First version:

https://public.tableau.com/profile/brenda4254#!/vizhome/project8_5/Story1?publish=yes

Final version:

https://public.tableau.com/profile/brenda4254#!/vizhome/project8-final/Story1?publish=yes

Summary

The data has 1157 baseball players' information. including their handedness (right or left handed), height (in inches), weight (in pounds), batting average, and home runs.

Using Tableau to create a visualization that shows differences among the performance of the baseball players, we find out some relative attributions for good performance player.

Design

1.First point out whether the top performance players in batting average and home runs are the same players. We want to have a list of top players' name in batting average and home runs.

Use bar plot can show name of players, their batting average and home runs value. And order the values can show the list of top players in each performance. Using hover tool to add interactivity to project, this will help reader get to know more details.

Changes in final version:

Change R, L, and B. to their full-word counterparts.

Change to use full-words instead of abbreviations like HR and avg. in hover tool.

In the story page1, same color is used in two plot . It's easy to make confuse at first glance. So change the 'Top 20 Home Runs' plot in to green, made it different from the other batting average plot. And we will use same color in the next steps to distinguish home runs and batting average plot.

2.Using scatter point plot to collect every player's information to check the relationship between batting average and home runs. The relationship of average batting and home run close to logarithmic. The good home run player also have good average batting performance.

The scatter plot has an advantage of showing details of each player. Choose weight and height as filters can lead reader thinking about the influence of player's figure and handedness on their performance. Those factor are explored in the next steps.

Changes in final version:

Filters give the reader the power to control for one or more variable while exploring the relationship between the variables plotted in the chart. So we add three filters to

show how the player's weight, height and handedness influence on the batting average and home runs.

3.Using bar plot to explore which kind of figure can make the player have good performance.

Bar plot divided the continuous height and weight value into bins, and this is helpful to point out the players performance in each bin.

Coloring the bar to show the average batting and home runs low value and high value. This coloring way can help reader directly to understand which figure range are the good players always in.

Lighter weight and shorter height player more easily to act better in average batting. While the medium weight and height player more likely to be a good home runner.

Changes in final version:

In the story page3, change the relative home runs plot also into green as it in story page1. Same color will help reader to quickly know the plots are discuss same parameter-- home runs or batting average.

4. Chose histogram and box plot show the handedness for all players.

Histogram plot can help reader to notice the tallest bar at first glance, but it only provide the average value of each handedness group. So we also plot the box plot can give more details to compare. For example, median, mean, max, min, etc.

And we find the left-handed have a slightly good performance in average batting and home run than both-handed and right-handed.

Changes in final version:

Change the color of home run into green.

5.Create two sets, one set for top 20 batting average player , the other set for top 20 home run players. We want to know the which handedness has advantage in the top players.

Analyze the top players in both batting average and home run. Left- handed occupied the highest percentage in the top 20 batting player. While, in the top 20 home run players, the right-handed occupied 65%, much higher than the other two kinds.

So we choose histogram plot, which can help reader to notice the tallest bar at first glance.

Changes in final version:

Change the color of home run into green. The order of handedness 'R,L,B' changed into the same sequence as previous pages 'B,L,R'.

Feedback

1. Change 'Left hander, right hander' to 'Left-handed players, right-handed players' in the description.

2. In the story page1, same color chose in two plot easy to make confuse at first glance. Change the 'Top 20 Home Runs' plot in to green.

3. In the story page3, the plot 'Distribution of Players' Weight and Height by Home Runs' better to choose the similar color with the page1 'Top 20 Home Runs', this will helpful for read.

4. In the story page4, the color of home run should be same to previous pages as changing into green.

5.The order of handedness 'R,L,B' should be change into the same sequence as previous pages 'B,L,R'.

6. Abbreviations facilitate data analysis and storage but in this last stage of the data analysis workflow, when we report the results of the analysis, it's best practice to avoid the ambiguity and obscurity of abbreviations. Not all reader will be familiar with the abbreviations in this dataset, so it's best to change R, L, and B. to their full-word counterparts.

7. Using abbreviations like HR and avg. in hover tool not easy to read

Resources:

https://docs.google.com/document/d/1w7KhqotVi5eoKE3I_AZHbsxdr-NmcWsLTIiZrpxWx4w/pub?embedded=true

https://onlinehelp.tableau.com/current/pro/desktop/en-us/trendlines_add.htm

https://onlinehelp.tableau.com/current/pro/desktop/en-us/reference_lines.htm

https://onlinehelp.tableau.com/current/pro/desktop/en-us/viewparts_marks_markproperties_color.htm

https://community.tableau.com/thread/218960

https://review.udacity.com/#!/reviews/1666705