

CRICKET WORLD CUP DATABASE

Chapter 1 Introduction:

Cricket is a bat-and-ball game played between two teams of eleven players on a field at the centre of which is a 20-metre (22-yard) pitch with a wicket at each end, each comprising two bails balanced on three stumps. The batting side scores runs by striking the ball bowled at the wicket with the bat, while the bowling and fielding side tries to prevent this and dismiss each player (so they are "out"). When ten players have been dismissed, the innings ends and the teams swap roles. The game is adjudicated by two umpires, aided by a third umpire and match referee in international matches. They communicate with two off-field scorers who record the match's statistical information. Cricket is a sport that has been played around the world for more than eight centuries. It is one of the most well-loved and feverishly watched sports in the world. It involves two teams with 11 players on each side. The captain who wins the toss decides whether his team bats or bowls first. If they bat first, their aim is to score a lot of runs and make sure the other team does not reach that score. Cricket is played in many formats, but the most popular are Test cricket And One Day cricket. In Test cricket game goes on for 5 days, with each team batting twice - if time permits.

1.1 Purpose:

This document aims to give a brief description about the Cricket Management System Project. This project is very use for Cricket match broadcasters to get information quickly. Also for Cricket lovers who are very much interested in Cricket Statistics. In other words this document will provide a basis for validation and verification.

1.2 Scope:

The project is designed very user friendly such that even people who know only the basic operation of the computer can use this software. This software is also functional to find out the application of cricket management system and to provide information and manage the system regarding cricket matches and team training. It also helps cricket teams to register new members.

1.3 Overall Description:

The overall description of our project can be stated as creating and managing the database, developing a friendly user interface to manipulate the database, provide an authentication mechanism to safely accomplish tasks mentioned above.

Chapter 2 Software Requirement Specification

A Software Requirements Specification (SRS) is a document that describes the nature of a project, software or application. In simple words, SRS document is a manual of a project provided it is prepared before you kick-start a project/application.

2.1 Hardware Specifications:

- i. Processor : i5 Core Processor
- ii. Clock speed : 2.5GHz
- iii. Monitor : 1024 * 768 Resolution
- iv. Keyboard : QWERTY v. RAM : 1 GB
- vi. Input Output Console for interaction

2.2 Software specification:

- i. MySQL (MySQL Workbench 6.3)
- ii. Visual Studio (HTML, CSS, JavaScript, NodeJS, ExpressJS)
- iii. Operating system: Windows10

Chapter 3 DESIGN:

Design is the first step into the development phase for any engineered product or system. Design is a creative process. A good design is the key to effective system. The term design is defined as the process of applying various techniques and principles for the purpose of defining a process or a system in sufficient detail to permit its physical realization. It may be defined as a process of applying various techniques and principles for the purpose of defining a device, a process or a system in sufficient detail to permit its physical realization. Software design sits at the technical kernel of the software engineering process and is applied regardless of the development paradigm that is used.

3.1 System Design:

The system design develops the architectural detail required to build a system or product. As in the case of any systematic approach, this software too has undergone the best possible design phase fine tuning all efficiency. performance and accuracy levels. The design phase is a transition from a user oriented document to a document

to the programmers or database personnel. System design goes through two phases of development: Logical and Physical Design.

3.2 ER Diagram:

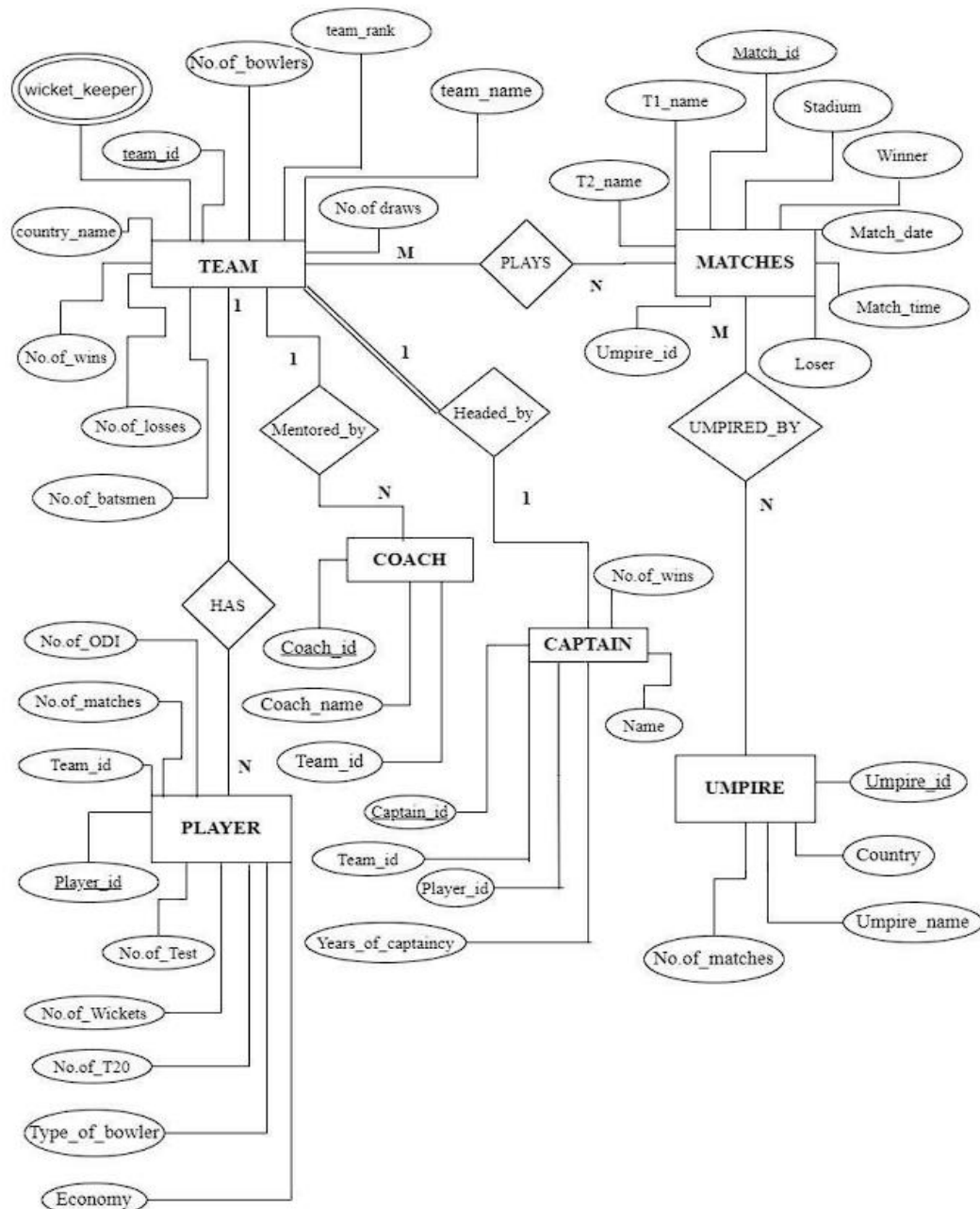
An ER model is typically implemented as a database. In a simple relational database implementation, each row of a table represents one instance of an entity type, and each field in a table represents an attribute type. In a relational database a relationship between entities is implemented by storing the PRIMARY KEY of one entity as a pointer or "foreign key" in the table of another entity. There is a tradition for ER/data models to be built at two or three levels of abstraction. Note that the conceptual-logical-physical hierarchy below is used in other kinds of specification, and is different from the three-schema approach to software engineering. While useful for organizing data that can be represented by a relational structure, an entityrelationship diagram can't sufficiently represent semi-structured or unstructured data, and an ER Diagram is unlikely to be helpful on its own in integrating data into a pre-existing information system. Cardinality notations define the attributes of the relationship between the entities. Cardinalities can denote that an entity is optional.



Relationships:

- Cricket player plays in team (N-1) A cricket player can play in only one team but a team can have many players in it but a team must have players in it. So, the relationship becomes (N-1).
- Coach manages team(1-N) Coach can manage a single team, but each team can have many coaches (like batting coach, fielding coach, bowling coach). But it is compulsory for a team to have a coach. So, the relationship is 1-N
- Team plays match(M-N) Team can play many matches and a match can be played by two teams. So, the relationship is M-N.

- Matches are umpired by Umpire(M-N) An umpire can umpire in many matches and a match can have two umpires. So, the relationship is M-N.
- Team headed by a Captain (1-1) A team has 1 captain and a captain is from single team only. So the relationship is 1-1



3.3 Relational Schema:

The term "schema" refers to the organization of data as a blueprint of how the database is constructed. The formal definition of a database schema is a set of formulas called integrity constraints imposed on a database. A relational schema shows references among fields in the database. When a PRIMARY KEY is referenced

in another table in the database, it is called a foreign key. This is denoted by an arrow with the head pointing at the referenced key attribute. A schema diagram helps organize values in the database.

