

Relational Schema

Entities: Person, Position, Player, Stat, Team, Conference, Division, Coach, Season

- ❖ Stat(StatID, GP, FG%, GS, FT, BLK, PTS, TO, AST, STL, REB, PF, PlayerID)
- ❖ Player(PlayerID, FirstName, LastName, DOB, StatID)
- ❖ Player_College(PlayerID, College)
- ❖ Plays(PlayID, PlayerID, PositionID, Weight, Height)
- ❖ Position(PositionID, Title, PlayID, PlayerID)
- ❖ Team(TeamID, TeamName, ArenaLocation, ArenaName, PlayerID)
- ❖ Coach(CoachID, FirstName, LastName, StartYear, TeamID)
- ❖ Person(PersonID, Name, DOB, CoachID, PlayerID)
- ❖ Conference(ConfID, ConfName, TeamID)
- ❖ Division(DivID, DivName, ConfID)
- ❖ Compete(CompeteID, Win, Loss, TeamID, SeasonID)
- ❖ Season(SeasonID, RegGames, EndDate, Year, StartDate, PlayoffGames)

Logical Design Business Rules

- Every Stat is assigned to **one and only one** player, and each Player can have **zero or more** assigned Stats
- Every Player plays **one or more** positions, and every Position is played by **one or more** Player
- Every Player belongs to **one and only one** Team, but each Team belongs to **zero or more** Players
- Each Player represent **one and only one** Person, but each Person represents **zero or one** Player
- Each Person represents **one and only one** Coach, but each Coach represents **zero or one** Person
- Every Coach coaches **one and only one** Team, but every Team can be coached by **one or more** Coaches
- Every Team compete in **one or more** Seasons, and each Season has **multiple** Teams competing
- Every Team participate **one and only one** Conference, and each Conference can have **zero or more** participating Teams
- Each Conference contains **one or more** Divisions, but each Divions contains **one and only one** Conference
- Each Plays relationship connects **many** Player to **many** Position
- Each Compete relationship connects **many** Teams to **many** Seasons