## **MEMORANDUM**

To: Professor Kumar

From: John Nisbet, Marcos Cisneros

Due Date: March 8th, 2024

Re: Data Representation of NFL 2022 Season Games and Outcomes

The project will consist of a program that will reveal how a team's season in the 2022 NFL season played out. This will be revealed based on the ELO ratings of the team and their starting quarterback. This data will be portrayed through bar charts and line plots.

Table 1 reveals information and specific aspects of the proposed program and data set, which will include details on the data set and questions that can be answered by the program.

Table 1. Dataset Information and Current Program Design Plans

Field	Information				
-	2022 NFL season ELO ratings of teams and their quarterbacks along with the quality,				
Data	importance, and overall rating of the games they played.				
Citation or Link	<u>Link</u>				
to Data Set					
	285 rows				
No. of Columns					
Potential Users	Users that are interested to see how each game (before and after) turned out for the 2022 NFL season based on a team and their team and quarterback ELO ratings				
Question #1	Question: How did a team/QB's 2022 season go based on their ELO rating?				
	Visualization: A graph plotting both team's ELO and QB's ELO, a chart containing a team's season listing wins/losses				
	User Interaction: Selecting a team or quarterback to look at. Select whether to display the team, QB or both				
Question #2	Question: What were the 10 highest-quality games in the 2022 season?				
	Visualization: A bar chart displaying the game's quality, a list of the top 10 highest-quality games.				
	User Interaction: Select whether or not to look at the regular season, playoff, or both				
Question #3	Question: How did two teams/quarterbacks play against each other?				
	Visualization: Images with both teams' logos and quarterbacks, display data on the game (Date, Type, ELO Changes, etc.)				
	User Interaction: Select two teams/QBs to compare				
Question #4	Question: How does average total score and average game quality change per week?				
	Visualization: A graph plotting the average total score and average game quality per week				
	User Interaction: Select to plot data from the regular season, playoffs, or both. Select to plot data for a specific team, division, conference, or all teams.				