**HONOR CODE**

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or that I contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

(Electronic Signature)

1. Shreyash Shrivastava
2. Sansidh Kommaraju

# DATABASE PROJECT 2

# PHASE 1

***By – Shreyash Shrivastava (1010397477) AND Sansidh Kommaraju (1001472425)***

**CREATE TABLE (STATEMENTS)**

CREATE DATABASE WORLD\_CUP

USE WORLD\_CUP;

**CREATE TABLE TEAM** (

TEAMID CHAR(2) NOT NULL,

TEAM VARCHAR(20) NOT NULL,

CONTINENT VARCHAR(10) NOT NULL,

LEAGUE VARCHAR(10) NOT NULL,

POPULATION BIGINT(20),

PRIMARY KEY (TEAMID));

**CREATE TABLE STADIUM** (

SID CHAR(3) NOT NULL,

SNAME VARCHAR(25) NOT NULL,

SCITY VARCHAR(15) NOT NULL,

SCAPACITY INT NOT NULL,

PRIMARY KEY (SID));

**CREATE TABLE PLAYER** (

TEAM VARCHAR(15) NOT NULL,

TEAMID CHAR(2) NOT NULL,

PlayerID int NOT NULL,

Position char(2) NOT NULL,

FIFA\_Popular\_Name varchar(20) NOT NULL,

BirthDate char(10) NOT NULL,

Shirt\_Name varchar(15) NOT NULL,

Club varchar(25),

Height int NOT NULL,

Weight int NOT NULL,

PRIMARY KEY (PlayerID, TEAMID)

FOREIGN KEY (TEAMID) REFRENCES TEAM(TEAMID)

);

**CREATE TABLE GAME** (

GAMEID CHAR(3) NOT NULL,

MATCH\_TYPE CHAR NOT NULL,

MATCH\_DATE CHAR(9) NOT NULL,

SID CHAR(3) NOT NULL,

TEAMID1 CHAR(2) NOT NULL,

TEAMID2 CHAR(2) NOT NULL,

TEAM1SCCORE INT NOT NULL,

TEAM2SCORE INT NOT NULL,

PRIMARY KEY (GAMEID));

**CREATE TABLE GOALS** (

GAMEID CHAR(3) NOT NULL,

TEAMID CHAR(2) NOT NULL,

PlayerID INT NOT NULL,

TIME\_of\_goal INT NOT NULL,

Penalty BOOLEAN NOT NULL,

PRIMARY KEY (GAMEID, TIME\_of\_goal));

**CREATE TABLE SUBSTITUTIONS** (

GAMEID char(3) NOT NULL,

TEAMID char(2) NOT NULL,

Substitute\_player\_ID INT NOT NULL,

Position char(2) NOT NULL,

Replace\_player\_ID INT NOT NULL,

TIME\_of\_sub int NOT NULL,

PRIMARY KEY (GAMEID, TIME\_of\_sub,Substitute\_player\_ID));

**CREATE TABLE CARDS** (

GAMEID CHAR(3) NOT NULL,

TEAMID CHAR(2) NOT NULL,

PlayerID INT NOT NULL,

Color\_Card VARCHAR(6) NOT NULL,

Time\_of\_card INT NOT NULL,

PRIMARY KEY (GAMEID, Time\_of\_card,PlayerID));

**CREATE TABLE OWN\_GOALS** (

GAMEID CHAR(3) NOT NULL,

TEAMID CHAR(2) NOT NULL,

PlayerID INT NOT NULL,

Time\_of\_og INT NOT NULL,

FOR\_TEAMID CHAR(2) NOT NULL,

PRIMARY KEY (GAMEID, Time\_of\_og));

**CREATE TABLE STARTING\_LINEUP** (

GAMEID CHAR(3) NOT NULL,

TEAMID CHAR(2) NOT NULL,

PlayerID INT NOT NULL,

PRIMARY KEY (GAMEID, PlayerID,TEAMID));

**LOADING THE DATA (STATEMENTS)**

LOAD DATA INFILE 'world-cup-starting-lineups-text.txt' INTO TABLE starting\_lineup FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-substitutes-text.txt' INTO TABLE substitutions FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-goals-text.txt' INTO TABLE goals FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-matches-text.txt' INTO TABLE game FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-teams-text.txt' INTO TABLE team FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-rosters-text.txt' INTO TABLE PLAYER FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-own-goals-text.txt' INTO TABLE own\_goals FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-cards-text.txt' INTO TABLE CARDS FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

LOAD DATA INFILE 'world-cup-stadiums-text.txt' INTO TABLE STADIUM FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n';

**QUERIES**

1. SELECT TEAM, FIFA\_Popular\_Name, Height FROM PLAYER WHERE Height > 190 AND TEAMID IN (SELECT TEAMID FROM team WHERE CONTINENT = 'Africa') GROUP BY team ORDER BY HEIGHT

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Description automatically generated

1. SELECT TEAM1.TEAM, T1.TEAM1SCCORE, TEAM2.TEAM, T1.TEAM2SCORE  
   FROM (SELECT TEAMID1, TEAMID2, TEAM1SCCORE, TEAM2SCORE   
   FROM game   
   WHERE GAMEID in   
   (SELECT GAMEID   
   FROM game   
   WHERE TEAM1SCCORE>1 AND TEAM2SCORE>1 AND (MATCH\_TYPE ='A' OR MATCH\_TYPE = 'B')  
   )  
   ) as T1, TEAM as TEAM1, TEAM as TEAM2   
   WHERE T1.TEAMID1 = TEAM1.TEAMID AND T1.TEAMID2 = TEAM2.TEAMID

GROUP BY team T1.MATCH\_TYPE

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1. SELECT DISTINCT t1.TEAM, p1.FIFA\_Popular\_Name, p1.Height, p1.Weight  
   FROM (SELECT TEAMID, PlayerID  
   FROM Cards  
   WHERE Color\_Card = 'Red') as cards1, team as t1, player as p1  
   WHERE cards1.PlayerID = p1.PlayerID AND cards1.TEAMID = p1.TEAMID AND p1.TEAMID = t1.TEAMID

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Description automatically generated

1. SELECT t1.team, p1.Fifa\_Popular\_Name, c2.maxi  
   FROM (SELECT c1.PlayerID, c1.TEAMID,Max(c1.CNT) as maxi  
   FROM   
   (SELECT PlayerID, TEAMID,CONCAT(PlayerID,TEAMID) as UN, Color\_Card, COUNT(\*) as CNT  
   FROM cards  
   WHERE Color\_Card = 'Yellow'  
   GROUP BY UN) as c1) as c2, team as t1, player as p1  
   WHERE c2.TEAMId = t1.TEAMID AND c2.PlayerId = p1.PlayerID AND p1.TEAMID = t1.TEAMID

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Description automatically generated

1. SELECT t1.TEAM, o1.CNT  
   FROM(SELECT TEAMID, COUNT(\*) as CNT  
   FROM own\_goals   
   GROUP BY TEAMID  
   HAVING COUNT(\*) >1) as o1, team as t1  
   WHERE t1.TEAMID = o1.TEAMID;

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1. CREATE VIEW GAME\_INFO AS  
   SELECT MATCH\_TYPE, MATCH\_DATE, SNAME,SCITY,TEAM1.TEAM as t1, TEAM2.TEAM as t2, TEAM1SCCORE, TEAM2SCORE  
   FROM GAME, STADIUM, TEAM AS TEAM1, TEAM AS TEAM2  
   WHERE GAME.TEAMID1 = TEAM1.TEAMID AND GAME.TEAMID2 = TEAM2.TEAMID AND game.SID = stadium.SID

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1. The queries for the above view are:
2. SELECT \*

FROM game\_info

WHERE t1 = ‘France’ or t2 = ’France’

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1. SELECT \*

FROM game\_info

WHERE MATCH\_TYPE = ‘A’ or MATCH\_TYPE = ‘X’

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1. SELECT \*

FROM game\_info

WHERE TEAM1SCORE >2

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1. SELECT \*

FROM game\_info

WHERE SNAME like ‘%kazan%’

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1. SELECT FIFA\_Popular\_Name, t1.TEAM  
   FROM player, team as t1,(SELECT TEAMID, PlayerID  
   FROM cards  
   WHERE COLOR\_CARD = 'Yellow' ) as c1  
   WHERE c1.PlayerID = Player.PlayerID AND c1.TEAMID = t1.TEAMID AND t1.TEAMID= player.TEAMID

ORDER BY t1.TEAM

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ii. SELECT DISTINCT t.TEAM

FROM TEAM AS t,

(SELECT GAMEID, t1.TEAMID as id1, t2.TEAMID as id2

FROM game, TEAM AS t1, TEAM AS t2, (

SELECT SID FROM

STADIUM WHERE

SCITY = 'Sochi') AS s1

WHERE s1.SID = game.SID) AS g1

WHERE T.TEAMID = g1.id1 OR T.TEAMID = g1.id2

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iii. SELECT fin.PLAYER\_IN, fin.PLAYER\_OUT, fin.TIME\_OF\_SUBS, t.TEAM   
FROM   
 (SELECT p\_in.FIFA\_Popular\_Name as PLAYER\_IN, p\_out.FIFA\_Popular\_Name as PLAYER\_OUT, sub.TIME\_of\_sub as TIME\_OF\_SUBS, sub.TEAMID as TEAM\_, p\_in.TEAMID as P1ID, p\_out.TEAMID as P2ID  
 FROM player as p\_in, player as p\_out,   
 (SELECT Substitute\_player\_ID, Replace\_player\_ID, TIME\_of\_sub, TEAMID   
 FROM substitutions   
 TIME\_of\_sub < 30) as sub   
 WHERE sub.Substitute\_player\_ID = p\_in.PlayerID AND sub.Replace\_player\_ID = p\_out.PlayerID AND p\_in.TEAMID = p\_out.TEAMID) as fin, team as t   
WHERE t.TEAMID = fin.TEAM\_ AND t.TEAMID = fin.P1ID AND t.TEAMID = fin.P2ID

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