Fall 2022 INFO-233 Group Project – Phase I – Project Definition

Project Name: NFL Sports Analyst

Team Name: Fantastic Four

1.      Define the problem you are trying to solve.

A quick and effortless way to find all information pertaining to an NFL team and its players. Having access to an easy-to-read application with all player and team data that you can utilize for the creation of fantasy NFL teams or for betting. This will allow us to see the teams wins/losses, the win rate percentage, and player career stats.

2.      How does your program help to solve the problem?

Instead of searching through browsers to find your NFL team's information, you can input a team's name to receive their stats which reduces the amount of time you spend searching. Inputting the team to receive the NFL team roster. You can input a player name to receive career data pertaining to this player and their associated team. Also, if you have a favorite NFL team you can easily access their stats throughout the years.

3.      Who will be the users of this program? Detail at least two Use Cases

a.      Use Case idea 1: Seeing all data pertaining to NFL Team/Teams selected to determine betting strategies if so desired

b.      Use Case idea 2: Seeing specific NFL player stats so the user can decide on whether to add them to their fantasy NFL team.

4.      What technology is available to solve the problem? Identify the specific APIs and Modules to be used for the program.

API-Sports will allow information such as win/loss and win rate percentage. Sportsreferance module for player stats.

API = <https://rapidapi.com/DathanStoneDev/api/nfl-team-stats/>

Module = <https://pypi.org/project/sportsreference/#get-a-specific-nfl-team-s-season-information>

API Key = 1e2e9e3fabmshd5d95ad5f5d0235p18ce1ejsne741590d0bb0

5.      Detail the sequence of the program- What is the flow of the program? How does a user use the program?

User input denotes what information they want from API, and player name for stats. Two methods that receive user input for NFL players or teams and collect data from API depending on what user wants, returns variables to main.(could just use one but having two would make it easier to run). Main collects variables returned and printed them to the user. Add error protection the same way we did with the API homework extra credit.