

ODI World Cup Management System

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A THESIS SUBMITTED FULFILMENT OF THE REQUIERMENT FOR THE
DEGGRE OF MACTER OF COMPUTER SCINECE (May 2020)

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Final Approval

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Dedication

To Our Loving Parents and Teacher who always encouraged us to be the soul of periphery? Our family member and sincere friends.

Acknowledgment

All praise to Almighty ALLAH Alone, the omnipotent, the compassionate. His prophet “HAZRAT MUHAMMADS” (Peace be upon him), the most perfect and exalted among and of ever born on the surface of the earth, who is forever torch of guideless and knowledge for humanity as a whole.

We feel great pleasure in expressing our heartiest gratitude to our honorable HOD **Dr. Malik Muhammad Ali Shahid** and Supervisor **Mr. Rashid Jahangir (Lecturer of Computer Science Department) COMSATS University Islamabad, Vehari Campus** for kind behavior, valuable suggestion, worth and keen supervision, scholarly criticism, sympathetic attitude during period of project work is unforgettable. We express our sincere thanks to all respectable teachers and faculty members of computer science department of **COMSATS University Islamabad, Vehari Campus**.

We feel great happiness in expressing our thanks to our family for their love and support. Prayers of our family are treasure for our life.

This dissertation report is a proof of sincerity of those who helped us during this project work. So we submit our earnest thanks again to all of them for their encouragement and moral support. Last but not least we pray for health happiness and prosperity of all the participants.

Project Team Members

Burhan Riaz

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Originality Statement

I hereby announce that this submission is my own work and to the best of my information it contains no materials recently distributed or composed by another individual, or significant extents of material which have been acknowledged for the grant of some other degree at MCS or some other instructive organization, aside from where due acknowledgement is made in the postulation. Any commitment made to the examination by others, with whom I have worked at MCS somewhere else, is unequivocally recognized in the theory. I additionally proclaim that the scholarly substance of this proposal is the result of my own work.

Abstract

Cricket is a group activity including a bat and ball played between two groups of eleven players each. The goal is to score more runs (focuses) than the rival group. A match is divided into innings during which one group bats, two batsmen at once, and the other group bowls. Cricket Matched played between two teams of Players on Oval-shaped field at the center of which is a rectangular 22-Yard long pitch. Cricket is very popular game in Pakistan as well as in other countries playing cricket.

Information about cricket match is provide using a scoreboard. Many websites commonly used to display information about cricket day to day. All online information system create their own database in back-end and update their user. Stored information in database is display using query when asked by user. Data stored in database in efficient and compact manner in back-end to display. The design and development of **One-Day International** (ODI) cricket Database Management System described in this paper.

Input in the form of cricket scoreboard. Information processing involve data management, retrieval, producing static or dynamic web page answer user request. Most of the processing is carried out using the database query language. We will create a database system to store whole record of One-Day International cricket world cup series in efficient and compact manner **1975** to **2019**. We will store record about series, country, match, teams, batting, bowling, wicket, player profile and all information that will be required in our database. Database management system will be able to display accurate answer when user frequently asked query.

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List of Abbreviation

ODI : One Day International Cricket

T20 : Twenty20 cricket or Twenty-20 (often abbreviated to T20), is a shortened format of cricket.

ICC : International Cricket Council

Chapter 1

Introduction

1. Introduction

Cricket is a team sport that played in outdoors. Cricket started in England and step by step became popular across in the whole world. The cricket sport played between two teams of 11 players each. Cricket was first played Southern England in 16th century. The end of 18th century it was developed into the national sport of England. The mid of the 19th century the first international match held. Cricket is very popular game in Pakistan as well as in other countries playing cricket.

The World Wide Web is the most commonly used and also possibly the largest information system available at present. There are many web sites available in the Internet for different areas of interest. Most of these sites use static web pages to present information with hyperlinks as creation of such pages are as easy as producing word-processed documents.

There are several disadvantages during this procedure like the lack to cater for specific user needs the manufacturing of obtainable information in several user preferred formats) and to update existing pages ensuring of consistency of data to beat this the alternate is to use the dynamic website construction facilities. an online based data system with a database because the backend for information storage provides a replacement dimension, as maintaining consistency of the knowledge and therefore the production of sites are often done through the database. Such a system should have a central database because the backend for information storage and an appropriate interface because the front-end for information browsing and querying by external users. Data capturing and maintaining facilities should be provided only to the authorized web master, while the system provides online static and dynamic website construction facilities, and delayed response retrieval facilities. The suitability of this approach for One-Day International (ODI) cricket and medical consultation data was shown there in paper.

Cricket Database management system to manage all the activities concern to the cricket. This project will help as the cricket organization to store all cricket related information. This application is useful store all the information related to the players, matches, stadiums etc. This project also provided with option to enter the match details, so it automatically show the scoreboard. All possible entities will be used in our database system to maintain and stored the whole record about scoreboard of One-day international cricket Matches. Entities will be design according to the requirement of our project and implement according to scoreboard record.

1.1 Cricket Formats:

There are three type of cricket playing in world. Test cricket, One-Day International cricket and Twenty20 International cricket are the three and how the three organizations work is clarified directly here. There are three arrangements of cricket played at the universal level Test matches, One-Day Internationals and Twenty20 Internationals.

1.1.1 Test Cricket

Both teams have to play two innings each, if necessary. 90 overs are to be bowled every day. **Both teams will have two innings each, and will alternate between batting and bowling. The team that scores the highest number of runs in their own innings will be considered the winner.**

1.1.2 One Day international Cricket

One day international cricket is a limited format of cricket. It was introduced in 1980s and 60 overs one side bowled. Over the years, this format also went through extreme changes in rules and reduced overs to 50 and colored uniform by ICC. Team A batting first had to set target for team B in 50 overs. Batting second, team B had to chase down the target also in 50 overs. If they fail to do so, team A winner. ODI matches are more popular than Test matches since there is excitement and the match is over in the same day. ODI cricket is also known as instant cricket since there is always a match result within of seven to eight hours.

1.1.3 T20 International Cricket

T20 is the latest and successful format of cricket. Cricket became widespread in this format and new countries like United-states, Canada and Malaysia. Each team gets to play 20 overs a side. Bating first, Team A set a target team B in 20 overs. Team B has to achieve the target in same number of overs while batting second.T20 format is very successful of cricket mostly peoples like this format because less time consume.

1.2 Cricket Scoreboard

Information of a cricket match is recorded in a scoreboard. In the one-day game the innings of the two teams are recorded. Each innings consists of individual scores of players, how they scored the runs, how they were dismissed, extra runs scored (extras), total runs scored (total), when each batsman was dismissed (fall of wickets) and how the opponent players bowled (bowling figures). The general match information of the type of where, when and how the game was played is also recorded in the scoreboard.

Basically, a cricket scoreboard should be able to describe in detail how a game was played. A summarized version of this scoreboard is published to describe each match played. These scoreboards provide static data once the game is completed, while there are dynamic during the playing time of the match.

Cricket scoreboard data are summarized by players, teams, venues, series etc. To produce different forms of cricket statistics and records, such as batting and bowling averages, tournament information, user profiles, highest scores, and many more.

2. DESIGN AND IMPLEMENTATION

All the relevant information in a scoreboard of an ODI cricket match should be stored in corresponding database tables in the central database. Each of these database tables will record detail information about ODI. All information about Scoreboard will be store in database in related tables. All possible entities will be used in our database system to maintain and stored the whole record about scoreboard of One-day international cricket Matches. All entity will designed according to the requirement of project and implement according to scoreboard record. Each of these database tables will record detail information about One Day international cricket.

Table 1-Entities & Description

Entities	Description
Teams	Record about Team Like country name and Rank
Players	All related record about Players like Name, age and country
Players Role	Batsman, bowler, wicket capper, many more about players
Matches	Record about Matches like match number, Stadium and result
Season	Season year, winner, stating and ending date
Series	Record about series year, winner, stating and ending date other information
Stadium	Stadium name , country name

Table 2-Teams

Entity	Attributes	
Teams	TeamID	Nickname

Table 3-Players

Entity	Attributes		
players	id	Name	Age

Table 4-Matches

Entity	Attributes					
Match	ID	Date	Team A	Team B	Won by	Lose by

Table 5-player

Entity	Attributes		
player	Name	DOB	Team

Table 6-season

Entity	Attributes				
Season	Year	Start date	End date	Total Match	Total Team

Table 7-series

Entity	Attributes			
Series	Year	Start date	End date	Total Match

Table 8-stadium

Entity	Attributes	
Country	ID	Names

Table 9-Country

Entity	Attributes		
Stadium	ID	Name	Country

2 Data Capturing and Processing

Input of the system is mainly in the form of cricket scoreboard. Information processing involve data management, retrieval, producing static web pages and

answering user requests. Most of the processing is carried out using the database query language. Presentation of statistical information for series, country, match, team statistics, batting records, bowling records, player profile and all round performance to the users, and the capability to answer frequently asked questions about cricket are the output of the online information system.

Importing such data from a web site into a database is not a direct process. There are several stages involved in this whole exercise. The initial step is to download the information file from the web site. As the second stage, intermediate files are created for each extracted data set. Data that are to be imported into the database are taken from these intermediate files.

Information Processing

Information available in the database has to be processed in order to produce the results or reports for user requests. Production of these reports involves data retrieval and processing which takes processing time. As a result response to individual request can be delayed since the system has to cater to hundreds or thousands of users at a time.

Chapter 2

Related Work

Related Work

There has been a lot of related study to this problem in various different sports. I have visit many website to research for project. Ignored similar work to make sure project will result according to end-user. Because many online system providing cricket information but not according to user and not easy way to search we make its easy and user friendly. So I will give reference in the reference section.

I had visited a website takes into consideration some of the external factors like the number of players injured in which particular game, the fatigue factor of the players, etc. The approach that I using in the project will not take record the like player injury in match. My data set contains more data about the matches like scoreboard, players and series result etc.

1. Cricket 24

Cricket 24 give us live cricket scores and all other cricket information from many domestic and international competitions around the world including Asian. Website saved record about cricket for who lovers of cricket.

2. ESPN Cricinfo

One of the most popular cricket information websites, ESPN Cricinfo provides live ball-to-ball coverage as well as. An in-depth analysis on all international cricketers is also included. This is most popular website in the word and available all record abut cricket.

3. Cricket World

Cricket World is the website to visit for live scores of international and domestic cricket plus the latest cricket news. This website provide all information about cricket day to day.

4. Wisden

Wisden One of the oldest and the most interesting cricket website out there on the internet. The history of the website is more like a fairy tale. Website saved record about cricket for who lovers of cricket.

3. Star Sports

Star sports website promises live scores, commentary, match schedules, highlights and perspectives from leading analysts from around the world. You can also catch full replays and video on demand for match short clips, as well video highlights for batsmen and bowler innings.

The sports industry is well known for a large number of people including sports enthusiasts, professional in sports industry and has great contributions for researchers. Researchers and other analysts are interested in exploring different patterns of games and individual players as well. In parallel to this, the volume of data is increasing incredibly that need to be analyzed for different purposes (predictive analysis and current analysis). Massive amounts are being spent for the development of a team and heavy revenue is generated after the success of that team in any tournament or tour matches. With the economic factor involved, the need to statistically analyze the performance of a player and important decision making process based on that analysis has never been greater.

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Chapter 3

Entity Relationship Diagram

Entity Relationship Diagram

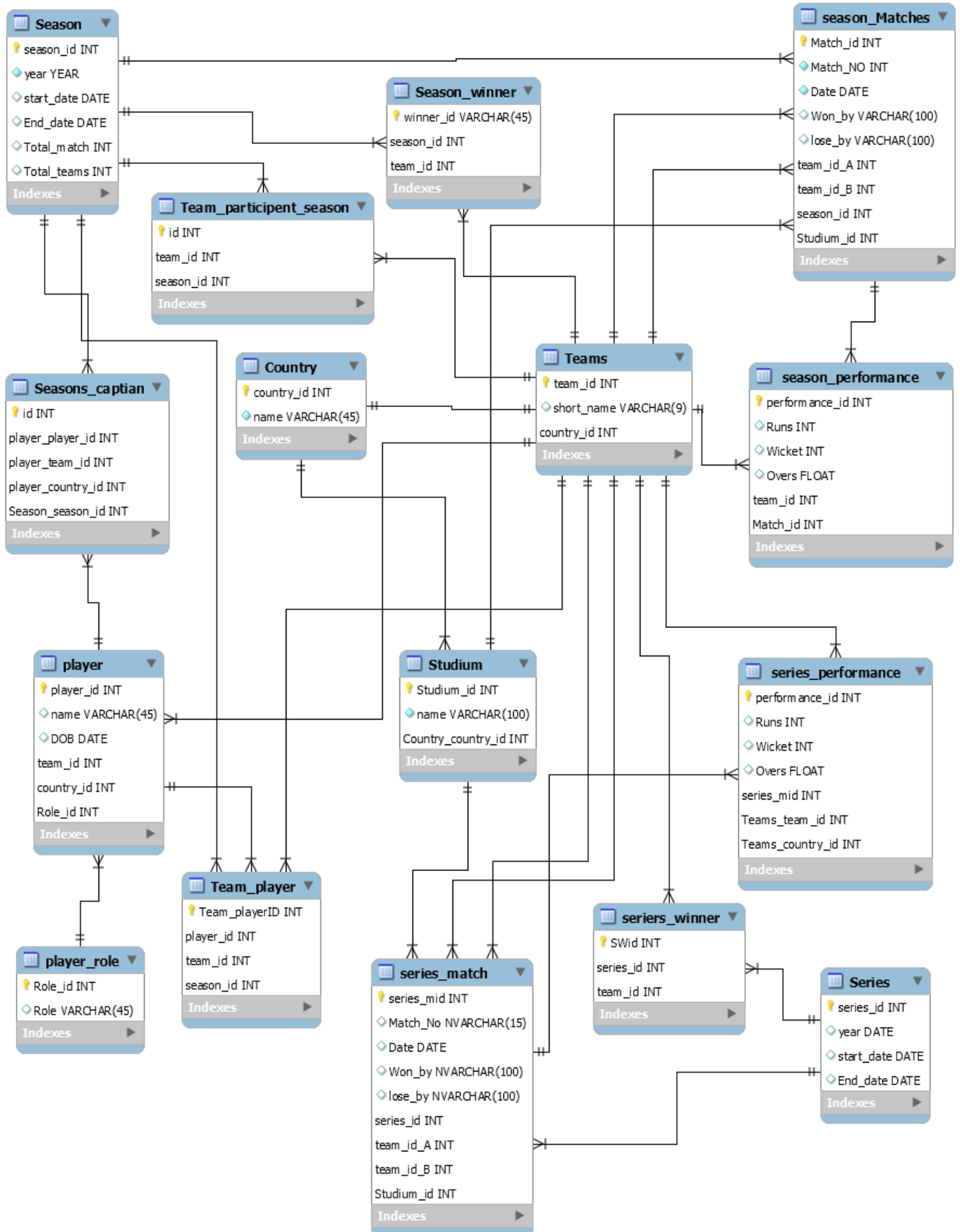
Entity Relationship Diagram, also known as ERD, ER model, is a type of structural diagram for use in database design. An Entity Relationship Diagram contains different symbols and connectors that visualize two important information. The major entities within the system scope, and the inter-relationships among these entities. That's why it's called "Entity" "Relationship" diagram (ERD).

Relationship

A relationship between two entities signifies that the two entities are associated. Describe the how many possible attributes will be add in both entity.

Cardinality

Cardinality defines the possible number of occurrences in one entity which is associated with the number of occurrences in table. Example, A team has MANY players. When present in an ERD, Entity Team and Player are inter-connected with a one-to-many relationship.



Explain Entity Relationship Diagram

1. Independent Entities

Season, series, Player Role and country are independent entities first of all we will create these entities with attributes. In these entities no one attributes come as a foreign key because these entities are not depend another entity primary key.

2. Dependent Entities

Players, stadium, teams, season winner, series winner, season matches, series matches, season match performs, series match performs, season captain and team participant all these entities are dependent entities. All these entities get primary key of another entity because they depend on other entity primary key.

One To One Relationship

1. Country and Team

In this relationship teams depend on country because each team has country so we will get country name from country table. Primary key of country will be added in team as a foreign key.

One to Many Relationship

1. Team and players
2. Season and season match
3. Series and series match

1. Team and players

In this relationship teams has many player. Each team has 11 player so 1 team against has 11 player. We will use team id in players table to identify unique each player belong particular team.

2. Season and season match

In this relationship every season has played many matches and one match belong to only one season that is why we will use season primary key in season match table to make each match unique.

3. Series and series match

In this relationship every series has played many matches and one match belong to only one series that is why we will use series primary key in series match table to make each match unique.

Many to Many Relationship

1. Season and Team
2. Season and Team

1. Season and Team

In this relationship each season has many teams and it is possible 1 team has played in many season so we will need to create a new table **Team participant season**.

2. Season and Team

In this relationship each season has many teams and it is possible 1 team has played in many season and one team has win season more than 1 so need to create new table which **season winner**.