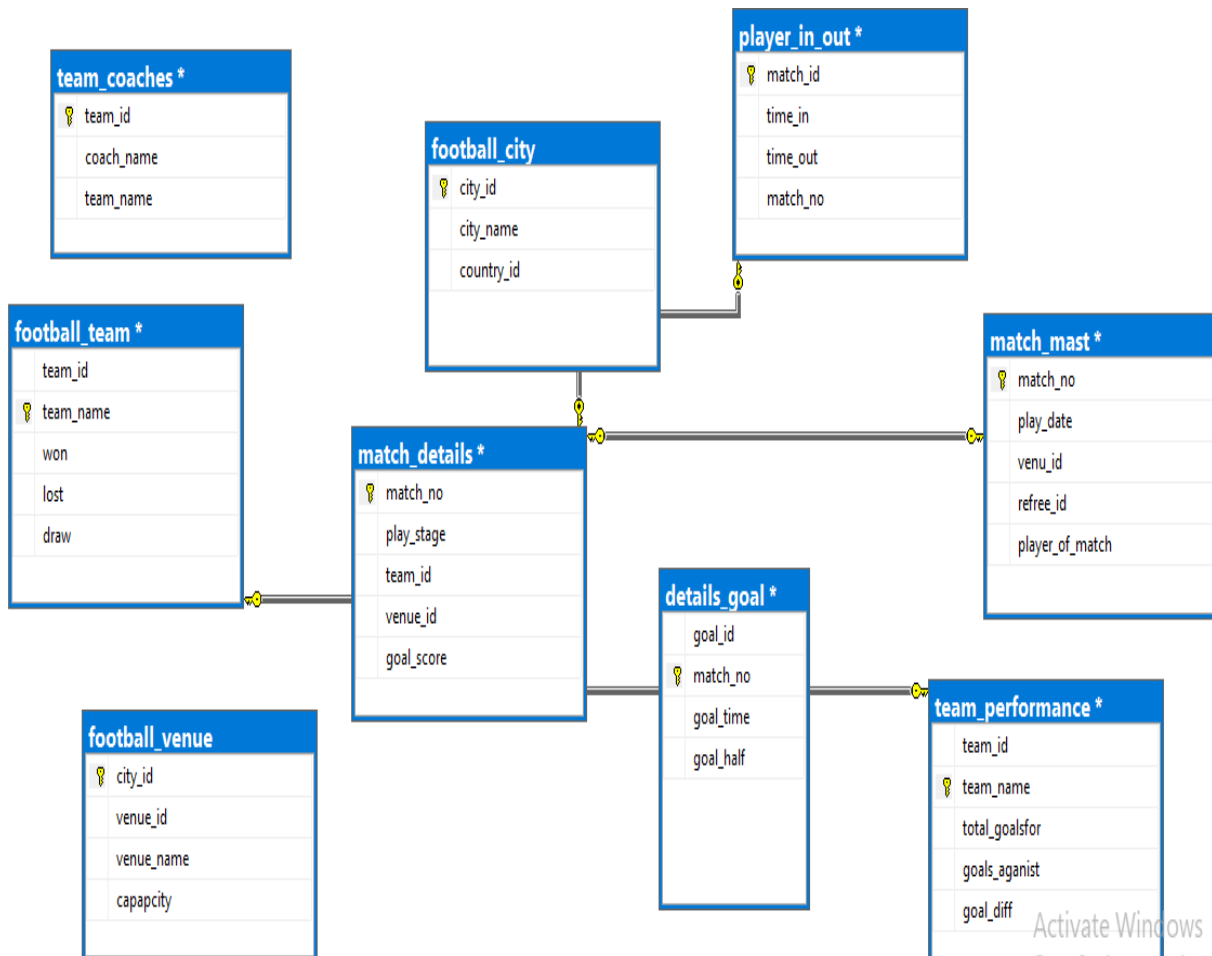


1) A1 Designing suitable Database Schema for any Service Sector for collecting large data sets efficiently from varied sources Including ERP



1) Creating associated tables by using Create Table Construct by SQL Commands

- SQL command for creating foot ball team table:
create database sportservice use sportservice

```
create table football_team
(
team_id int primary key,
team_name varchar(20),
won varchar(50),
lost varchar(40),
draw varchar(20)
)
```

```
insert into football_team values (1,'MAN UTD',40,5,5)
```

```
insert into football_team values (2,'LIVERPOOL',33,10,15)
```

- SQL command for team performance table:

```
create table team_performance
(
team_id int primary key,
team_name varchar(20),
total_goalsfor varchar(50),
goals_aganist varchar(40),
goal_diff varchar(20)
)
```

```
insert into team_performance values (1,'LIVERPOOL',50,30,20)
```

```
insert into team_performance values (2,'MAN UTD',43,40,3)
```

- SQL command for creating football city table:

```
create table football_city
(
city_id int primary key,
city_name varchar(20),
country_id varchar(50)
)
```

```
insert into football_city values (1,'MANCHESTER','UK')
```

```
insert into football_city values (2,'LIVERPOOL','UK')
```

- SQL command for creating football venue table:

```
create table football_venue
(
city_id int primary key, venue_id varchar(40), venue_name varchar(30)
capapcity varchar(100)
)
insert into football_venue values (1,'HAN21','MANCHESTERUNITED',84000)

insert into football_venue values (2,'LIV41','ANFIELD',63000)
```

- **SQL command for creating match mast table:**

```
create table match_mast
(
match_no int primary key,
play_date varchar(40),
venu_id varchar(30),
refree_id varchar(100),
player_of_match varchar(100)
)

insert into match_mast values (21,'19 december 2021','man42',26,'RONALDO')
```

- **SQL command for creating match details table:**

```
create table match_details
(
match_no int primary key,
play_stage varchar(40),
team_id varchar(30),
venue_id varchar(100),
goal_score varchar(100)
)

insert into match_details values (21,'2nd place','MAN42','MANCHESTER',5)

insert into match_details values (19,'3rd place','LIV41','MANCHESTER',4)
```

- **SQL command for creating team coaches table:**

```
create table team_coaches
(
team_id varchar(40),
coach_name varchar(30),
team_name varchar(30)
)
```

```
insert into team_coaches values ('MAN43','SIR ALEX','MANCHESTER')
```

```
insert into team_coaches values ('LIV41','PEP GARIDOL','LIVERPOOL')
```

- **SQL command for creating details goal table:**

```
create table details_goal
```

```
(  
goal_id varchar(40),  
match_no varchar(30),  
goal_time varchar(30),  
goal_half varchar(40)  
)
```

```
insert into details_goal values (10,21,'33rd min','1st half')
```

```
insert into details_goal values (11,19,'73rd min','2nd half')
```

- **SQL command for creating player in out table:**

```
create table player_in_out
```

```
(  
match_id int primary key,  
time_in varchar(30),  
time_out varchar(20),  
match_no varchar(50)  
)
```

```
insert into player_in_out values (1,'47th min','88th min','23')
```

```
insert into player_in_out values (2,'74th min','90 min','33')
```

1) Updating all tables by inserting 2 values in each table Inserting values into football team table

```
insert into football_team values (1,'MAN UTD',40,5,5)
```

```
insert into football_team values (2,'LIVERPOOL',33,10,15)
```

	team_id	team_name	won	lost	draw
1	1	MAN UTD	40	5	5
2	2	LIVERPOOL	33	10	15

Inserting values into team performance table

```
insert into team_performance values (1,'LIVERPOOL',50,30,20)
```

```
insert into team_performance values (2,'MAN UTD',43,40,3)
```

	team_id	team_name	total_goalsfor	goals_aganist	goal_diff
1	1	LIVERPOOL	50	30	20
2	2	MAN UTD	43	40	3

Inserting values into football city table

insert into football_city values (1,'MANCHESTER','UK')

insert into football_city values (2,'LIVERPOOL','UK')

	team_id	team_name	total_goalsfor	goals_aganist	goal_diff
1	1	LIVERPOOL	50	30	20
2	2	MAN UTD	43	40	3

Inserting values into football venue table

insert into football_venue values (1,'HAN21','MANCHESTERUNITED',84000)

insert into football_venue values (2,'LIV41','ANFIELD',63000)

	city_id	venue_id	venue_name	capapcity
1	1	HAN21	MANCHESTERUNITED	84000
2	2	LIV41	ANFIELD	63000

Inserting values into match mast table

insert into match_mast values (21,'19 december 2021','man42',26,'RONALDO')

	match_no	play_date	venu_id	refree_id	player_of_match
1	20	20 december 2021	liv41	35	MANE
2	21	19 december 2021	man42	26	RONALDO

Inserting values into match details table

insert into match_details values (21,'2nd place','MAN42','MANCHESTER',5)

insert into match_details values (19,'3rd place','LIV41','MANCHESTER',4)

	match_no	play_stage	team_id	venue_id	goal_score
1	19	3rd place	LIV41	MANCHESTER	4
2	21	2nd place	MAN42	MANCHESTER	5

Inserting values into team coaches table

insert into team_coaches values ('MAN43','SIR ALEX','MANCHESTER')

insert into team_coaches values ('LIV41','PEP GARIDOL','LIVERPOOL')

	team_id	coach_name	team_name
1	MAN43	SIR ALEX	MANCHESTER
2	LIV41	PEP GARIDOL	LIVERPOOL

Inserting values into details goal table

insert into details_goal values (10,21,'33rd min','1st half')

insert into details_goal values (11,19,'73rd min','2nd half'))

	goal_id	match_no	goal_time	goal_half
1	10	21	33rd min	1st half
2	11	19	73rd min	2nd half

Inserting values into PLAYER in out table

insert into player_in_out values (1,'47th min','88th min','23')

insert into player_in_out values (2,'74th min','90 min','33')

	match_id	time_in	time_out	match_no
1	1	47th min	88th min	23
2	2	74th min	90 min	33

4.Developing relationship between tables and normalizing the data using 2NF/3NF.Defining Primary key, Foreign key and composite key for the same

use sportservice

create table match_detail (

team_id int foreign key references football_team(team_id),

city_id int foreign key references football_city(city_id),

match_no int foreign key references match_mast(match_no),

match_id int foreign key references player_in_out(match_id),

players varchar(100),

goals_total varchar(100)

)

insert into match_detail values(1,1,1,1,'NEYMAR','542')

select *from polices

insert into polices values(2,2,2,2,2,2,2,'SHAM SINGH',84783)

