Shiny Proposal Template

Group name: 3Lattes

Title: US Sports Statistics in 2019

Purpose

We want to explore the statistics of Basketball (NBA), Baseball (NBL) and Football (NFL) players during 2019. The question we hope to address is finding the relationship between general in-game statistics (e.g average free throw success, assists, etc) and Win% or Salary. However, we want to make the relationships between the statistics open to explore.

Data

Data sources:

- Basketball Game per Data Set (https://www.basketball-reference.com/leagues/NBA__2020__per__game. html#per__game__stats)
- Football Stats (https://www.pro-football-reference.com/years/2019/scrimmage.htm#receiving__and__r ushing) The following datasets is included in the Lehman package, so we will be accessing the data from there.
- Baseball Fielding Stats (https://www.baseball-reference.com/leagues/majors/2019-standard-fielding.shtml#players_players_standard_fielding_fielding)
- Baseball Batting Stats (https://www.baseball-reference.com/leagues/majors/2019-standard-batting.shtml#players_standard_batting)
- Baseball Pitching Stats (https://www.baseball-reference.com/leagues/majors/2019-standard-pitching.shtml#players_standard_pitching)

We expect some challenges in data wrangling such as joining the Baseball datasets and accounting for multiple observations for the same player.

Shiny app

We will have 3 tabs that output a scatterplot for a specific sport. On the left side, we will have 3 widgets: one to select the x-axis variable, another to select the y-axis variable, and a search bar to select a player and highlight them on the scatterplot. We will add an interactive component of being able to hover over a point and see a player's information (name, age, team, etc).
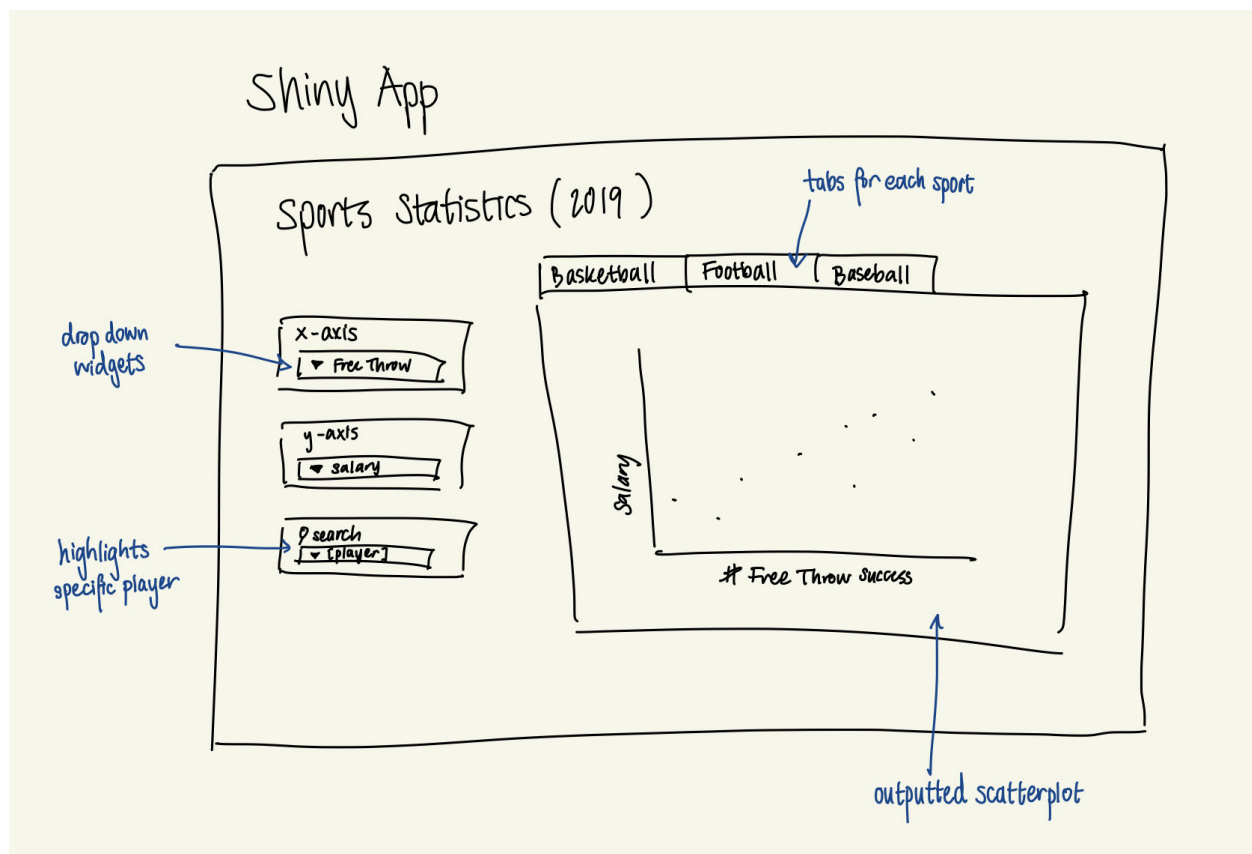
Figure 1: Shiny App Visual