

## Associative and Ternary relationships practice

1. We want to model information about Competitions (say the Olympics, or the state championship of XYZ), and the Events that happen there (say 100 meters running, or 100 meters swimming etc).
  - For each Competition, we keep its id (identifier), name, and beginning and ending dates.
  - For each Event we keep its id (identifier) and name.
  - We want to keep track of which competitions include which events; a competition includes one or more events, and an event is included in zero or more competitions.
2. Modify the above exercise, to also accommodate the following:
  - We also want to keep track of competitors; for each Competitor, we keep its id (identifier), name, and gender.
  - We want to keep track of which competitors win which events at a given competition; so, for each event that happened at a competition, we identify one competitor as the winner.
3. Now modify the above exercise so that, instead of keeping one winner, we keep track of everybody who competed in an event, with the place they took.
4. Create an ER diagram for the following situation (fields named id are identifiers; HINT: Weak entitie(s) and ternary relationship(s) are involved):
  - We want to model information about TV series, their episodes, characters and actors.
  - For each series, we keep its id (identifier), and title.
  - For each actor we keep its id, name and gender.
  - For each character we keep its id, name and gender.
  - We keep track of episodes of a series. For each episode we keep its number (which is unique among all episodes of the same series, but not among all episodes), title, and the date it first aired.
  - We keep track of which characters appear on which series; a character appears in one or more series, and a series will have zero or more characters.
  - We also keep track of which actor(s) play which character(s) in which series. Several actors could play the same character, the same actor could play more than one character in a series, and, of course, a series may have many characters.