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Assignment 3

The first table to touch on is the Coaches table. This table will mainly be used as a method of tracking what coach in in charge of what players. The Coaches table will have Coach ID, Coach first name, Coach last name, date of birth and then a player ID. The primary key is Coach ID as it will be unique. The foreign key in this table is the Player ID as players will be assigned to a coach. This table has a relationship with the Player table. The relationship is many to one, this is because the coaches will be assigned many players, but a player will only have one coach assignment.

The next table in the database is the Player table. This table will include a lot of information about the player themselves. The table will include the player’s name, date of birth, contact information and address. The table will also have the players parent’s names and contact information as well as if the player has any siblings. The player’s high school and AAU coaches names and contact information will be a part of this table as well to make sure we can contact those that have worked with the player. The player’s high school and address will be tracked as well. As players are found, the table will track where and when the player was located. More personal information will be in the table as well, like the players living situation if they come from a split family, the coaches know who they live with. The player tables have the most relationships, but first the primary key is PlayerID. The foreign keys are PlayerStatsID, CoachID, TeamID, RecruitingClassID, and AcadID. The first relationship is the Player table to Coach table, as in the last paragraph it is a many to one, as coaches will have many players, but a player will only have one coach. The next relationship is the Player table to Player Stats table, and this relationship will be many to one. This is because the Player stats table will have many players, but the players will only have one line of stats. The Team table and Player table will also be many to one. The team will have many players, but the players will only be assigned to one team. The Academic table and Player table has a many to one relationship as the players will only be assigned to one line for academics, but the academic table will have many players. The Recruiting class table and Player tables will have a many to one relationship since each recruiting class will have many players, but a player will only be a part of one recruiting class. The Player table has one more connection to the notes table, but it is done with a bridge table. This is because the relationship was many to many as a player can have many notes. I created a Player Notes table as a bridge table and it is connected to the Notes table. This allows the relationship from the Player table to the Player Notes table to be a many to one.

The next table in the database is the Academics table. This table will be tracking the players academics. The attributes in this table are the players academic ID, the players GPA, their academic interests, the Players ID, and then if we have their transcript or not. The primary key in this table is the academic ID. The foreign key is the connection to the Player table, and it is the PlayerID. The connection between these 2 tables is many to one. The player will only have one line of academics and the academic table will have many players.

The 4th table in my database is the Player stats table. This table oversees tracking the stats that coaches may find on players from the prior year. The attributes in the table are the player stats ID, the position of the player, the prior year’s points per game (PPG), the prior year’s assists per game (APG), the prior year’s steals per game (SPG), and blocks per game (BPG). It will also be able to track last years shooting percentage, free throw percentage and 3-point shooting percentage. The primary key in this table is the PlayerStatsID, and the foreign key is the PlayerID. There is only one connecting table and that is to the Player table. The relationship is a one to many as the stats will have many players, but the players will only have one line of stats.

The 5th table in the database is the recruiting class table. This table allows the database to track the player by what year they will be attending college. The attributes in this table are the classID, PlayerID, and the RecruitYear. The year is just tracking when the player would be going to college. The primary key in this table is the ClassID, and the foreign key is PlayerID. The relationships that this table has is a many to one relationship with the player table. This is because the players will only belong to one recruiting class, and the recruiting class will have many players.

The last table in this database is the Notes table. The notes table attributes are the NotesID, coachComments, VisitType to tell if it was in person or online (zoom), VisitComments to talk about how the visit went, the ContactNotes for phone calls, EventNotes to talk about how the player was at different events, ContactDate for showing when the player was last contacted, and ContactType to show the player was contacted by phone, email, text, or mail. This table has a primary key that is NotesID. There is not a foreign key as there is a bridge table that connects the Notes table and the Player table. The table is connected to the bridge table in a one-to-many relationship. The many is on the PlayerNotes bridge table and the one is on the Notes table. The bridge table, PlayerNotes, is connected to the player table in a one-to-many relationship as well with the many pointing at the PlayerNotes bridge table. The original relationship was a many to many between the Player table and Notes table but that was fixed with the bridge table.