Data Analytics Final Project Dashboard

Project: NFL Team Predict Model

Selected topic and reasoning

We chose the topic of football win totals based on previous season historical data. We chose this to see if we could use multiple linear regression analysis that is close to the predicted win O/U win totals presented by Vegas casinos before the start of the regular NFL season.

Sources

We will be collecting historical team data as well as betting data from the previous season and uploading into an excel file and creating SQL database tables. in these tables will be based on the previous season win totals, head coach return, total offensive ranking, total defensive ranking, Team QBR rating, OC remains, and DC remains

Questions we hope to answer

We hope to answer the question of what goes into the over/under totals that are given to teams. We want to know what the most important factor on if a team can be good or if a bad over under total can spark a team to a better record then was projected. and most importantly do these metrics lead to a team being over the projected total.

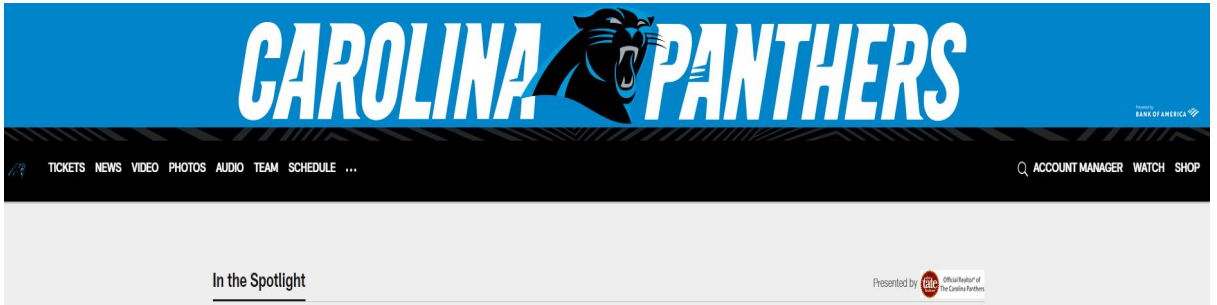
Data Exploration

We found the Data on ProFootball Reference, NFL.com and individual Team websites.

From ProFootball Reference we obtained offensive rating, defensive rating and QBR

From NFL.com we found divisions and seasonal records for wins and losses

Team websites gave us the Staffing information, such as head coach



Analysis Phase

We used the machine learning method multiple linear regression

We collected seasonal data for each NFL Team

Each season win total we placed into a column as our Y value of our prediction

We created the tables with Postgres SQL using joins to make on large dataset

Using Python and Jupyter Notebook we input all the important columns into dataframes

We merged each data frame on Team name to make sure all the data matched up

Technologies

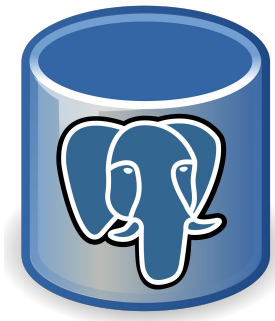
Python

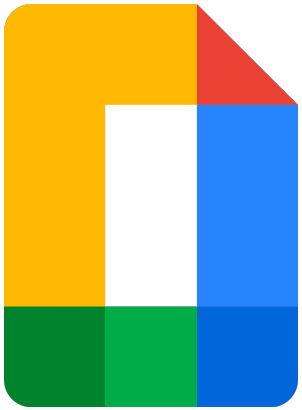
Jupyter Notebook

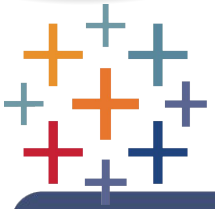
Postgres SQL

Google Slides

Tableu







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