Database Project Assignment 3: Entity Relationship Diagram & Documentation

Create an ERD for your database.

* Use a computer software, such as lucid chart or MS Visio
* Identify any foreign keys
* Identify primary keys
* Describe relationships between your tables using crows foot notation.

For each **table** in your ERD, you should have a paragraph explaining:

* What data is in this table?
* What attributes are included?
* Are there any foreign keys?
* What is the primary key?
* What table(s) does this table have a relationship with?
* What is the relationship between the tables, and why is it that?

Upload your assignment as a PDF to Moodle and Github. Show your ERD and explain the business logic on Flipgrid.

* What data is in this table?
* What attributes are included?
* Are there any foreign keys?
* What is the primary key?
* What table(s) does this table have a relationship with?
* What is the relationship between the tables, and why is it that?

Team table-

Team table is the centerpiece to the data base. Team is the first table the user will interact with as the user must select which year of the Eagles the user wants. From this table it holds within TmOffense, TmDefense, and TmSpecial which allows the user to optionally go from this table onto the next. This table is stacked with 3 foreign keys, TmOffense, TmDefense, and TmSpecial. The primary key is TeamYR. This Table has a relationship with every table besides playerpool as player pool is specifically designed for Leaders and has no impact to Team. Team impacts Offense, Defense, and special teams as all attributes of those tables depend on which year of the Eagles is selected. Team impacts Leaders table as well as just like offense, defense, and special teams, leaders of specific team stats change from year to year. Year’s relationship with offense is one optional to one mandatory due to offense be an option to see, but offense needs teamyr to be seen. Year’s relationship with defense is one optional to one mandatory due to defense be an option to see, but offense needs teamyr to be seen. Year’s relationship with special team is one optional to one mandatory due to offense be an option to see, but special team needs teamyr to be seen. Team is many optional to leaders with one mandatory due to there being many leaders in one team year.

Leaders table-

Leaders consists of TmLeaders, PlayerID, Stats, and TeamYR. Leaders will be individual players that lead in a specific stat in the team. Primary key Is TmLeaders, with two foreign keys being PlayerID and TeamYR. Leaders has a main relationship with playerpool as it needs players to be able to have leaders for the team. Leaders needs Team to grab which year it needs to show leaders for. Leaders has an one mandatory towards team as it only needs one team season to get the information it needs while team towards leaders has many optional as there are many leaders on a team, but only optional to see them.

PlayerPool-

Playerpool has playerID, PFname, PLname, and position. PlayerPool is a table for players of the team. Playerpool’s primary key is PlayerID with no foreign keys. Playerpool has only one relationship unlike all the other tables in this data base. The reason playerpool is so disentangled with the others is I made it only relevant to one table to declutter the attachments to Team. Playerpool has a one optional relationship to leaders and leaders has many mandatory relationship to playerpool as leaders has many players but can be just one leader shown.

Offense-

Offense is the team’s offensive stats. Offense has TmOffense, PassingYDs, PassingTDs, INTs, Sacked, TeamYR. Primary Key is TmOffense, while foreign key is TeamYR. Offense main relationship is to Team. Team decides what offensive stats to show as if the year changes so does the offense. This means Offense has a one mandatory relationship towards team and team has one optional to offense. User has a choice to see offense or not.

Defense

Defense is the team’s defensive stats. Defense has TmDefense, PassDef, RushDef, DINTs, Sacks, DefTDs, TeamYR. Primary Key is TmDefense, while foreign key is TeamYR. Defense main relationship is to Team. Team decides what Defensive stats to show as if the year changes so does the Defense. This means Defense has a one mandatory relationship towards team and team has one optional to offense. User has a choice to see Defense or not.

Special Teams-

Special Teams is the team’s special team stats. Special teams are a bit of an obscure stat in the NFL, but a key one to note for teams. Users will most definitely be interested in in how the specials teams has been doing as it is an important part of a team’s success. Special Teams has TmSpecial, FGM, FG%, XPM, XPpct, TeamYR. Primary Key is TmSpecial, while foreign key is TeamYR. Special Teams main relationship is to Team. Team decides what Special Team stats to show as if the year changes so does the Special teams. This means Special temas has a one mandatory relationship towards team and team has one optional to special teams. User has a choice to see special teams or not.

![Diagram

Description automatically generated]()