CO526 Databases Course Work 2: ER Modelling

Due in 12noon Thursday 1st March 2019

Submission

You must submit electronically produced or a scanned copy of neatly handwritten answers to all questions to CATE by the submission deadline.

Background

You are to design a new database to hold results from a cricket league of 50 over matches between English and Welsh counties.

Each county is identified by its name, and we record the first year the county played in the league, and the ground which is main ground for the county.

Each ground where matches are played is identified by its name, and we record the capacity, and postcode of the ground. Any ground within three miles of a railway station also has the name of the nearest railway station recorded. Matches are not solely held at the main grounds of counties.

Each time a county plays a match in the league, they select eleven players to form the team for that match. The match is between two counties, and for each team we record the runs scored, and wickets taken. We identify a match by the date and ground in which it was held. We identify a team by the match it played in and the county it represented.

Each player in a match has recorded his runs scored as a batsman, number of catches taken, and wickets taken if he bowled.

Each player is identified by his name, and we record the data of birth of all players, and the total runs scored in first class cricket, and total catches taken in first class cricket. Those players who have ever bowled in first class cricket will have the total overs bowled, runs conceeded and wickets taken. We also need to record the county a player is currently registered to.

Questions

1. Design an ER$^{\mathcal{ADHKLMNOSVW}}$ Schema to represent the UoD.
2. Map the ER schema into a relational schema.