**Members**

* Bryan Pham
* JaeEun Lee
* David Gigremosa

**Overview**

In this project, we propose to make a program that compares the salaries of players from the three most popular sports for adults in America - football, basketball, and baseball (Norman, 2018).

**Scope**

We will compare the salaries of professional players from football, basketball and baseball. The sources we for data are:

1. <https://www.pro-football-reference.com/players/salary.htm> for NFL players
2. <https://hoopshype.com/salaries/players/> for NBA players
3. <https://www.usatoday.com/sports/mlb/salaries/> for MLB players.

The features of our program are:

1. First display a bar chart that shows the top 10 highest earning salaries for all players in the NFL, NBA and MLB.
2. Multiple five number summaries describe our data.

Summaries for:

NBA players

NFL players

MLB players

Everyone

1. Allow the user to search for multiple players and see how their salaries and show their salary percentile.
2. Make a barchart using pandas and matplotlib that displays salary information on the players that the user has searched for and clear out the initial barchart.

For time saving purposes, we will only be using active players from the NFL, NBA, and MLB. In addition, we will not be displaying the team for each player because one of our NBA data sources does not provide a team name for each person. We will be only using the current year data and we will only use data from professional football players.

**Project breakdown and division of labor**

For displaying the barcharts we will be using pandas and matplotlib. We will also be using NumPy or pandas to help us calculate the values in the five-number summary.

Bryan - Display the bar charts and implement the search functionality.

JaeEun - Sorting data by the amount of wage and their name.

David - Calculating five-number summaries and salary percentiles

**Meetings and Communications**

* Utilize WebEx on days where some people may or may not be on campus at the same time
* Physical meetings at McKeldin, Hornbake, etc. after around 5:00 PM when everyone is finished with classes

**Schedule and Milestones**

Milestone 1 (November 8):

* Display the initial bar chart that displays the 10 highest earning players.
* Implement the search functionality to allow

Milestone 2 (November 15):

* Implement the five number summary
* Implement percentile calculations for every player that user searches for

Milestone 3 (November 26):

* Implement bar chart for every player searched

Milestone 4(Dec 1):

* Finish unit testing of project and see if there are any bugs to be fixed
* Prepare for final presentation

**Bibliography**

Norman, J. (2018, January 4). Football Still Americans' Favorite Sport to Watch. Retrieved October 25, 2019, from <https://news.gallup.com/poll/224864/football-americans-favorite-sport-watch.aspx>.