# Information Management II

## Database Design Project

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# Golfing Union of Ireland

# Overview

I chose to design a database for the Golfing Union of Ireland (GUI). The GUI is the governing body for male amateur golf in Ireland and Northern Ireland. It represents 400 golf clubs and over 160,000 members. The entity tables in this database are as follows: Province, Golf Club, Employee, Competition, Player and Round.

The **Province** table represents each of the sections of the Golfing Union of Ireland. The Union is split into five sections, the National level and then the four provinces of Ireland. The table contains info such as the province’s unique ID and name, as well as its contact info, Phone Number and Email.

The **Golf Club** table is a list of all the golf clubs in the Golfing Union of Ireland. This table contains the club’s unique ID, name, address and the province’s ID that it is a member of.

The **Employee** table is a list of all the employees employed directly or indirectly by the Golfing Union of Ireland. It contains all relevant employee information such as their unique employee ID, their first and last names, their role, salary, date of birth (DOB) and the ID of the club or province that they work for.

The **Competition** table is a list of all the past and upcoming competitions in the Union. Each element in the table represents a single competition with information like the competitions unique ID, the name of the competition, the date it takes place and the ID of the golf club that is hosting it.

The **Player** tables is a list of all the golfers that are indirectly (via golf clubs) members of the Golfing Union of Ireland. It has information columns for their unique player ID, their first and last names, their date of birth (DOB), their official world golf ranking (OWGR), their handicap and the ID of the golf club to which they are a member.

The **Round** table represents all the rounds played within the Union, logged for reasons such as handicap calculation. The table contains information such as the rounds unique ID, the date the round was played, the gross and net score, the ID of the golfer who played the round and the ID of the golf course where the round was played.

The last table in the database is an intermediary table called **Competition Entry**. This table is a list of all the competition entries in the Union. It contains a timestamp of when the entry was made as well as the players ID and the ID of the competition that the player is entering.

# Entity Diagram

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# Relationship Diagram

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# Relational Schema

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# Functional Dependency Diagram

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# Constraints

I implemented a number of constraints when designing this database.

The first constraint I implemented was that no golf club could be a member of the National level province. Instead they must be a part of one of the other four provinces (Leinster, Munster, Connacht and Ulster).

# Security

# Views

# Query Examples

# SQL Commands

### Creating the database and tables

### Creating the views

### Populating the databases