



```
CREATE TABLE Games (  
    HomeTeam VARCHAR(20),  
    AwayTeam VARCHAR(20),  
    Score_Home INTEGER,  
    Score_Away INTEGER,  
    SeasonWeek INTEGER,  
    Date DATE,  
    PRIMARY KEY (GameId)  
);
```

```
CREATE TABLE Rosters(  
    PlayerName VARCHAR(20),  
    Position VARCHAR(20),  
    TeamName VARCHAR(20),  
    PRIMARY KEY (PlayerId)  
);
```

```
CREATE TABLE PlayingIn(  
    PRIMARY KEY (PlayerId, GameId),  
    FOREIGN KEY (PlayerId) REFERENCES Rosters ON DELETE CASCADE,  
    FOREIGN KEY (GameId) REFERENCES Games ON DELETE CASCADE  
);
```

```
CREATE TABLE PlaysMade(  
    PlayType VARCHAR(20),  
    PlayerName VARCHAR(20),  
    PRIMARY KEY (PlayerId, PlayId),  
    FOREIGN KEY (PlayerId) REFERENCES Rosters ON DELETE CASCADE,  
    FOREIGN KEY (PlayId) REFERENCES PlayByPlay ON DELETE CASCADE  
);
```

```
CREATE TABLE PlayByPlay(  
    PRIMARY KEY (PlayId, GameId),  
    FOREIGN KEY (GameId) REFERENCES Games ON DELETE CASCADE,  
    HomeTeam VARCHAR(20),  
    AwayTeam VARCHAR(20),  
    PlayType VARCHAR(20),  
    Yards INTEGER,  
    Date DATE,  
    Quarter INTEGER,  
    QuarterTime VARCHAR(20),  
    Description VARCHAR(20),  
    Penalty INTEGER,  
    Touchdown INTEGER  
);
```

```
CREATE TABLE UserResult(  
    HomeTeam VARCHAR(20),  
    AwayTeam VARCHAR(20),  
    Date DATE,  
    Location VARCHAR(20),  
    HomeTeamPercentage REAL,  
    AwayTeamPercentage REAL,  
  
    PRIMARY KEY (ResultId,UserId),  
    FOREIGN KEY (UserId) REFERENCES UserInput ON DELETE CASCADE,  
);
```

```
CREATE TABLE UserInput(  
    Name VARCHAR(20),  
    OffenseDefense VARCHAR(20),  
    Penalties BOOLEAN,  
    BigPlay VARCHAR(20),  
    Hometown VARCHAR(20),  
    PassRun VARCHAR(20),  
    PRIMARY KEY (UserId),  
);
```

Rosters --- PlaysMade --- Play-by-Play:

- We believe each player in the roster will have made multiple plays

Play-by-Play --- PlaysMade --- Rosters:

- We believe each play will have been made by multiple players. For example, each play has an offense and a defense play

Play-by-Play --- Games:

- We believe there will be multiple plays that occur in a game

Games --> Play-by-Play:

- One game will have multiple plays

Rosters --- PlayingIn --- Games:

- There can be multiple players in multiple games

Games --- PlayingIn --- Rosters:

- Each game will have multiple players

User Input --- User Result:

- Each user input will create multiple results

User Result ---> User Input:

- Each result will have come from one user input