



CHAMPIONSHIP_TEAMS

Primary Key

- ID

Foreign Key(s)

- COACH_SSN

- o Pulls Coach Ssn from COACH table. Each team must have a single coach
- o On update, it cascades, as the coach for a team can change
- o Restricts deletion as there must be a coach
- ASSISTANT_COACH_SSN
- o Pulls assistant coach Ssn from ASSISTANT_COACH table. Can be null as a team may not have an assistant coach
- o On update, cascades as the assistant coach can change
- o On delete, cascades as there can be a team without assistant coaches

COACH

Primary Key

- Ssn

Foreign Key(s)

- None

PLAYERS

Primary Key

- Ssn

Foreign Key(s)

- CHAMPIONSHIP_TEAMS_ID

- o Each player must be a member of a championship team
- o On update, cascades as players can change teams
- o Restricts deletion, as we are assuming that players will not be removed from a team outright at this stage

Create and use schema if it does not already exist

CREATE SCHEMA IF NOT EXISTS Allstar_Team;

USE Allstar_Team;

Create table CHAMPIONSHIP_TEAM if it does not already exist

CREATE TABLE IF NOT EXISTS CHAMPIONSHIP_TEAM

(

SSN INT UNIQUE NOT NULL,

Name VARCHAR(45) NOT NULL,

Address VARCHAR(45) NOT NULL,

Birth_date DATE NOT NULL,

Years_uni INT DEFAULT 0 NOT NULL,

Years_total INT DEFAULT 0 NOT NULL,

Champ_wins INT DEFAULT 0 NOT NULL,

Semifinals INT DEFAULT 0 NOT NULL,

CONSTRAINT PK_COACH_SSN

PRIMARY KEY (SSN)

);

Create table ASSISTANT_COACH if it does not already exist

CREATE TABLE IF NOT EXISTS ASSISTANT_COACH

(

SSN INT UNIQUE NOT NULL,

Name VARCHAR(45) NOT NULL,

Address VARCHAR(45) NOT NULL,

Birth_date DATE NOT NULL,

University VARCHAR(45) NOT NULL,

Years_uni INT DEFAULT 0 NOT NULL,

Years_total INT DEFAULT 0 NOT NULL,

Specialization VARCHAR(45) NOT NULL,

CONSTRAINT PK_ASSISTANT_COACH_SSN

PRIMARY KEY (SSN)

);

Create table CHAMPIONSHIP_TEAM if it does not already exist

CREATE TABLE IF NOT EXISTS CHAMPIONSHIP_TEAM

(

ID INT UNIQUE NOT NULL,

Team_name VARCHAR(45) NOT NULL,

COACH_SSN INT UNIQUE NOT NULL,

ASSISTANT_COACH_SSN INT UNIQUE,

University VARCHAR(45) NOT NULL,

Team_rank INT UNIQUE NOT NULL,

Win INT DEFAULT 0 NOT NULL,

Lost INT DEFAULT 0 NOT NULL,

Tie INT DEFAULT 0 NOT NULL,

CONSTRAINT PK_TEAM_ID

PRIMARY KEY (ID),

CONSTRAINT FK_TEAM_COACH_SSN

FOREIGN KEY (COACH_SSN)

REFERENCES COACH (SSN)

ON UPDATE CASCADE,

CONSTRAINT FK_TEAM_ASSISTANT_COACH_SSN

FOREIGN KEY (ASSISTANT_COACH_SSN)

REFERENCES ASSISTANT_COACH (SSN)

ON DELETE CASCADE

ON UPDATE CASCADE

);

Create table PLAYERS if it does not already exist

CREATE TABLE IF NOT EXISTS PLAYERS

(

SSN INT UNIQUE NOT NULL,

CHAMPIONSHIP_TEAMS_ID INT UNIQUE NOT NULL,

Name VARCHAR(45) NOT NULL,

Address VARCHAR(45) NOT NULL,

Birth_date DATE NOT NULL,

Position VARCHAR(45) NOT NULL,

University VARCHAR(45) NOT NULL,

Years_team INT DEFAULT 0 NOT NULL,

Class VARCHAR(45) NOT NULL,

Time_allstar INT DEFAULT 0 NOT NULL,

Player_rank INT DEFAULT 0 NOT NULL,

CONSTRAINT CHK_Player_rank

CHECK (Player_rank BETWEEN 0 AND 100),

CONSTRAINT FK_PLAYERS_SSN

PRIMARY KEY (SSN),

CONSTRAINT FK_PLAYERS_TEAM_ID

FOREIGN KEY (CHAMPIONSHIP_TEAMS_ID)

REFERENCES CHAMPIONSHIP_TEAM (ID)

ON DELETE RESTRICT

ON UPDATE CASCADE

);

Create table ALLSTAR_GAME if it does not already exist

CREATE TABLE IF NOT EXISTS ALLSTAR_GAME

(

Date DATE NOT NULL,

Location VARCHAR(45) NOT NULL,

CHAMPIONSHIP_TEAMS_ID INT UNIQUE NOT NULL,

COACH_SSN INT UNIQUE NOT NULL,

ASSISTANT_COACH_SSN INT UNIQUE,

Score VARCHAR(10) DEFAULT 0 NOT NULL,

CONSTRAINT FK_GAME_Date_Location

PRIMARY KEY (Date, Location),

CONSTRAINT FK_GAME_TEAM_ID

FOREIGN KEY (CHAMPIONSHIP_TEAMS_ID)

REFERENCES CHAMPIONSHIP_TEAM (ID)

ON DELETE RESTRICT

ON UPDATE CASCADE,

CONSTRAINT FK_GAME_COACH_SSN

FOREIGN KEY (COACH_SSN)

REFERENCES COACH (SSN)

ON DELETE RESTRICT

ON UPDATE RESTRICT,

CONSTRAINT FK_GAME_ASSISTANT_COACH_SSN

FOREIGN KEY (ASSISTANT_COACH_SSN)

REFERENCES ASSISTANT_COACH (SSN)

ON DELETE RESTRICT

ON UPDATE RESTRICT

);

Create table ALLSTAR_NOMINEES if it does not already exist

CREATE TABLE IF NOT EXISTS ALLSTAR_NOMINEES

(

PLAYERS_SSN INT UNIQUE NOT NULL,

ALLSTAR_GAME_Date DATE NOT NULL,

ALLSTAR_GAME_Location VARCHAR(45) NOT NULL,

CONSTRAINT FK_NOMINEES_SSN_Game_Location

PRIMARY KEY (PLAYERS_SSN, ALLSTAR_GAME_Date, ALLSTAR_GAME_Location),

CONSTRAINT FK_NOMINEES_SSN_Game_Location

FOREIGN KEY (ALLSTAR_GAME_Date, ALLSTAR_GAME_Location)

REFERENCES ALLSTAR_GAME (Date, Location)

ON DELETE RESTRICT

ON UPDATE CASCADE,

CONSTRAINT FK_NOMINEES_PLAYERS_SSN

FOREIGN KEY (PLAYERS_SSN)

REFERENCES PLAYERS (SSN)

ON DELETE CASCADE

ON UPDATE RESTRICT

);

Drop statements for tables and schema

SET FOREIGN_KEY_CHECKS = 0;

DROP TABLE ALLSTAR_NOMINEES;

DROP TABLE ALLSTAR_GAME;

DROP TABLE ASSISTANT_COACH;

DROP TABLE COACH;

DROP TABLE CHAMPIONSHIP_TEAM;

DROP SCHEMA Allstar_Team;

SET FOREIGN_KEY_CHECKS = 1;