

### Practice ER Diagram Question – A Sample Solution

Suppose you are given the following requirements for a simple database for the National Hockey League (NHL):

- the NHL has many teams,
- each team has a name, a city, a coach, a captain, and a set of players,
- each player belongs to only one team,
- each player has a name, a position (such as *left wing* or *goalie*), a skill level, and a set of injury records,
- a team captain is also a player,
- a game is played between two teams (referred to as *host\_team* and *guest\_team*) and has a date (such as *May 11<sup>th</sup>, 1999*) and a score (such as *4 to 2*).

Construct a clean and concise ER diagram for the NHL database using the Chen notation as in your textbook. List your assumptions and clearly indicate the cardinality mappings as well as any role indicators in your ER diagram.

Here is one sample solution. Note that other diagrams are possible depending on assumptions.

