Project Proposal – Group 1

One-Stop Dashboard for NFL

Football Sports Teams and Player Statistics

Team Members

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Project Description

Football is one of the most populous sports in the world with a large viewing globally. The sport is also known to provide financial rewards for good predictors. Thus, there is a growing need for a platform that could cater for the needs of bettors, analysts and fans. This proposal outlines the development of a dashboard for NFL - National Football League 2022 teams and players stats.

Target Audience

The intended target audience who will benefit from this project are:

- Sport Enthusiasts looking for more information about the teams and players

- Individuals reviewing statistics and analysis of the sport for curiosity or betting purposes

Data Sources

- Pro Football Reference (https://www.pro-football-reference.com/)

- Covers (https://www.covers.com/nfl)

- SportsReference API (https://www.sports-reference.com/)

- ESPN GitHub (https://gist.github.com/akeaswaran/b48b02f1c94f873c6655e7129910fc3b#nfl)

Type of Data Visualizations

- TEAMS - Graphs with game results, stats with scores and number of matches.

- PLAYERS - Players historic data, biographic data, and season achievements.
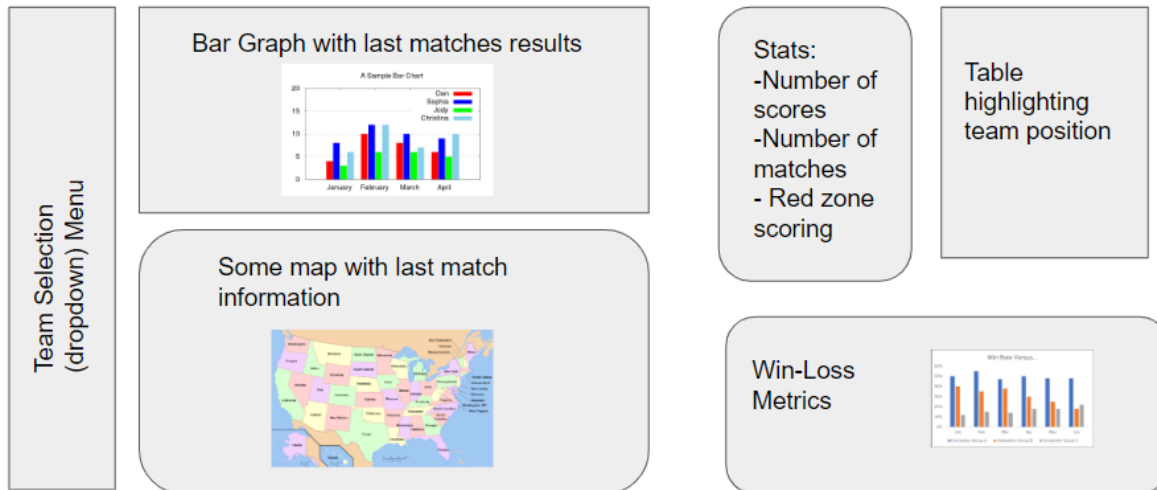
Platforms Used:

The following platforms will be used for ETL and creating the dashboard:

- Python (Pandas Dataframe) for ETL

- Python Flask API and JavaScript for presentation and visualizations

- MongoDB for database

Napkin Drawings:

Following are some napkin drawings we created to give an idea about what the dashboards will look like:

Teams Dashboard

Team Selection (dropdown) Menu

Bar Graph with last matches results

Some map with last match information

Stats:
-Number of scores
-Number of matches
- Red zone scoring

Table highlighting team position

Win-Loss Metrics

Players Dashboard

Player Selection (dropdown) Menu

Players info:
-Age
-Role
-Total career goals
-Highest score on a match
-Background
-Nationality
-Height
-Weight
-Transfer History

Stats in current team:
-Number of scores
-Number of matches

- Rushing/ receiving yards
- No. of red cards
- No. of yellow cards
- No. of assists