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DB2 Design Assignment

## **Project Objectives**

### **Summary of System Requirements**

The primary goal of this system is to accurately record information related to sports teams competing in a competition. The end-user of this database needs to input which teams are paired to play each match, the date, time, and location of each match, and the two referees assigned to officiate the match. Before each game, players from both teams are selected to be included in a game, either as a player or a reserve. Each player on the field has a jersey number for the position they are playing; each time they score, an entry is to be added to the database for the points score, the players jersey number, time of the score and the match. The database will calculate the final score for the match, and for the competition.

During a match, if a player is injured their position can be refilled with a player from the squad’s reserve player pool. This change needs to be tracked in the database so that any point scored by the reserve player are attributed to them and not the player they have replaced. Additionally, injuries to a player must be entered into the database; this record needs to include details of the player, the team, the match time and location and the injury code(s) associated with the injury. Injury codes are provided by ACC.

### **Database Scope**

Recording data for multiple seasons was not a requirement, however, we decided to include a ‘year’ attribute in the competition table to enable each season of competition to be separated. To track injuries and player points, we initially included a ‘season’ table; this was later removed, and a ‘year’ attribute was added to the competition table instead. This attribute allows the database to keep record of past competitions, matches, player points and injuries.

Most sports welcome competitors of all ages, who compete at an age-based level; to allow for this, a ‘grade’ table been included. This is to allow multiple competitions to run concurrently during a season.