**Summary**

Baseball has long been considered America’s national pastime. The visualizations below show various metrics and the characteristics necessary to be a top 10 baseball player.

**Design**

I started with a data set containing 1,157 baseball players including their handedness (right or left handed), height (in inches), weight (in pounds), batting average, and home runs. I started out the project by listing all the baseball players in order by batting average (highest to lowest). This in turn showed me which players were ranked in the top 10. I created multiple graphs to see how the various variables interacted with one another. What I noticed right away is that most of the players in the Top 10 were either left handed or right handed. There was only one player (Pete Rose) who batted both ways.

I next looked at how BMI influenced Home Runs and Batting Average. As it relates to Home Runs a BMI of 25 resulted in the most at 15629. The next graph I created shows BMI vs Batting Average broken down by handedness. I learned from this graph that a higher BMI results in higher batting averages across all handedness. The surprising thing is “right” and “both” handed players also see increased batting averages at the lower BMI ranges as well; BMI 19 for right handed and 20 BMI for both handed.

**Feedback**

I sent my data to 2 people and asked for feedback. Please see their comments below:

**Feedback #1:**

1. In the first horizontal bar chart… Even though last 2 payers have two best/highest batting avg, why they are appearing at the bottom of the list? Can I have a filter to choose top n players where n can be a parameter user can enter?
2. In the 2nd chart-looks better compared to 1st chart as the Scale of the chart is adjusted. Why the last 2 players of 1st chart are missing here?
3. In the 3rd chart-BMI(bin)=29 shows a spike on Avg HR and only present on right-handed bucket. Is it an outlier? May be number of player of each BMI(bin) could tell a better story. It is surprising to see none right-handed in 30 bin and none left-handed in 29 bin. Can we create a combined version too, which will be displayed only when more than one check-boxes are selected?
4. In the 4th chart-Does the circle size signify anything? So, what the conclusion? Is it increase the BMI in order to score more? 😊 Does Tableau provide functionality to attach comment or can it generate automated conclusion or help anyway to write a conclusion?

**Feedback #2:**

1. In the first chart, was there any sort criteria used on the first graph?
2. In the second graph, since it doesn’t say much about the L/R handed player; it does seem to say something about the dual dexterous players and their batting average.
3. On the third chart, what appears to be the idea BMI regardless of which hand a player utilizes if you take out the outliers?

**Post Feedback Changes**

After receiving the feedback, I made the following changes:

1. For the 1st horizontal chart I had 2 players who had the same name. Since in both instances one was right handed, and its counterpart was left handed, I created a calculated field that concatenated the name and handedness. This solved this issue. I also added a “Top 10 Batting Avg” filter that shows only the top 10 if “true” is selected.
2. For the 2nd chart the reviewer noticed it was different from the first chart. To fix this I brought in all the records and added the “Top 10 Batting Avg” filter.
3. In the 3rd chart I went in a different direction and showed BMI vs HERs across the entire population. I then showed the batting avg by BMI and handedness. I also added a line graph to the chart that shows number of player in each bin.
4. With the 4th chart I added a chart that shows Batting Avg vs Avg Hr by handedness. I included the trend line to show the rate of increase across each handedness.
5. Because my conclusion wasn’t clear I added a 5th side that clears up the story. I also homed in on “Top 10” by adding “Batting Avg Category”. This shows the data that answers the question “What does it take to be one of the 10 best baseball players of all time?”

**Resources**

<https://public.tableau.com/en-us/s/resources>

<https://www.tableau.com/sites/default/files/media/which_chart_v6_final_0.pdf>

**Online Project Location**

First draft

<https://public.tableau.com/profile/teresa.upshaw1294#!/vizhome/TeresaUpshawNanodegreeProjectv1/Story1?publish=yes>

Final

<https://public.tableau.com/profile/teresa.upshaw1294#!/vizhome/TeresaUpshawNanodegreeProjectfinal/HowtobecomeaTop10BaseballPlayer?publish=yes>