Visvesvaraya Technological University, Belagavi – 590010



DBMS MINI PROJECT REPORT ON Fantasy Sports League

Submitted by

Wilton Santhosh D'Souza Winston Sebastian Pais 4SO17CS117 4SO17CS124

Under the guidance of

Ms Sunitha G
(Assistant Professor, CSE Department)



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ST JOSEPH ENGINEERING COLLEGE Vamanjoor, Mangaluru -575028, Karnataka 2019-2020

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CERTIFICATE

This is to certify that the Mini project entitled "Fantasy Sports League" is a bonafide work carried out by

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Students of fifth semester B.E. Computer Science & Engineering, and submitted as a part of the course DBMS Laboratory with Mini Project (17CSL58), during the academic year 2019-2020.

•	
Ms Sunitha G	Dr Sridevi Saralaya
Project Guide	Head of the Department
Name of the Examiners	Signature with Date
1	1
2	2

ABSTRACT

A fantasy sport league is a game, where participants assemble imaginary or virtual teams of real players of a professional sport. These teams compete based on the statistical performance of those players by generating random points to each player. This performance is converted into final points of the users that are compiled and totaled according to an admin. These point systems can be simple enough to be manually calculated by a "league commissioner" basically an admin who coordinates and manages the overall league, or points can be compiled.

Fantasy sports leagues are one way fans can enjoy their favorite sports away from the stadium or arena. A fantasy sports league is made up of a dozen or so participants who compete against each other based on statistics from real-world competitions. Fantasy leagues normally begin with a draft of some sort, where owners either select their players or are randomly assigned players.

The objective of the fantasy sports league is, it's a fun game among friends, but its booming popularity has made this a multi dollar business globally. India is fast catching up.

ACKNOWLEDGEMENT

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CHAPTER 1 – INTRODUCTION

A fantasy sport (also known less commonly as rotisserie or roto) is a type of game in which it comprises of an admin and there will be many users. Each user will have a football as well as cricket teams where he/she can select players whoever they like and final the admin who controls the game generates or resets the scores of the teams and finally the users can view, who is the winner of the sports league.

When the application is run, there will be a login page where the user can login and if in case they don't have an account, they can sign in by going to the Registration page where he/she have to enter their details like name, phone, Favourite team, password and email address. After the Registration is done, the user will be redirected to the Login page. In this page, the user has to enter his email address and his password. After that, the user gets to select the sports i.e., Football or cricket. If the user selects Football, he/she has to select player which they like and finally make a squad, similarly if the user selects Cricket, he/she has to select player which they like and finally make a squad. In the Selection of sports page, at the top there are two option, Logout and My Profile page. If the user wants to Logout from the application, they can select Logout option and if the user wants to see the profile of its own. They can select that option. In the profile page, there are two tables of the sports, in one table there will be user's football players and in the other user's cricket players where he can view his/her players. Also there will be a Leadership score option where the user can check where he/she stands in the sports league.

Finally, there will be an admin where he decides to reset the scores or generate the scores. Using the point's generator, each player selected by the users get their score and sum of the scores of both the football and crickets will be displayed. Looking at the results, user can determine where he/she stands in the league.

1.1 Problem Definition

The main objective of this project is, to make a sports gaming platform where every user in the game can have their desired teams with their favorite people in their squad and compete with the other users present in the league. No game affords the spectator such unique opportunities of exerting their critical talents. There's always a fan that knows more about the game, wants to bring more to the table than there is, and is a critic at heart. The users can exercise that knowledge and expertise with it, which allows users to create their own teams and pick a Captain for each match. Based on how your chosen groups of cricketers or footballers perform in the actual matches, you earn points. At the end of the game, points are calculated and you get to compare your performance with that of others players in the league.

1.2 Scope & Importance

Fantasy Sports has grown big in India and the industry is all set to break records when it comes to engaging sports fans and testing their sports knowledge & skills. It is expected that in the coming days almost all sports leagues in the country are going to offer their own fantasy leagues to their fans similar to fantasy premier league which is the official fantasy football game of the Premier League with more than 4.6 Million registered users. From a business point of view, fantasy sport is a great start-up idea to invest in India. The growth in this sector is also because of the increased interest of the users. We can add additional features to it like adding others to it and also get the statistic results from the live matches for the future scope. Above passage tells that, using this application the users can play games with their favorite teams and also we can increase the interest of the users by adding other games to it, with this for any Entrepreneur who starts his business on this legally, can increase his business more and get a lot of profit out of it.

CHAPTER 2 – Software Requirement Specification

2.1 Functional Requirements Specification

Login Module: In this module, we can do the following:

- Users or Admin can log in to their accounts.
- If a user is not registered with the database, he/she may enrol himself/herself following which a unique user id and password will be generated for login.
- Admin must login with his/her unique user id, password.

Administrator Module: In this module, we can do the following:

- Admin can generate scores for the teams both football and cricket.
- Admin should reset the scores before he/she generates the scores. So that, the new scores should not be added to the current generated scores.

User Module: In this module, we can do the following:

• The user can select the sports i.e., Cricket or Football and chose his/her favourite teams.

Add: In this module, the user can add players to his/her team.

Delete: In this module, the user can delete or remove the players from his/her team.

Search: In this module, the user can search for players.

View: In this module, the users can view his/her team and check the leader board for scores.

2.2 Software Requirements Specification

Operating System: Windows 7 or higher

Language: JAVA, PL/SQL

Database: Oracle Database 11g Express Edition

IDE: Netbeans IDE 8.2

2.2 Hardware Requirements Specification

Installed Memory (RAM): 2GB or higher

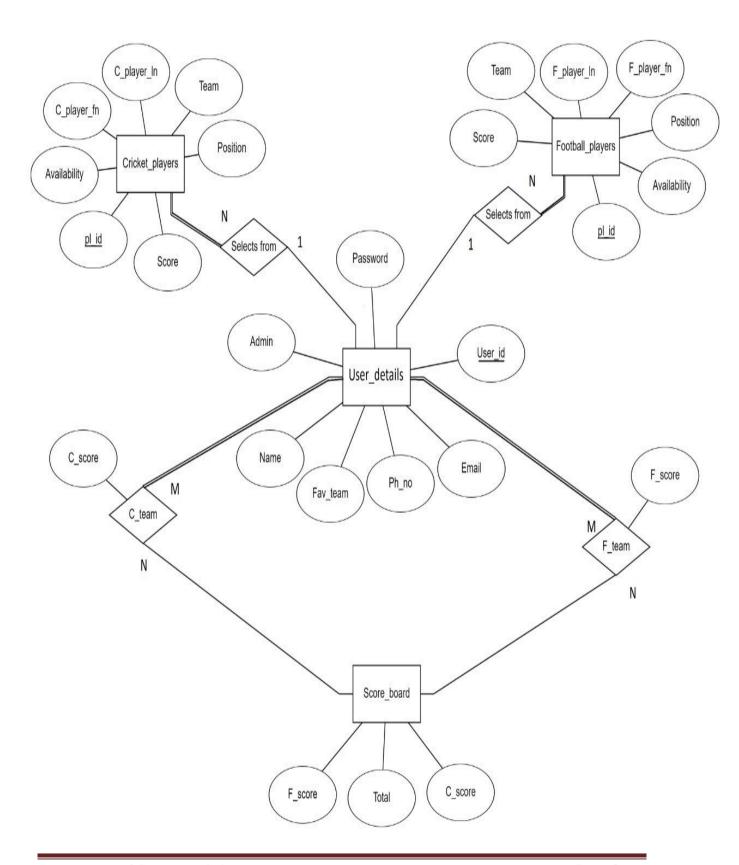
Processor: 1GHz or higher

Hard disk Space: 20 GB availability

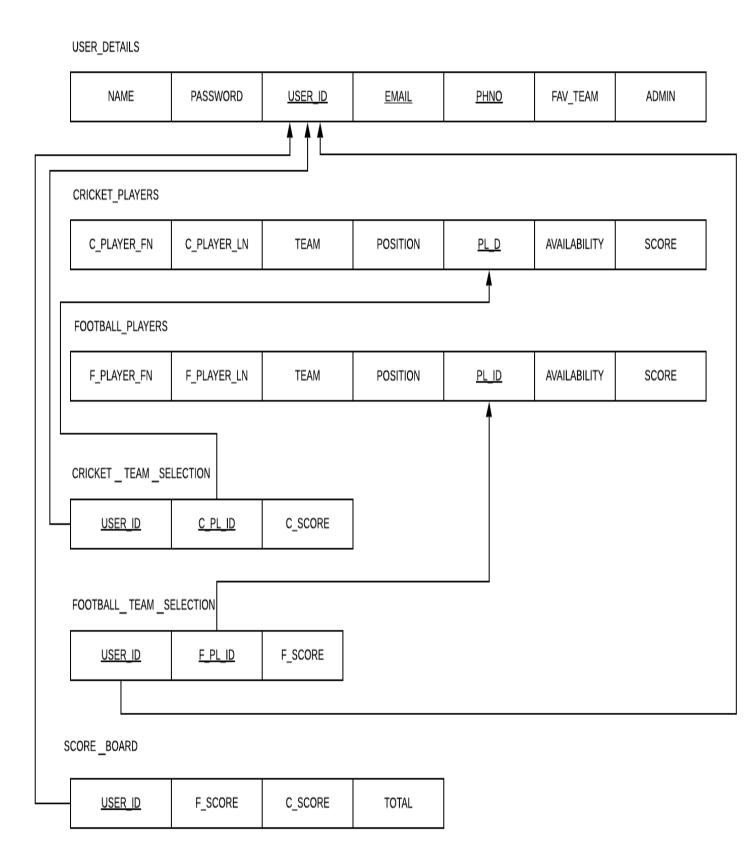
Display: Standard output display

CHAPTER 3 – SYSTEM DESIGN

3.1 ER Model



3.2 Schema Diagram



3.3 Table Description

Table 1:User_details

Attributes	Data Types	Constraints	Description
USER_ID	VARCHAR2(6)	PRIMARY KEY	Unique id to user
NAME	VARCHAR2(20)	NOT NULL	Name of the user
PASSWORD	VARCHAR2(20)	NOT NULL	Password of the user
EMAIL	VARCHAR2(30)	NOT NULL	User email id
PHNO	NUMBER(10,0)	NULLABLE	User phone number
FAV_TEAM	VARCHAR2(30)	NULLABLE	User favourite team
ADMIN	NUMBER(1,0)	NOT NULL	No.of admins

Table 2: Cricket_players

Attributes	Data Types	Constraints	Description
PL_ID	VARCHAR2(6)	PRIMARY KEY	Player id of player
C_PLAYER_FN	VARCHAR2(20)	NOT NULL	Player first name
C_PLAYER_LN	VARCHAR2(20)	NULLABLE	Player last name
TEAM	VARCHAR2(20)	NOT NULL	Team name
POSITION	VARCHAR2(20)	NOT NULL	Position of the player
AVAILABILITY	NUMBER(2,0)	NULLABLE	Availability of the player
SCORE	NUMBER(2,0)	NULLABLE	Score of the player

Table 3: Football_players

Attributes	Data Types	Constraints	Description
PL_ID	VARCHAR2(6)	PRIMARY KEY	Player id of player
F_PLAYER_FN	VARCHAR2(20)	NOT NULL	Player first name
F_PLAYER_LN	VARCHAR2(20)	NULLABLE	Player last name
TEAM	VARCHAR2(20)	NOT NULL	Team name
POSITION	VARCHAR2(20)	NOT NULL	Position of the player
AVAILABILITY	NUMBER(2,0)	NULLABLE	Availability of the player
SCORE	NUMBER(2,0)	NULLABLE	Score of the player

Table 4: Cricket_team_selection

Attributes	Data Types	Constraints	Description
USER_ID	VARCHAR2(6)	PRIMARY KEY	User_id of the user
C_PL_ID	VARCHAR2(6)	PRIMARY KEY	Cricket player id
C_SCORE	NUMBER	NULLABLE	Cricket team score

Table 5: Football_team_selection

Attributes	Data Types	Constraints	Description
USER_ID	VARCHAR2(6)	PRIMARY KEY	User_id of the user
F_PL_ID	VARCHAR2(6)	PRIMARY KEY	Football player id
F_SCORE	NUMBER	NULLABLE	Football team score

Table 6: Score_board

Attributes	Data Types	Constraints	Description
USER_ID	VARCHAR2(6)	PRIMARY KEY	User id of the user
F_SCORE	NUMBER(3,0)	NULLABLE	Football score
C_SCORE	NUMBER(3,0)	NULLABLE	Cricket score
TOTAL	NUMBER	NULLABLE	Total score

CHAPTER 4 – IMPLEMENTATION

4.1 Implementation of Stored Procedures and Triggers

1. Trigger Name: CRICKET_PLAYERS_T1

Description: This trigger is executed, only when a cricket player table has a score and that score gets updated in the score attribute of cricket team selection table.

Trigger Event: UPDATE

Trigger action: Updates the score in the cricket team selection table

Trigger Procedure:

create or replace trigger "CRICKET_PLAYERS_T1"

AFTER

update on "CRICKET_PLAYERS"

for each row

begin

UPDATE cricket_team_selection SET c_score =:NEW.score where c_pl_id =:NEW.pl_id ; end;

2. Trigger Name: FOOTBALL_PLAYERS_T1

Description: This trigger is executed, only when a football player table has a score and that score gets updated in the score attribute of football team selection table.

Trigger Event: UPDATE

Trigger action: Updates the score in the football team selection table

Trigger Procedure:

create or replace trigger "FOOTBALL_PLAYERS_T1"

AFTER

update on "FOOTBALL_PLAYERS"

for each row

begin

 $\label{lem:selection} \begin{tabular}{ll} UPDATE\ football_team_selection\ SET\ f_score =: NEW.score\ where\ f_pl_id =: NEW.pl_id\ ; \\ end: \end: \e$

3. Stored Procedure: finalscore

Description: After getting the scores from each players of a particular user. The total of both the scores of cricket and football is summed and displayed in the score board.

Procedure Definition:

```
create or replace finalscore (user_idd varchar2(6),f_scoree number,c_scoree number)
is
total number :=0;
begin
   total=f_scoree+c_scoree;
   insert into score_board (user_id,f_score,c_score,total_score) values
(:user_idd,:f_scoree,:c_scoree,:total);
end;
//
```

CHAPTER 5 – SCREENSHOTS



Fig 5.1: Registration Page



Fig 5.2: Login Page



Fig 5.3: Selection of Sports Page



Fig 5.4: Football Player Selection Page



Fig 5.5: Cricket Player Selection Page



Fig 5.6: Profile Page



Fig 5.7: Admin Page

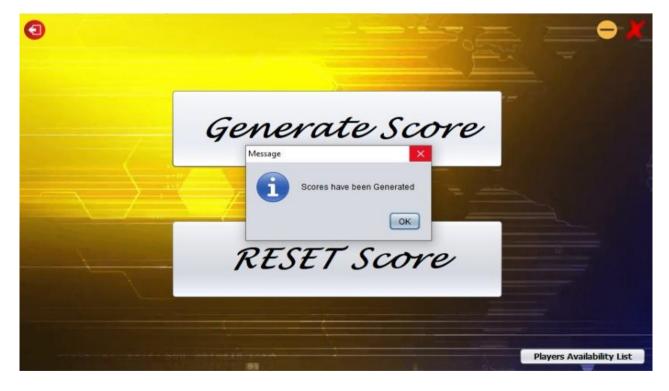


Fig 5.8: Scores Generated

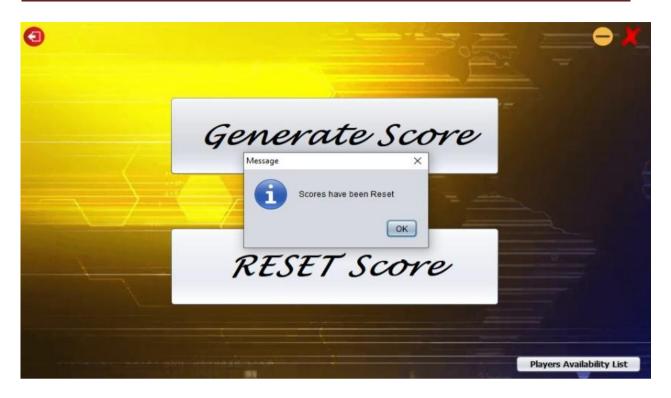


Fig 5.9: Reset Scores



Fig 5.10: Sports Selection Page (Admin)



Fig 5.11: Cricket Player List (Admin)

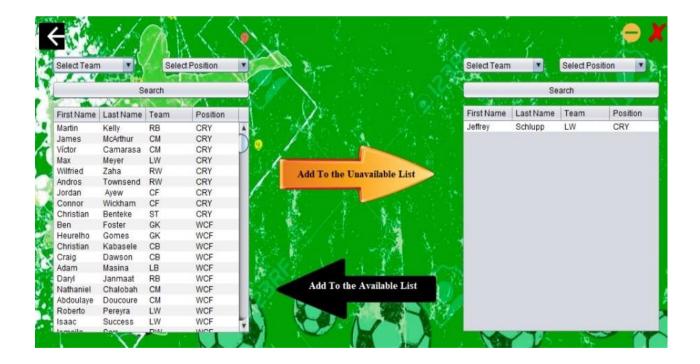


Fig 5.12: Football Player List (Admin)



Fig 5.13: Winner Page

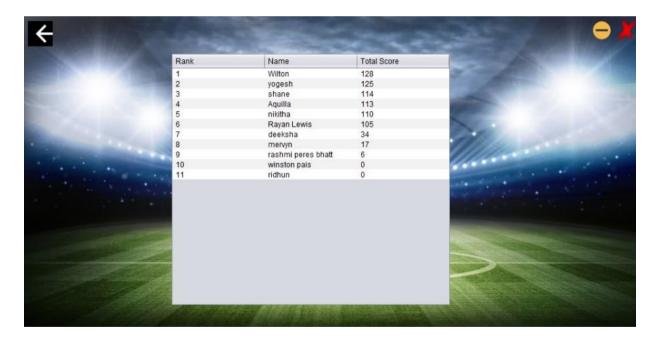


Fig 5.14: Score Board

CHAPTER 6 – CONCLUSION & FUTURE SCOPE

Fantasy Sports league aims to provide its users a game where they can make a team comprises of their favourite sportsman and play matches with the other users. The users can view their scores in the leader board.

For the future scope, we are planning to add many other sports like hockey, basketball, etc and also for every match, we are planning to add a live statistics of the match between the teams.

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