

# Chapter 1

## Textual description of a database

### 1.1 Aim

Football manager database in order to be able to simulate football manager game.

It needs to reflect realistically status, description, attributes of entities connected with football in order to ensure better simulation.

Activities we would like to cover are, players exchanged between clubs, players playing in matches, staff being exchanged between clubs, clubs taking part in competition,

### 1.2 Objects

We choose minimal 5 entities to make our task easier

- Player - Football players who are involved in matches, are signed to clubs, are coached by specific staff, they are the most important entity in the database as they are base for the whole database to function properly. Their behavior needs to be simulated not only during games but also after and before games. Rating for several attributes (stamina), favourite position, personality, unique traits. teamwork, reputation, transfer status, loan status, status (is player loaned out from another club for example or maybe they do not have a club at all), injuries, retirement, age, wages, transfer value,
- Club - club financial situation, players assigned to club, staff assigned to club, competition the club is taking part in, facilities quality (like stadium), reputation, stadium location, country of origin, number of staff,

- Match - Clubs taking part in (from which we derivate staff and players), score, statistics (like shots on target), attendance, weather, duration (90 minutes or extended time), date, referee name,
- Staff - type of staff (manager, coach, Scout), attributes concerning coach skills, scout skills, management skills, reputation, traits, personality, retirement, age, wages (not just manager/coach because there are a lot of people involved in)
- Competition - rules concerning minimal number of players on each team, list of matches, schedule, clubs involved, prize, country of origin, list of stadiums, reputation (importance of the tournament), player requirements (nationality, age, where they were trained, player number), (not tournament because tournament usually refers to like cup competitions not league ones)

### 1.3 Requirements concerning data

Player and staff attributes are between 1 and 10

Positions are restricted to Goalkeeper, Defender, Midfield and Attacker

Reputation are restricted between 1 and 5 (as in stars with 1 between each step)

Quality of facilities are restricted between 1 and 5

Type of staff - Manager, Coach, Scout,

Competition should have at least one match

Weather restricted to Sunny, Rainy, Snowy,