

## LIS 464 Relational Database Project

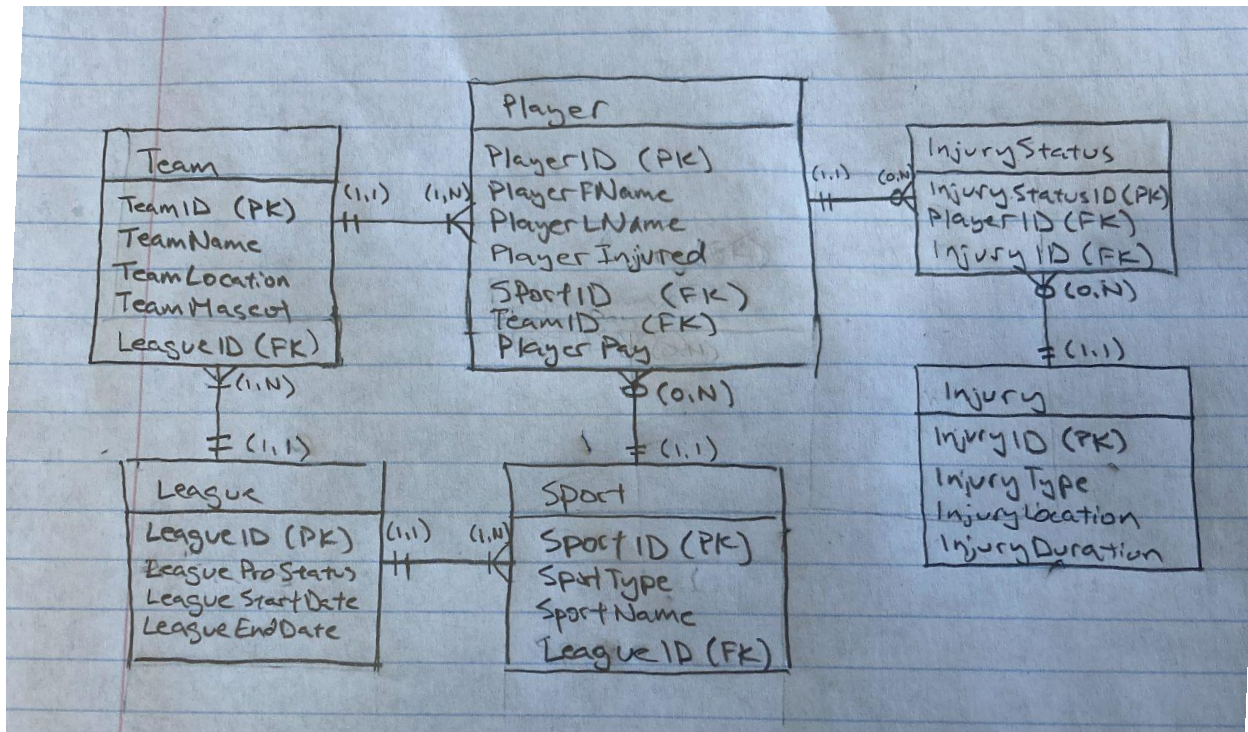
For our relational database, we wanted to create something that allows people to quickly find information about their favorite players and teams, including their injury status and which teams/sports they play for. This project was created by Vincent Garth, Joe Mahoney, and Kai Tsuyoshi. The database will be on Vincent Garth's account.

**Mission statement:** The purpose of the sports injury database is to maintain the data about current and historical player injuries across sports. This will allow for league officials as well as the general public to analyze player profiles and injury trends.

**Mission objectives for the database:**

- Keep track of all player injuries.
  - Produce detailed player profiles with personal information, team affiliation, league, sport, and injuries.
  - Keep track of injury types and locations to support research about patterns, trends, and risk factors.
  - Support information grouped by team, league, and sport.
  - Provide information about injury history and recovery timelines to inform team decision making

## ERD:



## Business Rules:

### Rule Information

**Rule Statement:** A team is only able to be a part of one league

**Constraint:**

**Type:** ☒ Database Oriented

**Category:** ☐ Field Specific

☐ Application Oriented

☒ Relationship Specific

### Structure Affect:

Field Names:

Table Names: Team, League

**Field Elements affected:**

- |   |  |
|---|--|
| <input type="checkbox"/> Data Type      | <input type="checkbox"/> Character Support |
| <input type="checkbox"/> Data length    | <input type="checkbox"/> Null Support      |
| <input type="checkbox"/> Decimal Points | <input type="checkbox"/> Range of Values   |
| <input type="checkbox"/> Key Type       | <input type="checkbox"/> Default Value     |

**Relationship Characteristics Affected**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Degree of Participation | <input type="checkbox"/> Type of Relationship |
| <input type="checkbox"/> Deletion Rule                      |   |

**Actions Taken to Change the Database from the Default ERD shown above.**

The relationship between team and League is one and only one, must be restricted.

**Rule Information**

**Rule Statement:** A player must have a status of either injured or not, cannot be null

**Constraint:**

- |  |   |
|--|---|
| <b>Type:</b> <input checked="" type="checkbox"/> Database Oriented | <b>Category:</b> <input checked="" type="checkbox"/> Field Specific |
| <input type="checkbox"/> Application Oriented                      | <input type="checkbox"/> Relationship Specific                      |

**Structure Affect:**

Field Names: PlayerInjured

Table Names: Player

**Field Elements affected:**

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Data Type | <input type="checkbox"/> Character Support       |
| <input type="checkbox"/> Data length          | <input checked="" type="checkbox"/> Null Support |
| <input type="checkbox"/> Decimal Points       | <input type="checkbox"/> Range of Values         |
| <input type="checkbox"/> Key Type             | <input type="checkbox"/> Default Value           |

**Relationship Characteristics Affected**

- |  |   |
|--|---|
| <input type="checkbox"/> Degree of Participation | <input type="checkbox"/> Type of Relationship |
| <input type="checkbox"/> Deletion Rule           |   |

**Actions Taken to Change the Database from the Default ERD shown above.**

Use a BIT data type to create a binary option of 1 representing “Yes” (Is injured) and 0 representing “No” (Not injured).

**Rule Information**

**Rule Statement:** A team may not have a Mascot, and can be null

**Constraint:**

- |   |   |
|---|---|
| <b>Type:</b> <input type="checkbox"/> Database Oriented | <b>Category:</b> <input checked="" type="checkbox"/> Field Specific |
| <input type="checkbox"/> Application Oriented           | <input type="checkbox"/> Relationship Specific                      |

**Structure Affect:**

Field Names: TeamMascot

Table Names: Team

**Field Elements affected:**

- |   |  |
|---|--|
| <input type="checkbox"/> Data Type      | <input type="checkbox"/> Character Support       |
| <input type="checkbox"/> Data length    | <input checked="" type="checkbox"/> Null Support |
| <input type="checkbox"/> Decimal Points | <input type="checkbox"/> Range of Values         |
| <input type="checkbox"/> Key Type       | <input type="checkbox"/> Default Value           |

**Relationship Characteristics Affected**

- |  |   |
|--|---|
| <input type="checkbox"/> Degree of Participation | <input type="checkbox"/> Type of Relationship |
| <input type="checkbox"/> Deletion Rule           |   |

**Actions Taken to Change the Database from the Default ERD shown above.**

Null support for TeamMascot must allow for nulls.