

# Mapping EER model to Relational Schema

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## Summary of EER Model

Entity Types:

- Players
- Teams → NFL Teams
- Games
- Stadium

Weak Entity Types:

- Dependents

N-M relations:

- PlayerGames
- PTG

*Note:* we use the same table for the parent/child entity types.

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## 1. Tables for Entity Types

**Players:**

- **attributes:**  
Pid INT primary key, Ph\_number int, Name varchar2, City varchar2, Salary REAL, Avg\_score1 REAL, Avg\_score2 REAL (*derived attributes*)
- **Foreign Keys:**  
Tid (*for PlayesFor relation*)

Players (Pid, Ph\_number, Name, City, Salary, Avg\_score1, Avg\_score2, Ti

**Teams:**

- **attributes:**  
Tid INT primary key, Name varchar2, City varchar2, Avg\_score3 REAL (*derived attribute*)  
Manager varchar2
- **Foreign keys:**

Teams (Tid, Name, City, Avg\_score3, Manager)

## Stadium:

- **attributes:**  
Sid INT primary key, City varchar2
- **Foreign keys:**  
Tid NOT NULL (*reference to Teams table*)

Stadium (Sid, City, Tid)

## Games:

- **attributes:**  
Gid INT primary key, G\_Name varchar2, Score INT
- **Foreign keys:**  
Sid INT (*reference to Stadium table*)  
Tid1 INT, Tid2 int (*reference to Teams table*)

Games (Gid, G\_Name, Score, Sid, Tid1, Tid2)

## Dependents:

- **Primary key:** (Pid, Dep\_name)

Dependents (Pid, Dep\_name)

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## 2. Tables for Multiple-valued Attributes

### Contracts:

- **Primary key:** (Pid, Phone\_number)

Contracts (Pid, Phone\_number)

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## 3. Tables for Relations

### PlayerGames:

- **Primary Keys:** (Pid, Gid)  
*Pid and Gid reference to Players and Games tables, respectively*
- **Attributes:**

PGscore INT

PlayerGames (Pid, Gid, PGscore)

### **PTG:**

- **Primary Keys:** (Pid, Tid, Gid)

- **Attributes:**

Score INT

PTG (Pid, Tid, Gid, Score)