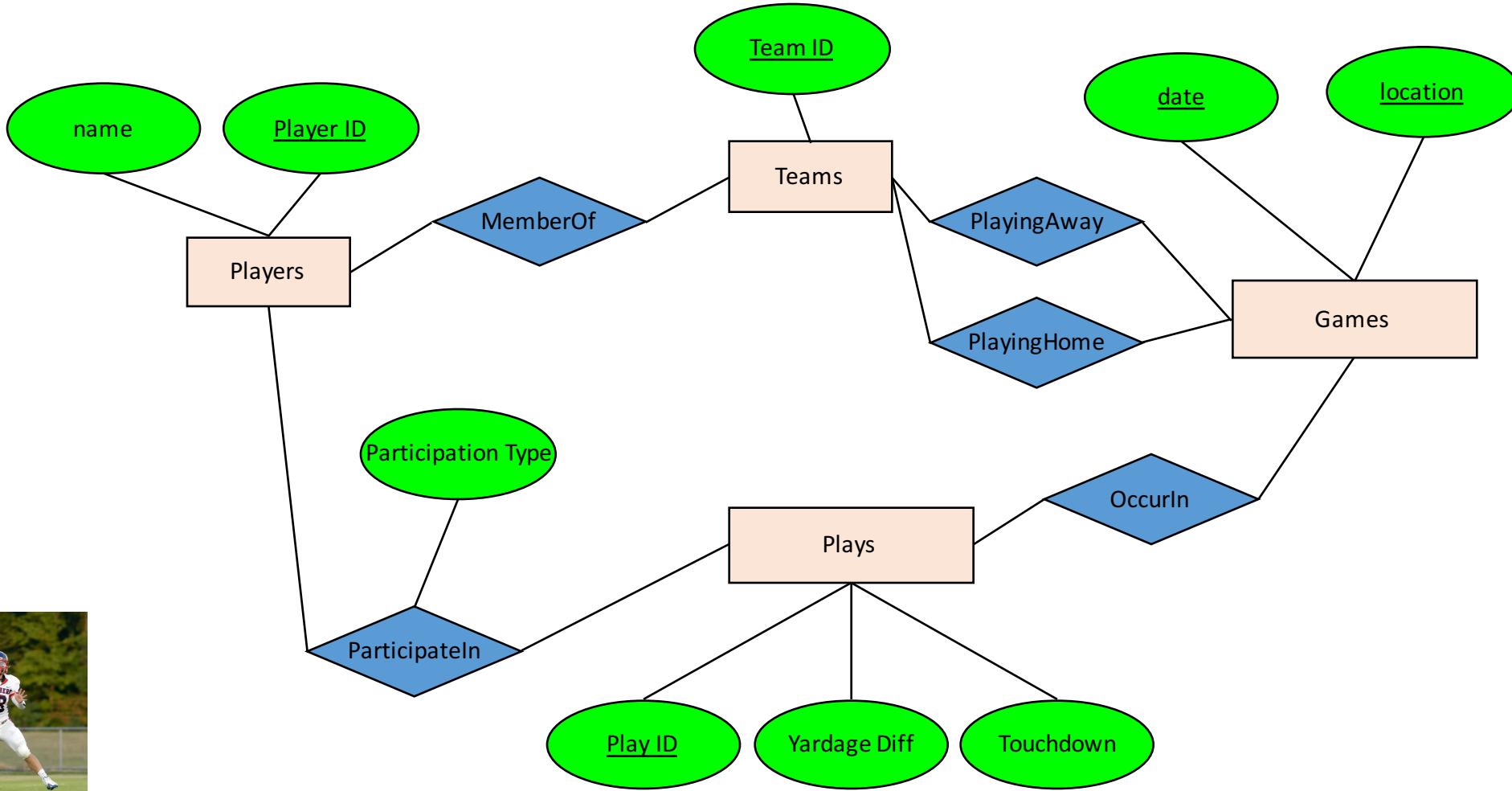
Teams play each other in Games. Each pair of teams can play each other multiple times



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

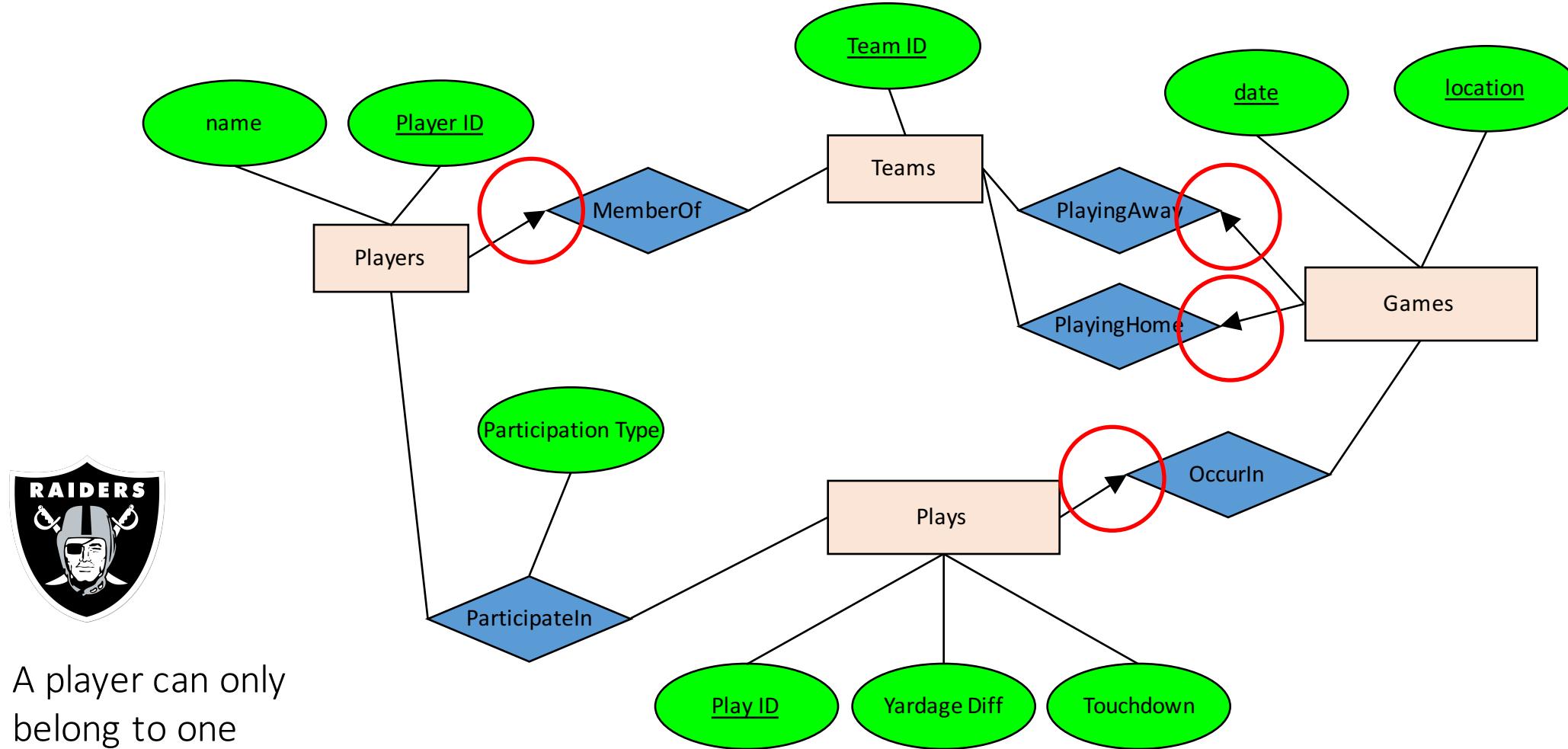


A Play will contain either a Pass from one player to another, or a Run by one player

Note: we changed this from lecture! This simplifies some things, however we are missing some constraints we might ideally want... which ones?

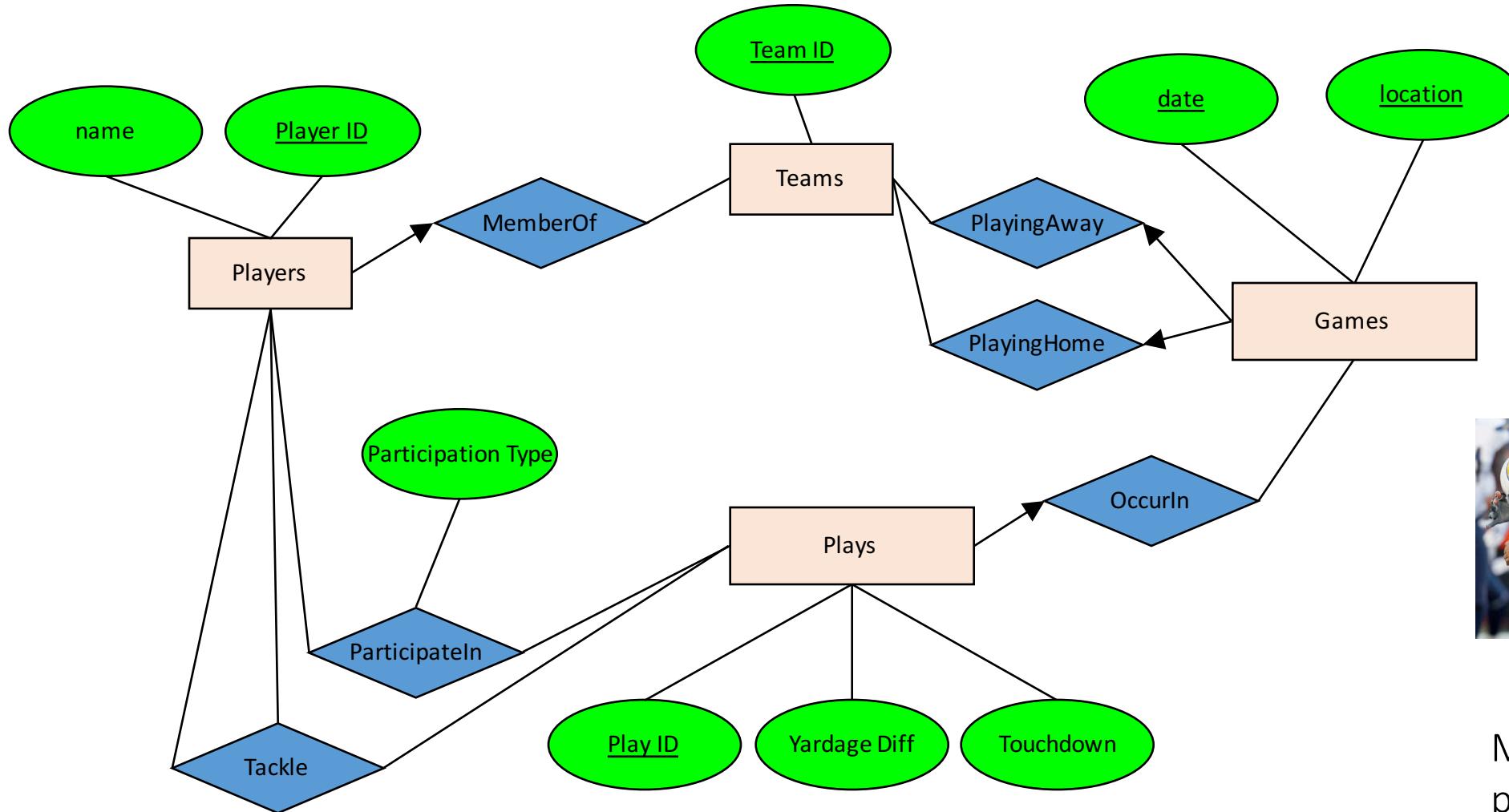
Activity 2

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

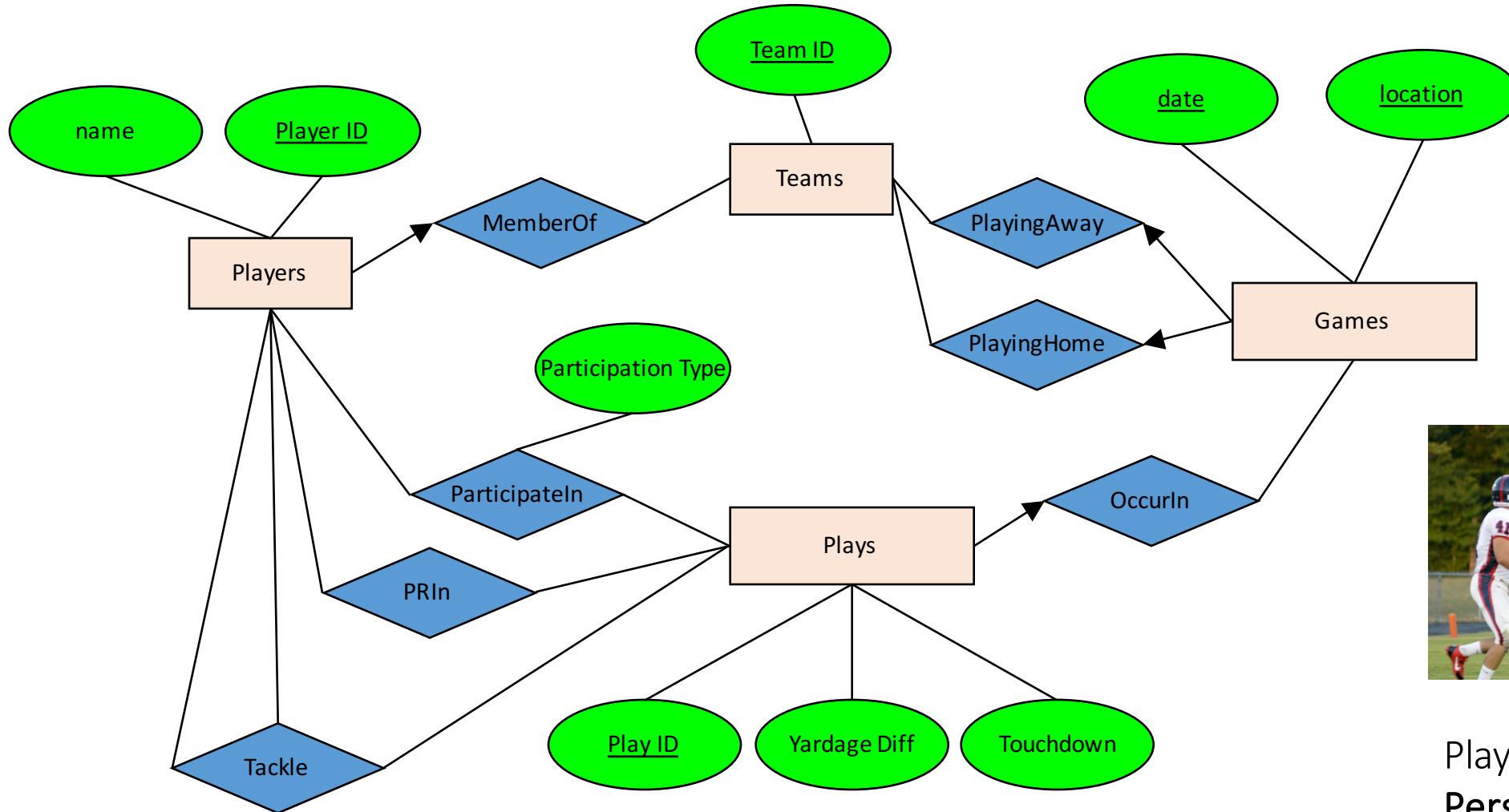


A player can only belong to one team, a play can only be in one game, a pass/run...?

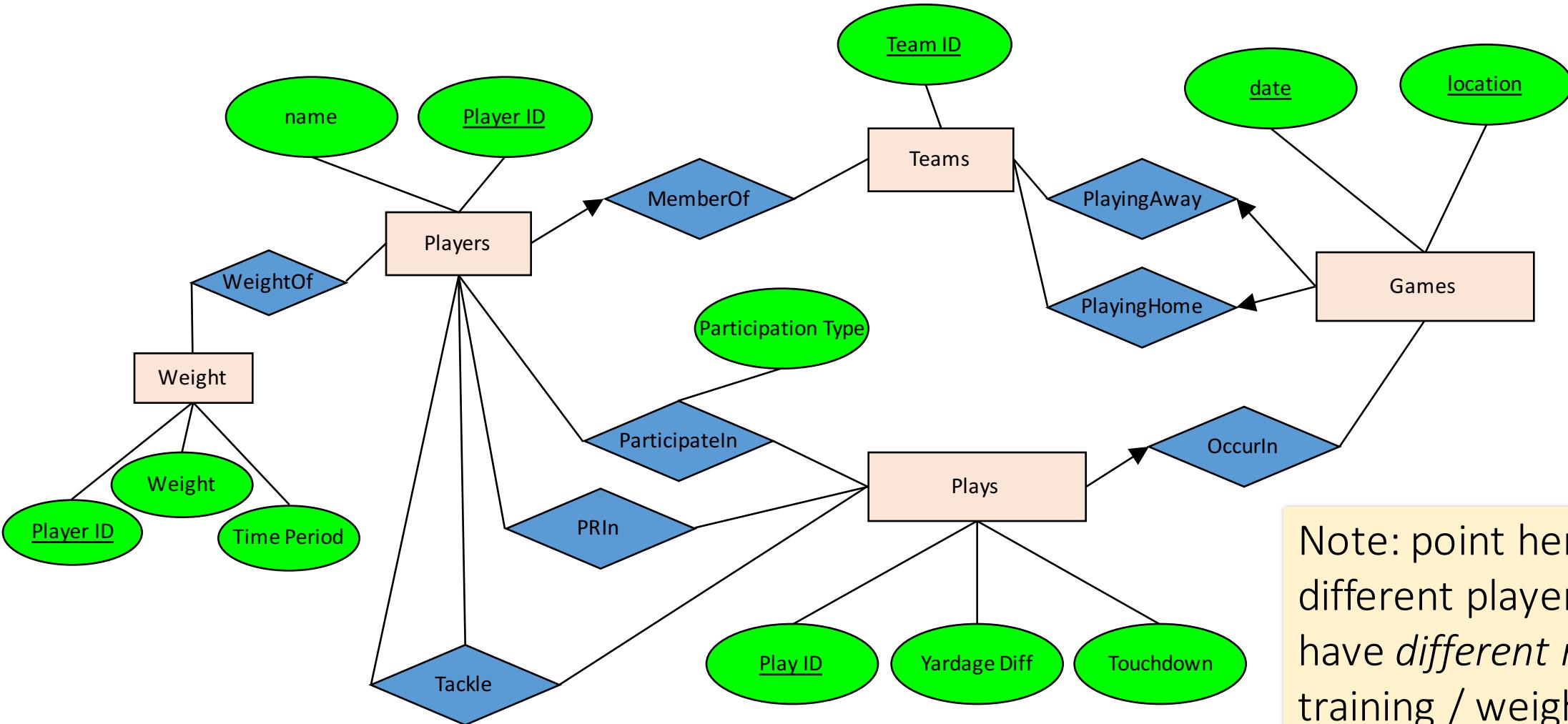




Multiple players Tackle a single person in a play

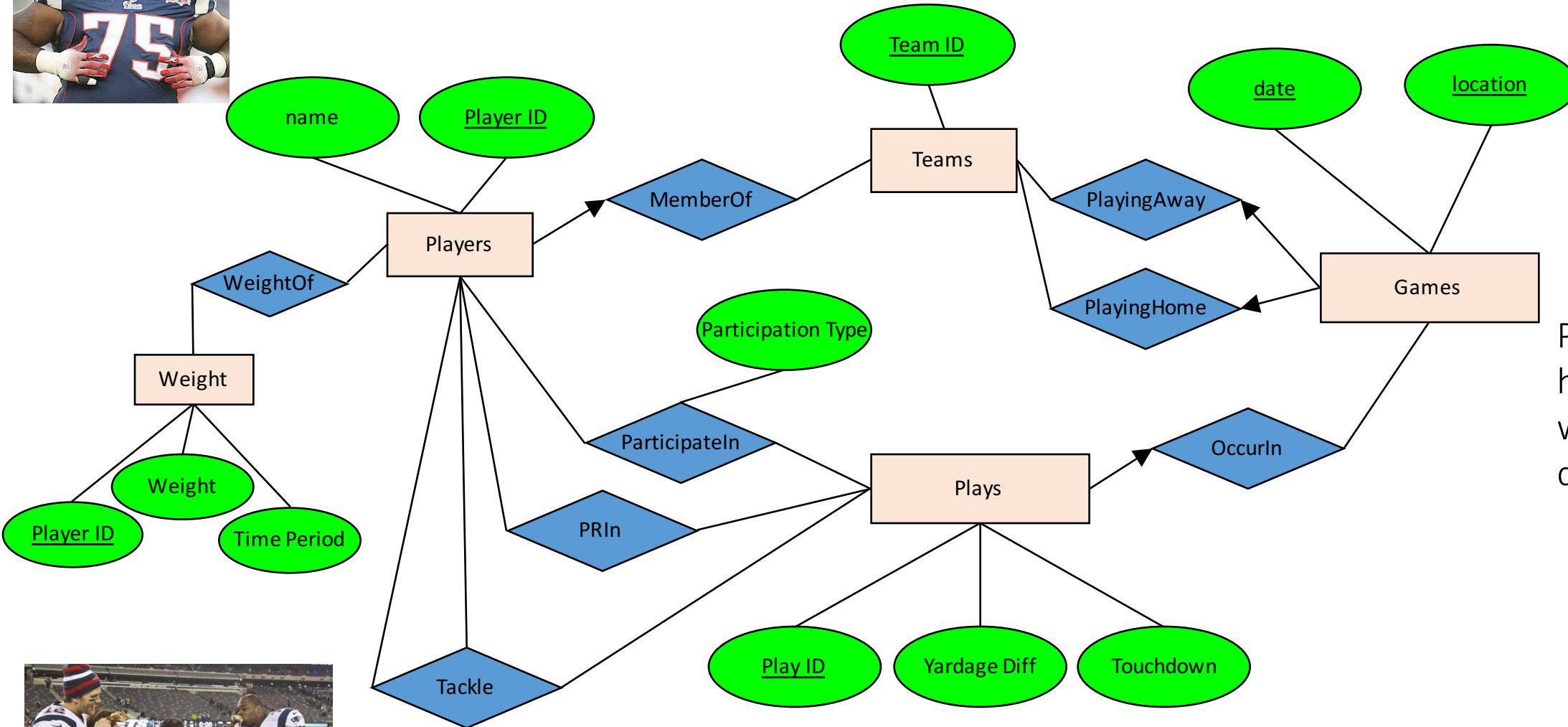


Players can achieve a **Personal Record** linked to a specific Game and Play



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!

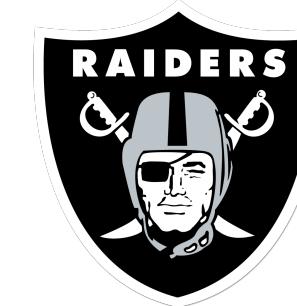
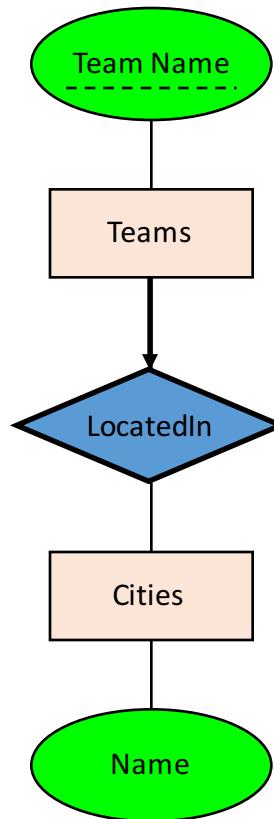


Players might have different weights at different times

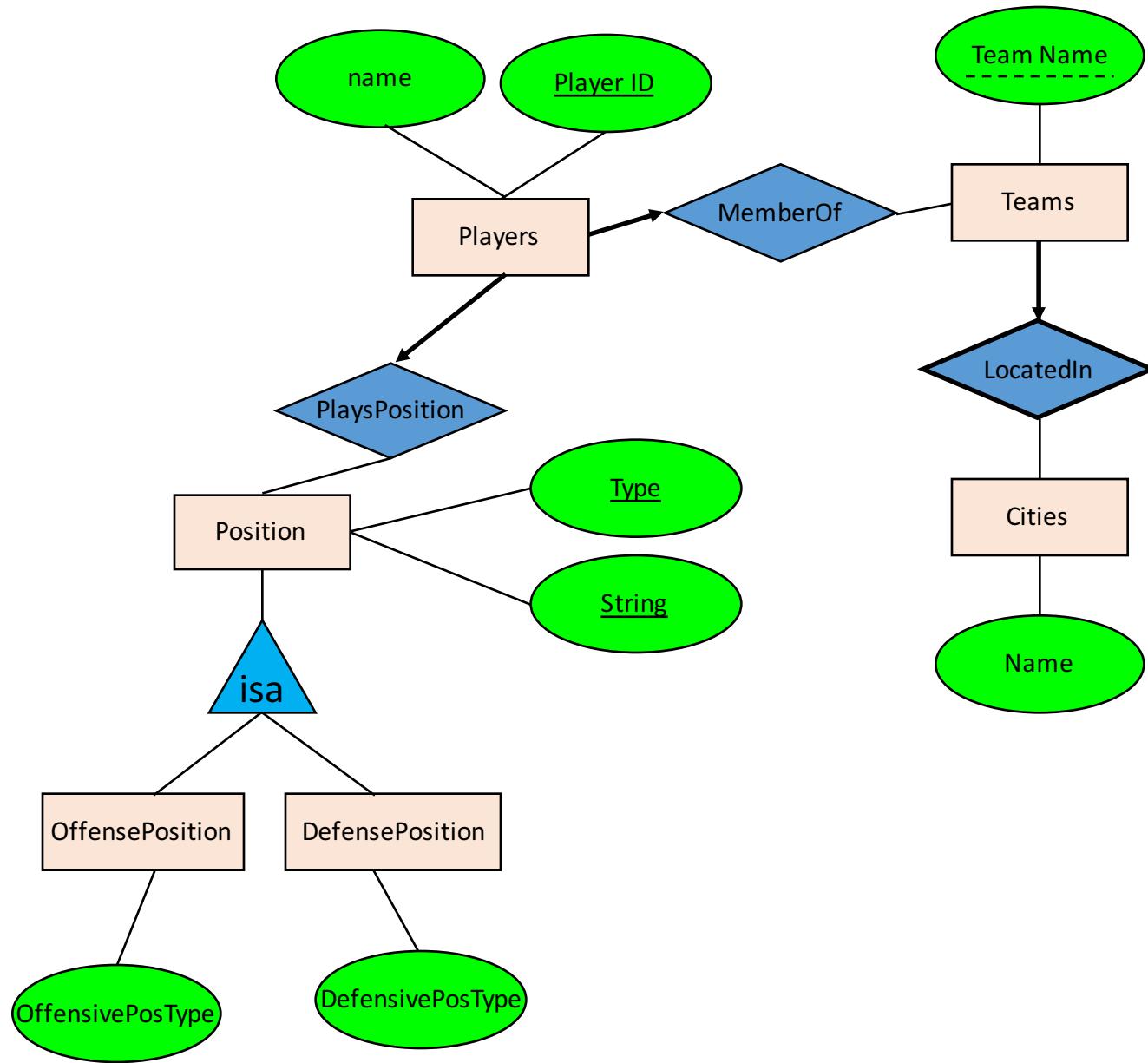


Activity 3

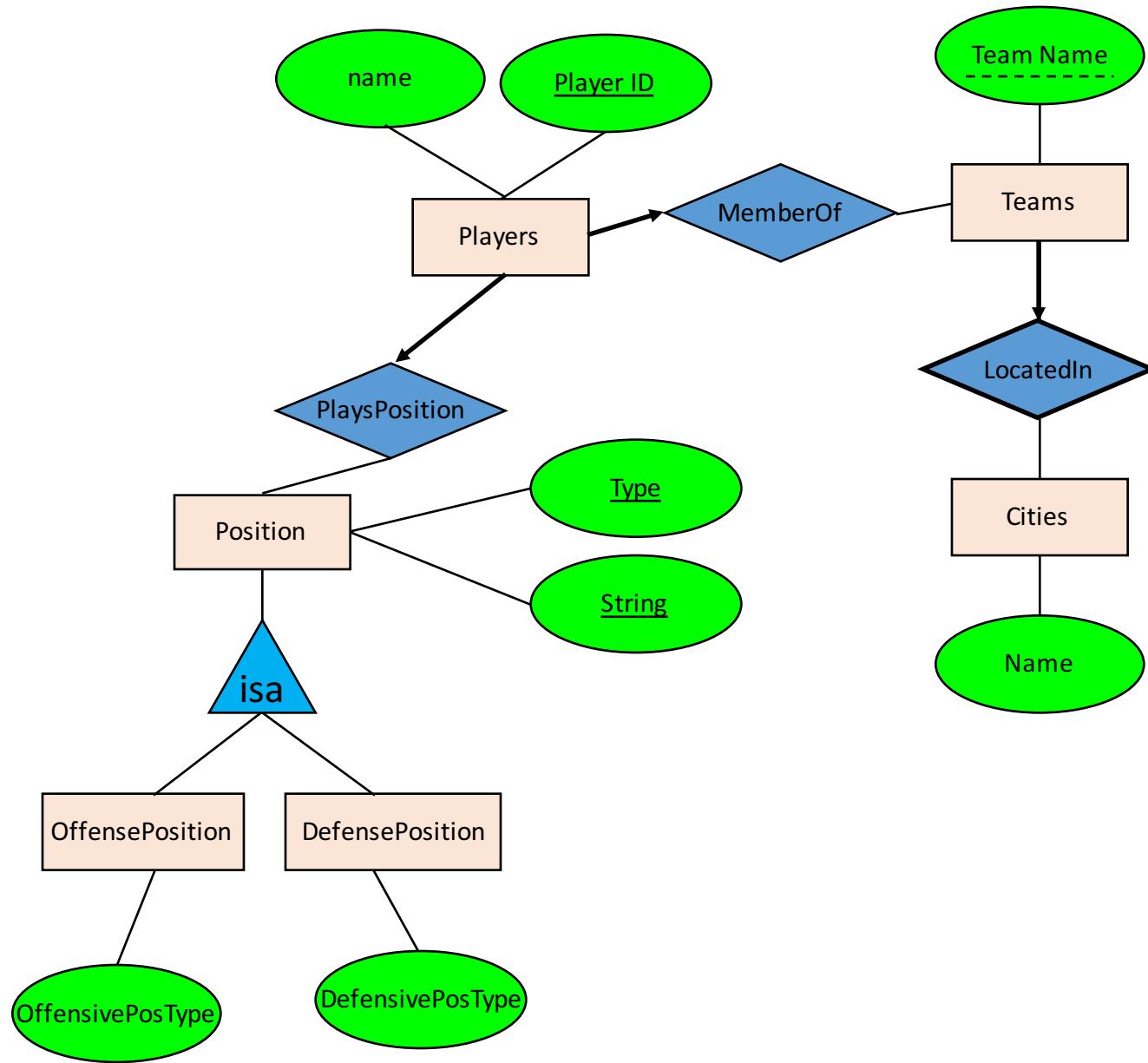
Note that various ER diagrams could work, not just the following one!



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](#)* ...)



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