**Tableau Project Write-up**

**Links to Tableau Public Workbooks:**

Version 1:

<https://public.tableau.com/profile/veena.hanumanthgari#!/vizhome/MyTableauProject_1/Dashboard2?publish=yes>

Version 2:

<https://public.tableau.com/profile/veena.hanumanthgari#!/vizhome/UdacityTableauProject_5/Dashboard3?publish=yes>

Final Version:

<https://public.tableau.com/profile/veena.hanumanthgari#!/vizhome/UdacityTableauProject_5/Story1?publish=yes>

**Summary:**

Have you ever wondered if a person’s level of physical fitness can affect his/her performance in a game? Although there might be other factors that influence a player’s scores, like experience on the field, amount of practice and level of dedication and interest in the game, it is interesting to analyze if the physical aspects like height and weight of a person affect a baseball player’s batting average and number of home runs scored.

Based on the available data in the dataset, this project analyses to verify if the correlation between Body Mass Index(BMI) of a player and both batting average and number of home runs scored (using scatterplots and histograms).

BMI = [Weight]\*0.45359237/(0.00064516\*[Height]\*[Height])

(weight and height in lbs. and inches respectively as given in the dataset)

The final Tableau story has plots showing batting average and number of homeruns each vs the BMI. Also, the variation of these two performance attributes with the height and weight of the players is also analyzed. **There is no correlation between performance attributes and the physical attributes of players. However, below are some of the notable observations.**

1. In the BMI vs home runs plots, players with high home run numbers have BMIs in the range 22-28.
2. Players with high number of home runs have their heights in the range of 70-76 inches.
3. In the BMI vs batting average plots, it can be observed that players with BMI in the range 23-27 have the best batting average scores.

**Design:**

1. To view the data of players with each type of handedness separately, a filter based on handedness has been added to both of the scatterplots.
2. Also, data has been encoded with color based on handedness of players to enhance detail in the visualizations.
3. After reviewing feedback from others, the different handedness also were plotted side by side along with the original plot.
4. Chart junk/ Unnecessary text which take up the same and distract from the message were removed.
5. Representation of counts in each handedness changed from bar chart to pie chart as recommended in review of first project submission.
6. Filtered out players with zero values for both of the performance variables.

**Feedback:**

Person 1**:**

1. Title was missing.
2. Please write a story which include 3-4 dashboards in sequence order.
3. I don't know about the data, So I don't know what type of meaningful graph you can plot more.

Person 2**:**

1. Small note on the scatter plot, the most frequent points (right handed) should be drawn first (on the background) to not obscure the others.
2. You may try to plot the different handedness side by side but that depends on what you're trying to convey. In the bar charts, the stacked bars show the distribution of the whole population and the proportion of each subcategory, but it’s hard to infer the distribution of each subcategory.
3. This does a good job at conveying the feel of the data. There are some players with 0 batting average which seems odd though.

**Resources:**

<https://classroom.udacity.com/nanodegrees/nd002/parts/84946f6a-429e-434a-b7be-a98f15d96913>

<https://community.tableau.com>