Introduction:

Oracle database (Oracle DB) is a relational database management system (RDBMS) from the Oracle Corporation. Originally developed in 1977 by Lawrence Ellison and other developers, Oracle DB is one of the most trusted and widely-used relational database engines.

The system is built around a relational database framework in which data objects may be directly accessed by users (or an application front end) through structured query language (SQL). Oracle is a fully scalable relational database architecture and is often used by global enterprises, which manage and process data across wide and local area networks. The Oracle database has its own network component to allow communications across networks. Oracle DB is also known as Oracle RDBMS and, sometimes, just Oracle.

Oracle targets high-end workstations and minicomputers as the server platforms on which to run its database systems. Along with Sun Microsystems, Oracle has long been a champion of network computers. It now boasts that it was the world's first software company to develop and deploy 100 percent Internet-enabled enterprise software across its entire product line: database, server, enterprise business applications, and application development and decision support tools.

Project Idea:

Cricket is one of the most popular game in the world. It perhaps most popular game in our sub-continent. I am also a big fan and lover of Cricket. Now a days different types of league games are being played in different cricket playing countries like BPL,IPL,Big Bash,CPL,PCL etc. In those leagues auction of players is one of the most attraction of any league. Bidding of players among many teams are very popular. So, for this CSE 3110 Database project I have design a Database using Oracle DBMS on this "***Cricket League Auction Management System***".

Project Description:

For my Database I have used Oracle DBMS.

The project "***Cricket League Auction Management System***" contains information about Team, Player of teams, Owner of teams, Bidding details and Auction Room.

It is consisted by the following schemas:

01. **Team**: (Team Name, Player ID)
02. **Player**: (Player ID, Player Name, Nationality, Base Price, Matches Played, Player Type)
03. **Owner**: (Owner ID, Team Name, Owner Name, Account Balance, Profession, Nationality)
04. **Bidding**: (Bidding ID, Owner ID, Player ID, Team Name, Auction Room Number)
05. **Auction_Room**: (Auction Room ID, Bidding ID, Room Number, Date Of Auction, Time Of Auction)

Here in the database system, each owner would have a specific team. For his/her team he/she will buy players through bidding in auction. This auction will take place in a specific Auction room on a specific time of a day. Thus all the records regarding auction system will be store in the designed database.

ER Diagram:

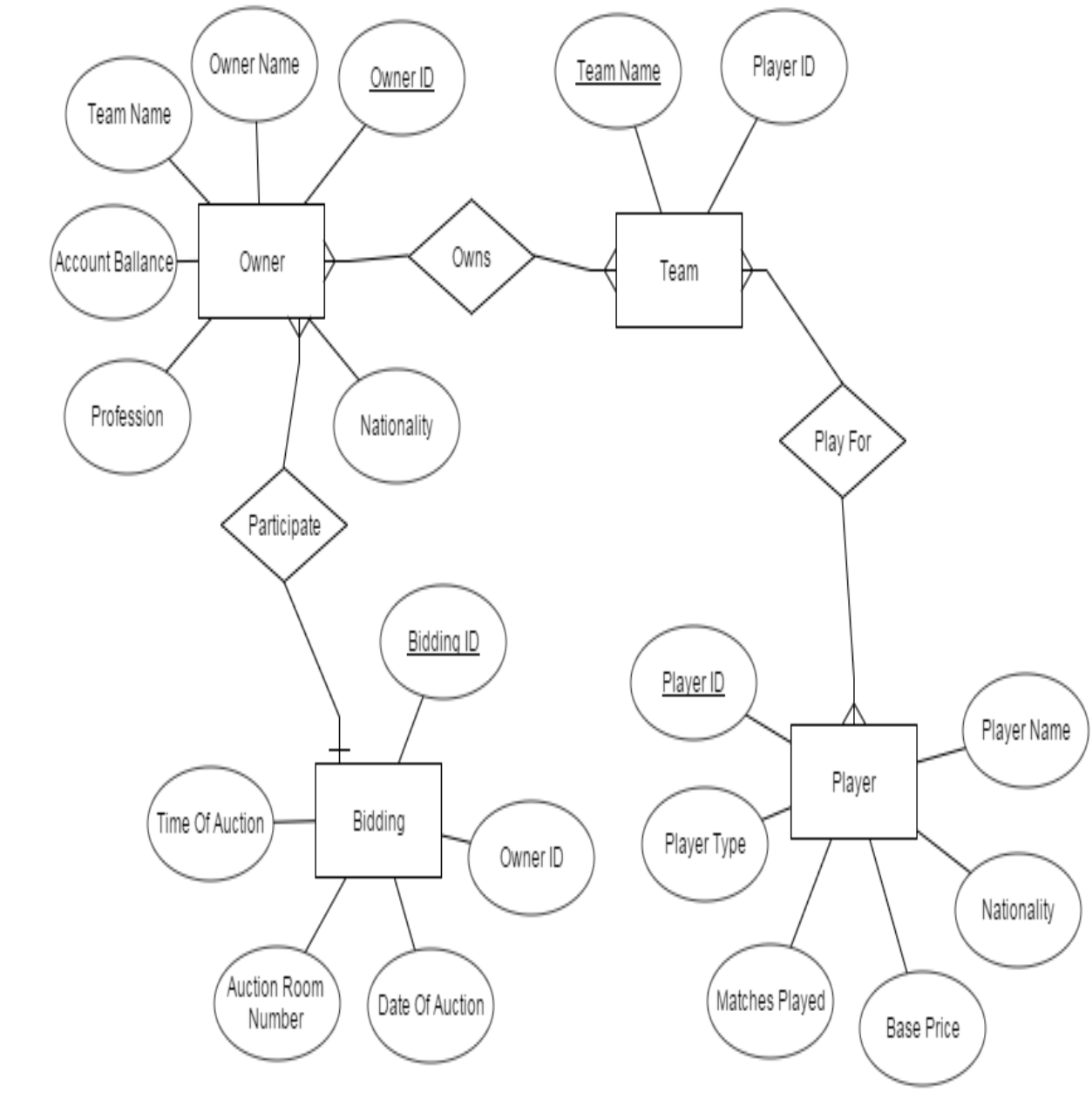

Figure-01: ER Diagram (Logical Diagram) Of Cricket Auction Management System.

Schema Diagram:

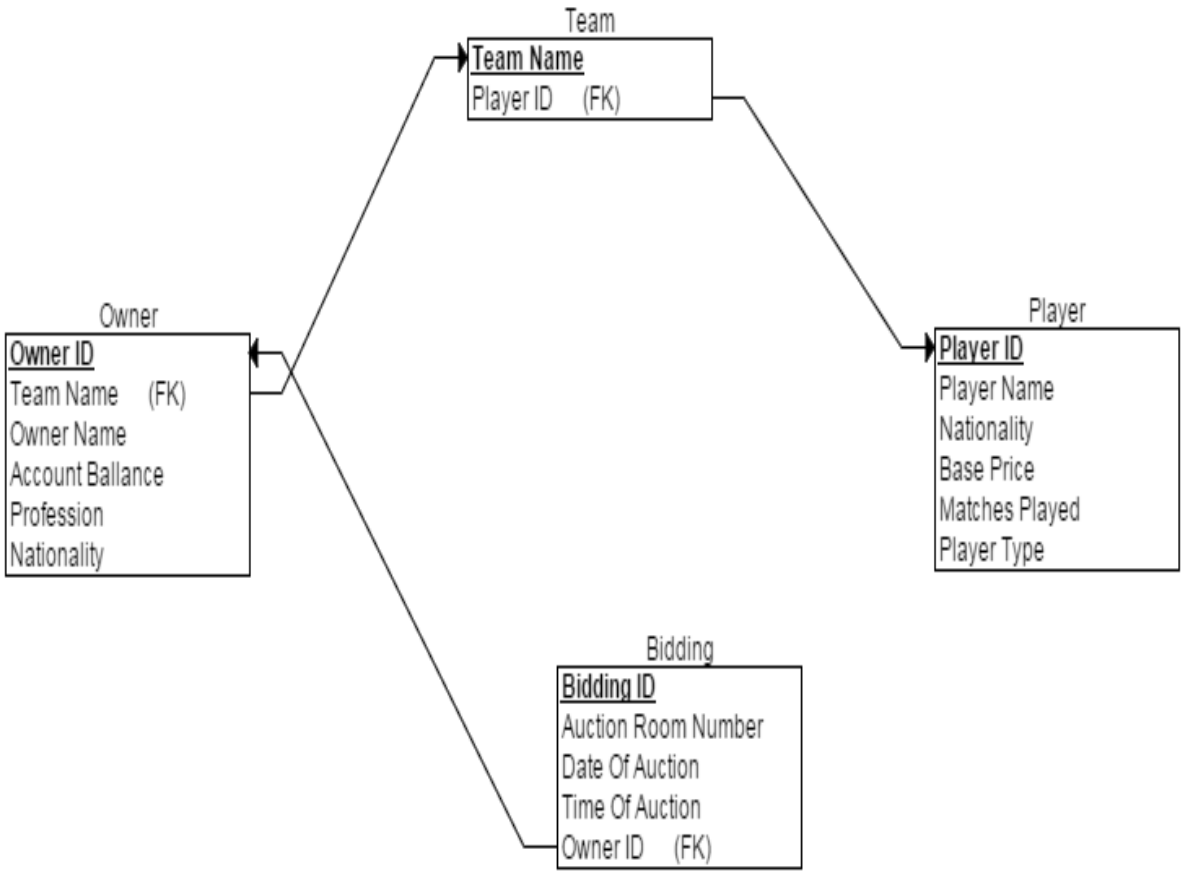

Figure-02: Schema Diagram (Physical Diagram) Of Cricket Auction Management System.

Sample Code (*Table.SQL*):

```
drop table bidding ;
drop table owner ;
drop table team ;
drop table player ;

create table PLAYER (
player_id number (20) NOT NULL,
player_name varchar(50),
nationality varchar(20),
base_price number (15),
matches_played number (10),
player_type varchar (20),
PRIMARY KEY (player_id)
);

create table TEAM (
team_name varchar (20) NOT NULL,
player_id number(20) NOT NULL,
PRIMARY KEY (team_name),
FOREIGN KEY (player_id) REFERENCES PLAYER (player_id)
);

create table OWNER (
owner_id number (20) NOT NULL,
```

```
team_name varchar (20),
owner_name varchar (20),
account_ballance number (10),
profession varchar (20),
nationality varchar (20),
PRIMARY KEY (owner_id),
FOREIGN KEY (team_name) REFERENCES TEAM (team_name)
);

create table BIDDING (
bidding_id number (10) NOT NULL,
owner_id number (10),
date_of_auction varchar (20),
time_of_auction varchar (20),
auction_room_number varchar (20),
PRIMARY KEY (bidding_id),
FOREIGN KEY (owner_id) REFERENCES OWNER (owner_id)
);

INSERT INTO PLAYER VALUES ( 100, 'AB de Villiars' , 'South African' ,50000 ,50 ,
'International');
INSERT INTO PLAYER VALUES ( 101, 'Chris Gayle' , 'West Indian' ,100000 ,70 ,
'International');
INSERT INTO PLAYER VALUES ( 102, 'Virat Kohli' , 'Indian' ,40000 ,40 , 'Local');

INSERT INTO TEAM VALUES ( 'RCB',100);
INSERT INTO TEAM VALUES ( 'KKR',101);
INSERT INTO TEAM VALUES ( 'MI',102);
```

```
INSERT INTO OWNER VALUES ( 500, 'RCB' , ' VIJOY MALIYA', 5000000,
'BUSINESSMAN','INDIAN');

INSERT INTO OWNER VALUES ( 501, 'KKR' , 'SHAH RUKH KHAN', 6000000, 'ACTOR'
,'INDIAN');

INSERT INTO OWNER VALUES ( 502, 'MI' , 'PRITY JINTA', 7000000, 'ACTRESS' ,'INDIAN');


INSERT INTO BIDDING VALUES ( 1000, 500 , '16-04-2016', '6 P.M.', 100);

INSERT INTO BIDDING VALUES ( 1001, 501 , '16-04-2016', '6 P.M.', 101);

INSERT INTO BIDDING VALUES ( 1002, 502 , '16-04-2016', '6 P.M.', 102);
```

Discussion:

In my "***Cricket League Auction Management System***" project, I have used Data Definition Language (DDL) for table creation and Data modification Language (DML) for INSERTION,UPDATE and DELATE.
I have also used PL/SQL (Procedural Language/Structured Query Language) in my project. PL/SQL (Procedural Language/Structured Query Language) is Oracle Corporation's procedural language extension for SQL and the Oracle relational database. PL/SQL includes procedural language elements such as conditions and loops. We can declare constants and variables, procedures and functions, types and variables of those types, and triggers.

Conclusion:

A lot of new things have been learned through this project. Although an auction management system database is more large and complex in the real world but for this mini project I tried my best to make a standard replica of an auction management system. The journey was little tough but managed it in due time with having lots of fun!

References:

01. http://docs.oracle.com
02. Oracle Database 10g: The Complete Reference by Kevin Loney