CSE 3330 – Project #1 – ER Diagram

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 salary, 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 11th, 2017) and a score (such as 4 to 2).

Part 1: ER Diagram

1. Construct a clean and concise ER diagram for the NHL database. List your assumptions and clearly indicate the cardinality mappings.

Part 2: SQL Queries

- 2. Write SQL queries OR use a simple Web interface to get the results of the following queries:
- 3. Enter a team name and retrieve all the names and salaries of all team members who play on that team.
- 4. Enter a player's last name and first name and retrieve a list of their injuries.
- 5. List all captains and the team they play for.
- 6. For each team, retrieve the name and the number (count) of players on that team. Order the result by number of players in descending order.
- 7. For each host team list the team's name and the number of wins and losses of that team.

You should turn in via Canvas to a document that includes:

- 1. Which tools you used for the project. (Readme file)
- 2. ER Diagram
- 3. Source code of SQL CREATE statements, or screen shots of how you created the tables via one of the tools.
- 4. Explain which method you used to load the data into the tables.
- 5. Source code of SQL SELECT statements for each query executed, showing the query result; OR screen shots of your simple Web interface that was used to execute the queries and show the query results.