ISYS2014 – Database System

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Laboratory: Wednesday 4-6pm

Final Assignment – Report Paper

Introduction

The following report consider the scenario of FIFA Women World Cup. Every part of the work has been described with evidence in various formats. The report includes explanations for designing process as well as coding implementation with useful queries to retrieve data.

Part 1

a. ER Diagram

Entity sets	Keys	Other attributes
Referee	refNo	refRole, age
Person	nationality, firstName, lastName	DOB
Player	playerID	value, position, number, age
Coach	coachID	age, coachRole
MatchPlay	matchID	date, time, temperature, attendance, A_goal, B_goal
Stadium	stadName	city, state, capacity
Card	cardType	minute
Team	teamCode	ranking, teamValue
play for	NULL	goals, assists, appearances

Relationship sets	Between entity	Attributes of	Note
	Sets	relationship	
P-Player	Person - Player		a person to be a
P-Coach	Person – Coach		player, a coach,
P-Ref	Person – Referee		or a referee
Play for	Player - Team	goals, assists, appearances	A player to play for a national team
manage	Coach - Team		
play in	Team – Match		Teams to play in a match
refereed	Referee - Match		
Take place	Match - Stadium		A match to be played in a stadium
Give	Referee - Card		Cards given by a referee
In	Card - Match		Cards given in a match
given	Card - Player		A player to be booked

given	Card - Coach	A coach to be
		booked

Relationship sets	Cardinality	Participation	Note
Relationsinp sets	constraints	constraints	Note
P-Player	1:1	Person – Partial/ Player – Total A person may not be a player, a player must be a person	
P-Coach	1:1	Person – Partial/ Coach – Total A person may not be a coach, a coach must be a person	A person can only be a player, coach or referee
P-Ref	1:1	Person – Partial/ Referee – Total A person may not be a coach, a coach must be a person	
Play for	1:N	Player – Total/Team – Total A player must play for a team, a team must have players	A player can only play for a team, a team can have many player
Manage	1:N	Coach – Total/Team – Total A team must have a coach, a coach must manage a team	A coach can only manage a team, a team can have many coaches
play in	M:N	Team – Total/Match – Total A team must play matches, matches must be played by teams	2 teams can play in a match, a team can play many matches
Refereed	M:N	Referee – Partial/ Match – Total A match must have referee, a referee may not take part in a match	Many referees can take part in a match, a referee can take part in many matches
Take place	1:N	Match – Total/Stadium – Partial A match must be play in a stadium, a stadium may not have any match	A stadium can host many matches, a match can only be played in a stadium

Give	1:N	Referee – Partial/Card – Partial A card may not be given by a referee, a referee may not give any card	A referee can give many cards, a card can be given by only a referee
ln	M:N	Card – Partial/Match – Partial A match may not have any card, a card may not be given in any match	Many cards can be given in a match, a card can be given in many matches
Given	M:N	Card – Total/Player – Partial A player may not have any card, a card, if given, must be given for at least a player	Many players can be booked with the same card,
Given	M:N	Card – Total/ Coach – Partial A coach may not have any card, a card, if given, must be given for at least a coach	Many coaches can be booked with the same card

b. Relational schema

- Person(firstName, lastName, nationality, DOB)
- Player(playerID, teamID, firstName, lastName, nationality, value, number, age, position)

FK teamID REF Team(teamID)

FK firstName REF Person(firstName)

FK lastName REF Person(lastName)

FK nationality REF Person(nationality)

• Coach(coachID, teamID, firstName, lastName, nationality, coachRole, age)

FK teamID **REF Team**(teamID)

FK firstName REF Person(firstName)

FK lastName REF Person(lastName)

FK nationality REF Person(nationality)

Referee(refNo, refRole, firstName, lastName, nationality, age)

FK firstName REF Person(firstName)

FK lastName REF Person(lastName)

FK nationality REF Person(nationality)

playfor(playerID, teamID, goals, assists, appearances)

FK playerID REF Player(playerID)

FK teamID REF Team(teamID)

Card(cardType, minute, refNo, matchID)

FK refNo REF Referee(refNo)

FK matchID REF MatchPlay(matchID)

 MatchPlay(<u>matchID</u>, stadName, round, date, temperature, attendance, A_goal, B_goal, A_teamID, B_teamID)

FK stadName REF Stadium(stadName)

FK A_teamID REF Team(teamID)

FK B_teamID REF Team(teamID)

- Stadium(stadName, city, state, capacity)
- Team(teamName, teamID, ranking)
- Given(cardType, coachID, playerID)

FK coachID REF Coach(coachID)

FK playerID REF Player(playerID)

Refereed(refNo, matchID)

FK refNo REF Referee(refNo)

FK matchID REF Match(matchID)

c. Data description

Person

Attributes	Туре	Size	PK	Null	Description	Note
firstName	VARCHAR	15	Υ	N	First name	
lastName	VARCHAR	15	Υ	Υ	Last name	
nationality	VARCHAR	10	Υ	N	Nationality	
DOB	DATE			N	Date of Birth	

Player

Attributes	Туре	Size	PK	Null	Description	Note
value	INT	6		Υ	Player's market value	Values are in USD million
number	INT	2	Υ	N	Player's shirt number	
playerID	VARCHAR	10	Υ	N	FIFA ID for each player	
position	VARCHAR	2		N	Player's position	A player can play in multiple positions
age	INT	2		N	Player's age	Calculated with DOB

Coach

Attributes	Туре	Size	PK	Null	Description	Note
coachID	VARCHAR	10	Υ	N	FIFA ID for coaches	
coachRole	VARCHAR	20		Υ	Coach role	
age	INT	2		N	Coach's age	Calculated with DOB

Referee

Attributes	Туре	Size	PK	Null	Description	Note
refNo	VARCHAR	10	Υ	N	FIFA codes for referees	Values are in USD million
age	INT	2		N		Calculated with DOB
refRole	CHAR	2		N	Referee role	Such as Referee, Assistant Referee

Team

Attributes	Туре	Size	PK	Null	Description	Note
teamName	VARCHAR	20	Υ	N	Country name	
teamID	CHAR	3		N	FIFA code for a nation	
ranking	INT	3		Υ	FIFA World Ranking	

MatchPlay

Attributes	Туре	Size	PK	Null	Description	Note
matchID	VARCHAR	6	Υ	N	Unique identifier for each match	
date	DATE			N		Sydney date
attendance	INT	6		N	Total attendance in a match	Must be =< Stadium capacity
A_goal	INT	1		N	Goal for team A	
B_goal	INT	1		N	Goal for team B	
round	VARCHAR	10		N	Round	
A_teamID	VARCHAR	6		N	Team 1	
B_teamID	VARCHAR	6		N	Team 2	

Stadium

Attributes	Туре	Size	PK	Null	Description	Note
stadName	VARCHAR	40	Υ	N	Stadium name	
city	VARCHAR	30		N		
state	CHAR	2		N		
capacity	INT	6		Υ	Maximum capacity	

Card

Attributes	Туре	Size	PK	Null	Description	Note
cardType	CHAR	1		N	Type of Card	Red or Yellow
minute	INT	2		N	When the card to be given in a match	

play for

Attributes	Туре	Size	PK	Null	Description	Note
goals	INT	2		Υ	Goals for team	International record only
appearances	INT	3		Υ	Matches played for team	International record only

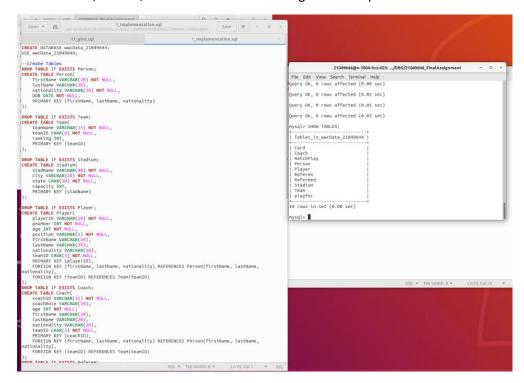
Business Rules

- BS1: position attributes for Players are displayed as RW, CB, CM, GK...
- BS2: Number of teams cannot exceed 32.
- BS4: Players' records for clubs are not eligible (Only for national teams).

Part 2

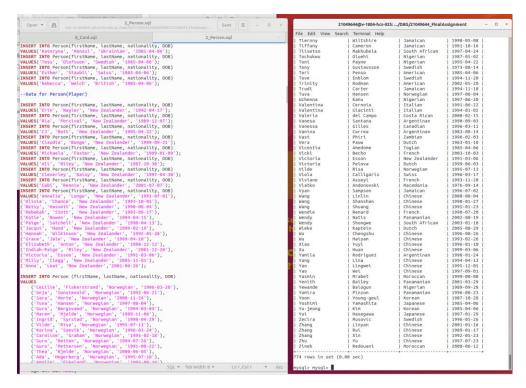
a. Implementation

Tables are created with SQL script files, data types based on information above. There are 11 SQL script files. Every script is numbered with proper names matching tables accordingly. SQL script number 1 is the implementation of tables. Scripts number 2-11 are data and values for each table created by script number 1. A large portion of data in this assignment is collected via Wikipedia and FIFA official website. The suggested source from Blackboard is also used. Some data for tables such as Card, Refereed is fabricated as it is not easy to obtain the one required. However, overall, these tables don't have significant impact on the database.

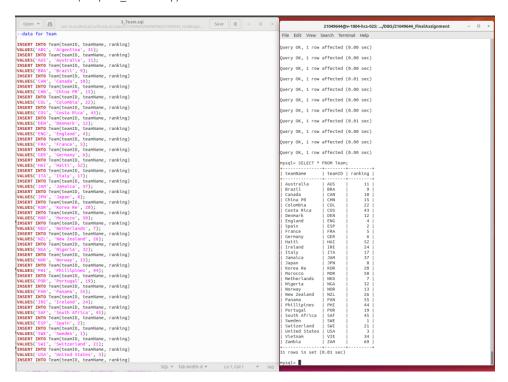


Implementation of tables (Script: '21049644_implementation.sql')

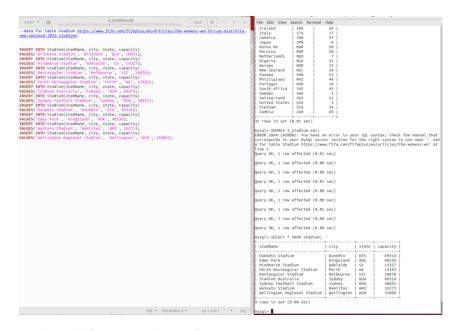
b. Loading sample data



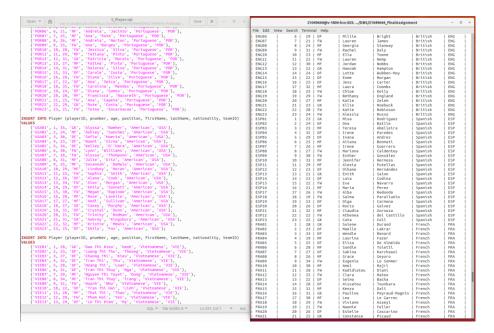
Person table (Script: 2_Person.sql)



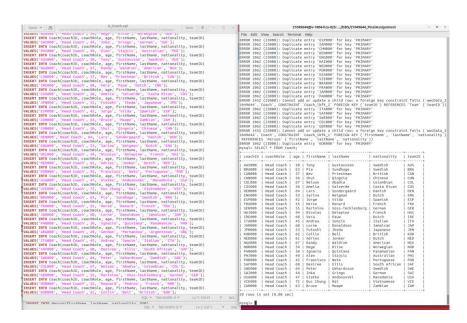
Team tables (Script: 3_Team.sql)



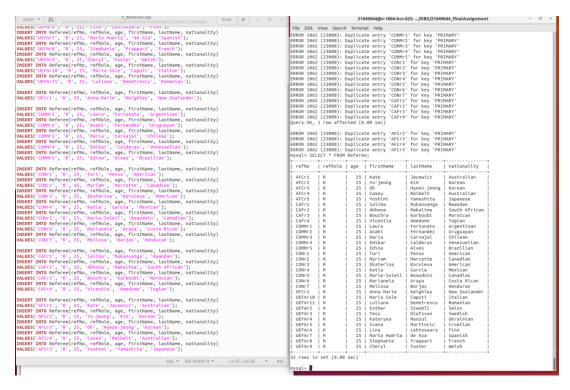
Stadium table (Script: 4_Stadium.sql)



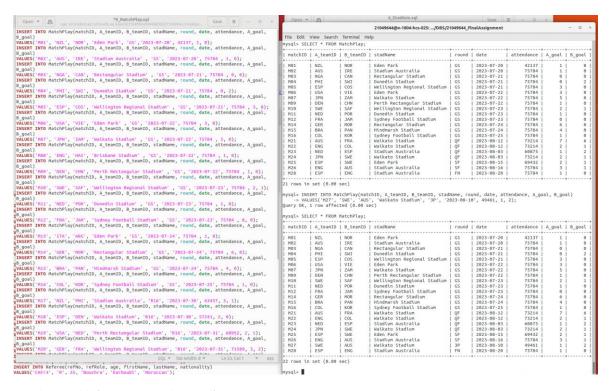
Player table (Script: 5_Player.sql)



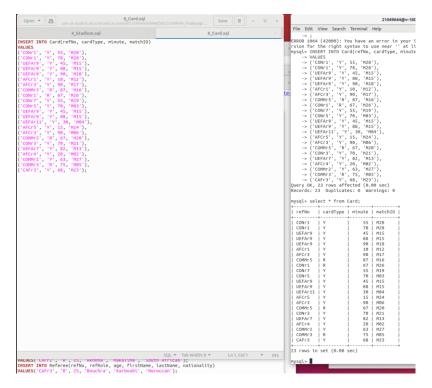
Coach table (Script:6_Coach.sql)



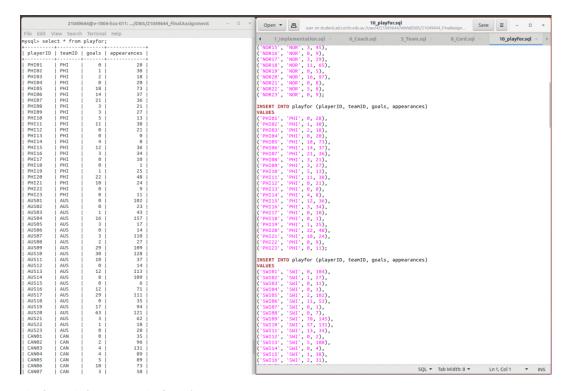
Referee table (Script: 7 Referee.sql)



MatchPlay table (Script: 9_MatchPlay.sql)



Card table (Script: 8_Card.sql)

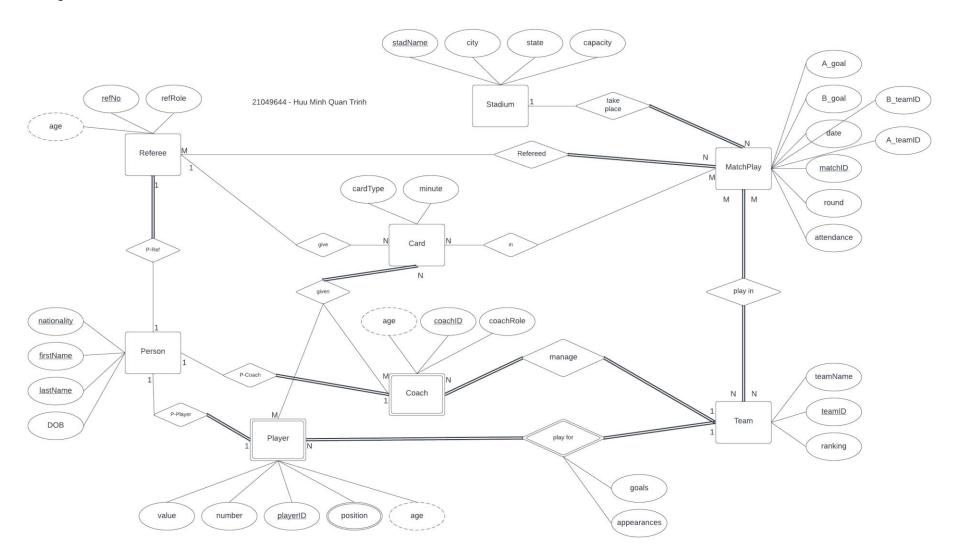


playfor table (Script: 10_playfor.sql)



Refereed table (Script: 11_Refereed.sql)

ER Diagram



Page **15** of **24**

Part 3 - Designing and Implementing queries.

Level 1:

1. Provide statements to display every player whose position is Forward.

mysql> SELECT * FROM Player WHERE position = 'FW';

The second of th							
playerID	pnumber	age	position	firstName	lastName	nationality	teamID
AUS05	I 5	25	FW	Cortnee	Vine	Australian	l AUS I
I AUS09	l 9	28	FW	Caitlin	l Foord	Australian	l AUS I
AUS11	11		FW	Mary	Fowler	Australian	l AUS I
AUS16	16	28	FW	Havley	Raso	Australian	AUS I
AUS17	17	32	FW	Kyah	Simon	Australian	AUS I
I AUS20	1 20	29	FW	Sam	Kerr	Australian	I AUS I
I CHN07	7		FW	Wang	Shuang	Chinese	CHN I
CHN11	11	33	FW	Wang	Shanshan	Chinese	CHN
CHN14	14		FW	Lou	Jiahui	Chinese	CHN
CHN18	18	28	FW	Tang	Jiali	Chinese	CHN
CHN20	20	27	FW	Xiao	Yuvi	Chinese	CHN
COL11	11	33	FW	Catalina	Usme	Colombian	COL
COL18	I 18	18	FW	Linda	Caicedo	Colombian	COL I
COL21	I 21	25	FW	Ivonne	Chacon	Colombian	COL I
COL23	23	25	FW	Elexa	Bahr	Colombian	COL
ENG07	7	21	FW	Lauren	James	British	ENG
ENG09	9	31	FW	Rachel	Daly	British	ENG
ENG11	11	22	FW	Lauren	Hemp	British	ENG
ENG18	18	25	FW	Chloe	Kelly	British	ENG
ENG19	19	29	FW	Bethany	England	British	ENG
ENG22	22	20	FW	Katie	Robinson	British	ENG
ENG23	23	24	FW	Alessia	Russo	British	ENG
ESP08	8	27	FW	Mariona	Caldentey	Spanish	ESP
ESP09	9	30	FW	Esther	Gonzalez	Spanish	ESP
ESP15	15	22	FW	Eva	Navarro	Spanish	ESP
ESP17	17	26	FW	Alba	Redondo	Spanish	ESP
ESP18	18	19	FW	Salma	Paralluelo	Spanish	ESP
ESP22	22	22	FW	Athenea	del Castillo	Spanish	ESP
FRA09	9	34	FW	Eugenie	Le Sommer	French	FRA
FRA11	11	28	FW	Kadidiatou	Diani	French	FRA
FRA12	12	25	FW	Clara	Mateo	French	FRA
FRA18	18	29	FW	Viviane	Asseyi	French	FRA
FRA19	19	21	FW	Naomie	Feller	French	FRA
FRA23	23	19	FW	Vicki	Becho	French	FRA
HAI07	7	26	FW	Batcheba	Louis	Haitian	HAI
HAI10	10	24	FW	Nerilia	Mondesir	Haitian	HAI
HAI11	11	24	FW	Roseline	Eloissaint	Haitian	HAI
HAI15	15	19	FW	Darlina	Joseph	Haitian	HAI
HAI17	17	25	FW	Shwendesky		Haitian	HAI
HAI22	22	30	FW	Roselord	Borgella	Haitian	HAI
ITA07	7	23	FW	Sofia	Cantore	Italian	ITA

2. Spain is the new WWC champion, provide statements to display every of their player, with the descending order of 'age' column.

3. Show every stadium with capacity of more than 40 000.

4. Show the average age of every referee and store the data in a new column with proper column name.

5. Show the gap between the oldest and the youngest person in this tournament (Including players, coaches, referees.

Level 2:

1. From Player table, find the player's full name and age who has the same age as "Aitana Bonmati" of Spain. (Reference: Lecture 6 – Slide 12).

```
mysql> SELECT age, CONCAT(firstName, '', lastName) AS Name
    -> FROM Player
    -> WHERE age = (SELECT age FROM Player
    -> WHERE firstName='Aitana' and lastName='Bonmati');
| age | Name
  25 | CortneeVine
   25 | ClareWheeler
   25 | TeaganMicah
   25 | JessieFleming
   25 | ZhuYu
   25 | YaoWei
   25
      | LorenaBedoya
   25 | IvonneChacon
   25 i ElexaBahr
   25 I
       JessCarter
   25
       ChloeKelly
   25
       AitanaBonmati
   25 I
       ElisaDe Almeida
   25 | ClaraMateo
      ConstancePicaud
   25
   25
      | JennyferLimage
   25
       ShwendeskyJoseph
       ManuelaGiugliano
   25 I
       AnnamariaSerturini
   25 İ
   25
       KonyaPlummer
   25
        TiernnyWiltshire
   25
       HonokaHayashi
   25 İ
        RyuJi-soo
   25
       KangChae-rim
   25
        LizeKop
   25
        JacinthaWeimar
   25
       OliviaMcDaniel
        ChandlerMcDaniel
   25
   25
        AngelaBeard
   25
        AliciaBarker
   25
        LuciaAlves
   25 | AnaRute
   25 j
       AnaCapeta
   25
        .
SavannahDeMelo
   25
        EmilyFox
       CatherineMusonda
MaryMulenga
   25 I
   25 İ
   25 | MaryWilombe
   25 | MarthaTembo
   25
       IreenLungu
   25 | HellenChanda
25 | AvellChitundu
42 rows in set (0.00 sec)
```

2. Show every player's full name, and teams that participate in the Quarter-final

```
mysql> SELECT a.playerID, a.firstName, a.lastName
-> FROM Player a
-> NATURAL JOIN MatchPlay b
-> WHERE a.teamID = b.A_teamID OR a.teamID = b.B_teamID
-> AND b.round = 'QF'
-> GROUP BY a.playerID, a.firstName, a.lastName;
  playerID | firstName
                                                    | lastName
                      | Lydia
                                                        Williams
  AUS01
                         Courtney
Aivi
Clare
Cortnee
Clare
                                                        Nevin
Luik
Polkinghorne
Vine
Wheeler
  AUS02
  AUS03
AUS04
  AUS05
  AUS06
                         Steph
Alex
Caitlin
Emily
Mary
Teagan
  AUS07
AUS08
                                                         Catley
Chidiac
  AUS09
                                                         Foord
  AUS10
AUS11
AUS12
                                                         van Egmond
Fowler
Micah
                          Tameka
Alanna
Clare
Hayley
  AUS13
                                                         Yallop
  AUS14
AUS15
AUS16
                                                         Kennedy
Hunt
                                                         Raso
  AUS17
                          Kyah
Mackenzie
Katrina
                                                         Simon
                                                         Simon
Arnold
Gorry
Kerr
Carpenter
Grant
Cooney-Cross
  AUS18
AUS19
  AUS20
                          Sam
Ellie
  AUS21
  AUS22
AUS23
COL01
                          Charlotte
Kyra
Catalina
                                                         Perez
                          Manuela
Daniela
Diana
                                                         Vanegas
Arias
Ospina
  COL 02
  COL03
  COL<sub>05</sub>
                          Lorena
                                                         Bedoya
  COLOG
COLOG
COLOG
                          Daniela
Maria Camila
Marcela
                                                         Montoya
Reyes
Restrepo
  COL09
                          Mayra
                                                         Ramirez
  COL10
COL11
COL12
                         Leicy
Catalina
Sandra
Natalia
                                                         Santos
Usme
Sepulveda
  COL13
                                                         Giraldo
  COL14
```

3. Show every player who played in this tournament with more than 30 international caps.

playerID	Name
+	
	Lydia Williams
	Aivi Luik
	Clare Polkinghorne
	Steph Catley
	Caitlin Foord
	Emily van Egmond
AUS11	
	Tameka Yallop
	Alanna Kennedy
	Hayley Raso
	Kyah Simon
	Mackenzie Arnold
	Katrina Gorry
	Sam Kerr
	Ellie Carpenter
	Kailen Sheridan
	Allysha Chapman
	Kadeisha Buchanan
	Shelina Zadorsky
	Quinn Rebecca
	Deanne Rose
	Julia Grosso
	Jayde Riviere
	Jordyn Huitema
	Ashley Lawrence
CAN12	
	Sophie Schmidt
CAN15	
	Gabrielle Carle
CAN17	
	Adriana Leon
PHI05	
	Tahnai Annis
	Sarina Bolden
	Anicka Castaneda
	Carleigh Frilles
	Sofia Harrison
	Quinley Quezada
	Irene Paredes
	Ivana Andres
	Aitana Bonmati
	Mariona Caldentey
	Esther Gonzalez
	Jennifer Hermoso
	Alexia Putellas
	Ayaka Yamashita
JPN02	Risa Shimizu

4. Show ID and full name of every referee taking part in "Eden Park" stadium.

```
mysql> SELECT a.refNo, CONCAT(b.firstName, ' ', b.lastName) AS RefName
    -> FROM Refereed a JOIN Referee b ON a.refNo=b.refNo
-> WHERE a.matchID = (SELECT c.matchID
    -> FROM MatchPlay c
    -> WHERE a.matchID=c.matchID AND c.stadName='Eden Park');
| refNo | RefName
| AFCr3 | Oh Hyeon-jeong
| UEFAr7 | Marta Huerta de Aza |
2 rows in set (0.00 sec)
```

Part 4 - Increase the data base functionality with advanced concept.

1. Create view to show every player with total international caps is more than 0 (Reference: Lecture 8 Slide 32).

```
mysql> CREATE VIEW mostExperiencedPlayer AS
    -> SELECT a.playerID, b.firstName, b.lastName, SUM(a.appearances) AS TotalAppearances
-> FROM playfor a JOIN Player b ON a.playerID=b.playerID
    -> WHERE a.appearances > 0
-> GROUP BY a.playerID, b.firstName, b.lastName
-> ORDER BY TotalAppearances DESC;
Query OK, 0 rows affected (0.01 sec)
mysql> SELECT * FROM mostExperiencedPlayer;
| playerID | firstName | lastName
                                         | TotalAppearances |
 CAN12
              Christine | Sinclair
  CAN13
               Sophie
                            Schmidt
  AUS04
              Clare
                            Polkinghorne
                                                             314
  JPN04
              Saki
                            Kumagai
                                                             266
              Kadeisha
  CAN03
                            Buchanan
                                                             262
  AUS10
               Emily
                            van Egmond
                                                             256
  AUS20
              Sam
                            Кегг
                                                             242
              Ashley
  CAN10
                            Lawrence
                                                             234
  CAN17
               Jessie
                            Fleming
  AUS13
               Tameka
                            Yallop
                                                             226
  AUS17
              Kyah
                            Simon
                                                             222
  AUS07
               Steph
                            Catley
                                                             220
  AUS14
               Alanna
                            Kennedy
                                                             218
  AUS09
              Caitlin
                            Foord
                                                             218
  AUS01
                            Williams
               Lydia
                                                             204
  ESP11
              Alexia
                            Putellas
                                                             200
  ESP10
               Jennifer
                            Hermoso
                                                             194
  CAN19
              Adriana
                            Leon
                                                             192
  CAN02
              Allvsha
                            Chapman
                                                             192
  AUS19
               Katrina
                            Gorry
                                                             188
  CAN15
               Nichelle
                            Prince
                                                             180
  ESP04
              Irene
                            Paredes
                                                             180
  CAN04
               Shelina
                            Zadorsky
                                                             178
  CAN05
               Quinn
                            Rebecca
                                                             178
  CAN<sub>0</sub>6
               Deanne
                            Rose
                                                             146
  PHI05
              Hali
                            Long
                                                             146
  AUS16
              Hayley
                            Raso
                                                             142
  CAN09
               Jordyn
                            Huitema
                                                             128
  TPN14
               Vui
                            Hasegawa
                                                             126
  JPN11
```

Mina

F11ia

ALIC 21

Tanaka

124

2. Procedure to insert new player (Reference: PracTest04).

```
mysql> DROP PROCEDURE IF EXISTS InsertNewPlayer;
  Query OK, 0 rows affected (0.00 sec)
 mysql> DELIMITER //
 mysql> CREATE PROCEDURE InsertNewPlayer(
                   > firstName VARCHAR(20), lastName VARCHAR(20), nationality VARCHAR(20), DOB
    DATE.
                      ,
> playerID VARCHAR(10), pnumber INT, age INT, position CHAR(2), teamID VARC
 HAR(10))
              -> COMMENT 'Insert info for new player'
-> BEGIN
                -> INSERT INTO Person(firstName, lastName, nationality, DOB)
              -> VALUES(firstName, lastName, nationality, DOB);
-> INSERT INTO Player(playerID, pnumber, age, position, firstName, lastName,
    nationality, teamID)
--> VALUES(playerID, pnumber, age, position, firstName, lastName, nationality
               -> END;
 Query OK, 0 rows affected (0.00 sec)
 mvsql> DELIMITER :
 mysql> CALL InsertNewPlayer('Lionel', 'Messi', 'Argentinan', '1987-06-24', 'ARG9
Pysql> CALL InsertNewPlayer('Harry', 'Trinh', 'Spanish', '2004-28-10', 'ESP'), '99', '99', '99', '99', '99', '99', '96', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60', '60',
99, 19, 'DF', 'ESP');

RROR 1292 (22007): Incorrect date value: '2004-28-10' for column 'DOB' at row 1 mysql> CALL InsertNewPlayer('Harry', 'Trinh', 'Spanish', '2004-10-28', 'ESP99', 99, 19, 'DF', 'ESP');

Query OK, 1 row affected (0.01 sec)
 mysql>
```

Create a trigger to check for duplication after calling procedure InsertNewPlayer()
 (Check for duplication of 'firstName', 'lastName' and 'DOB' in Person table) (Reference: Stack
 Overflow - https://stackoverflow.com/questions/37136254/mysql-trigger-for-checking-duplicate-record-in-table-before-insert).

```
mysql> DELIMITER //
mysql> CREATE TRIGGER InsertNewPlayerExHandling

>> BEFORE INSERT ON Person

>> BEGIN

>> ECREA EXERT ON Person HERE firstName = NEW.firstName and lastName = NEW.lastName and nationality = NEW.nationality and DOB = NEW.DOB) THEN

>> SIGNAL SQLSTATE VALUE '45000' SET MESSAGE_TEXT = 'Duplicate Person information';

>> END IF;

>> END IF;

>> END /,
Query OK, 0 rows affected (0.02 sec)

mysql> DELIMITER ;
mysql> CALL InsertNewPlayer('Aitana', 'Bonmati', 'Spanish', '1998-01-18', 'ESP06', 6, 25, 'MF', 'ESP');
ERROR 1305 (42000): PROCEDURE wwcData_21049044.InsertNewPlayer does not exist
mysql> DELIMITER //
mysql> CREATE PROCEDURE wwcData_21049044.InsertNewPlayer does not exist
mysql> DELIMITER //
mysql> CREATE PROCEDURE InsertNewPlayer(

-> firstName VARCHAR(20), punber INT, age INT, position CHAR(2), teamID VARCHAR(10))

-> COMMENT 'Insert info for new player'

-> BEGIN

-> INSERT INTO Person(firstName, lastName, nationality, DOB)

-> VALUES(firstName, lastName, nationality, DOB);

-> VALUES(firstName, lastName, nationality, DOB);

-> VALUES(firstName, lastName, nationality, DOB);

-> PROCEDURE (Aitana', 'Bonmati', 'Spanish', '1998-01-18', 'ESP06', 6, 25, 'MF', 'ESP');

-> //
QUERY OK, 0 rows affected (0.00 sec)
```

Part 5 – Connect database to a programming language.

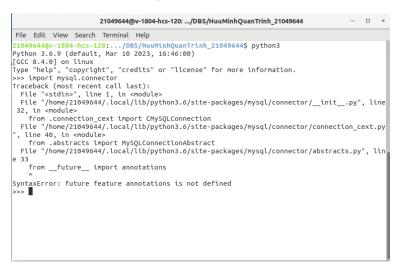
(Script: connectPy.py)

Part 6 – Discussion.

- Overall, the work has covered almost every aspect of the Assignment Specification, however there are still some unfinished parts and improvements to be considered.
- Regarding the designing process, it is the fact that data sources for women football is not as
 enormous as men's. Thus, there are some interesting attributes can not be implemented
 such as the odds before each match, expected goal index or player market value.
- Connect to a programming language: I have tried multiple solutions to get the final part done, however, none of those could produce any result.



For this VSCode, it always seems to have issue with the 'host' parameter. I have tried both '127.0.0.1' and 'localhost' but hardly there was a result.



Running on python3 console resulted in this error even though mysql-connector package is available. I have tried some advanced solutions such as 'grant privilege', it did not work either.