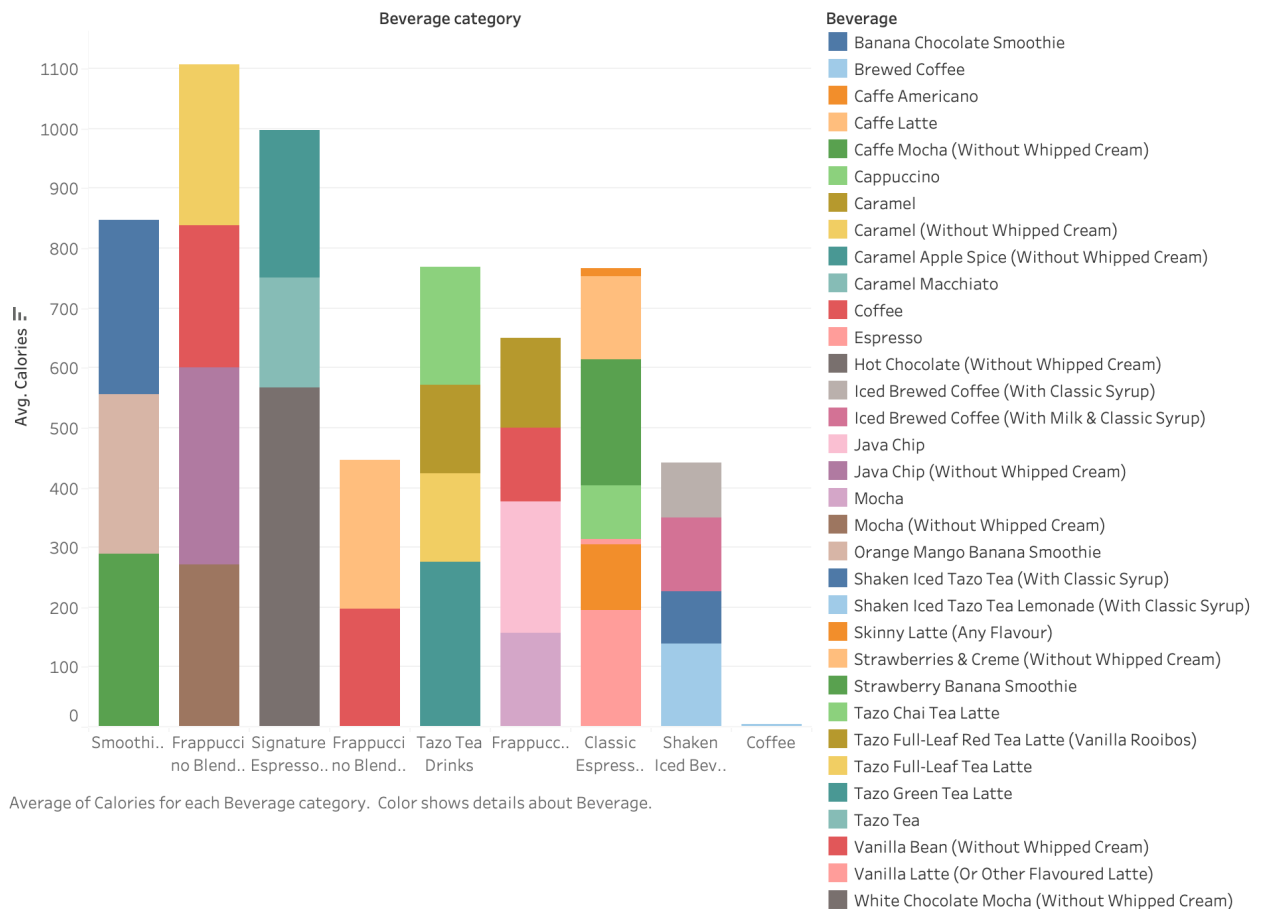


Yaphet Gebrecristos

Beverage Contents Data Visualization with Tableau

Calorie Distribution by Beverage Category

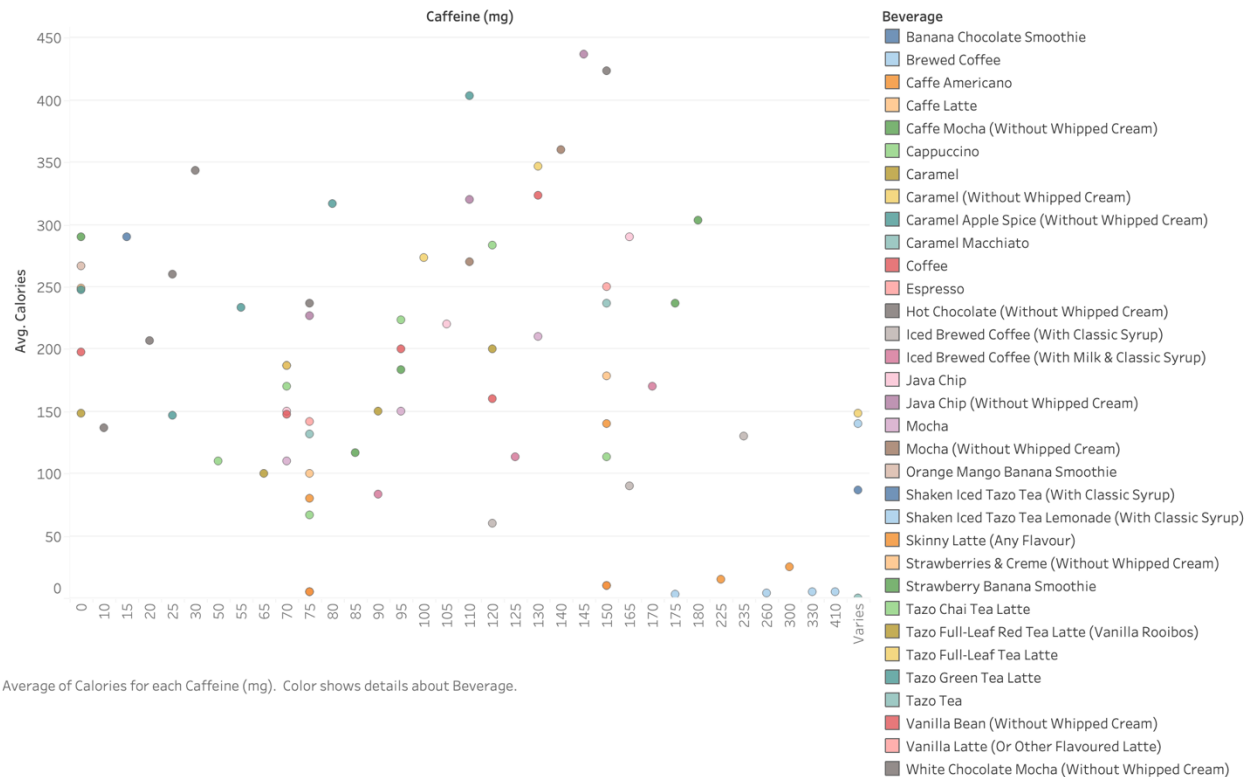


- Viz 1**
 - Started by dragging the Beverage category to the X-axis and Calories to the Y-axis. Use the average of calories for a more accurate representation. Grouping similar categories or focusing on major ones can help. The most helpful feature would be the ability to easily switch between different aggregation methods like average and median.
 - The chart displays each beverage category bar divided into to each respective beverage showing the average amount of calories. For example, a classic espresso drink that is a vanilla latte has the average of 195.8 calories. Sorted in descending order by average of calories within Beverage category.
 - Tableau's drag-and-drop interface simplifies the creation of such visualizations but dealing with many sub-categories can be challenging, and it might require additional steps to clean or organize the data for clarity. Tableau does a good job in creating informative bar charts, but the initial setup and data preparation was a bit tedious.

Yaphet Gebrecristos

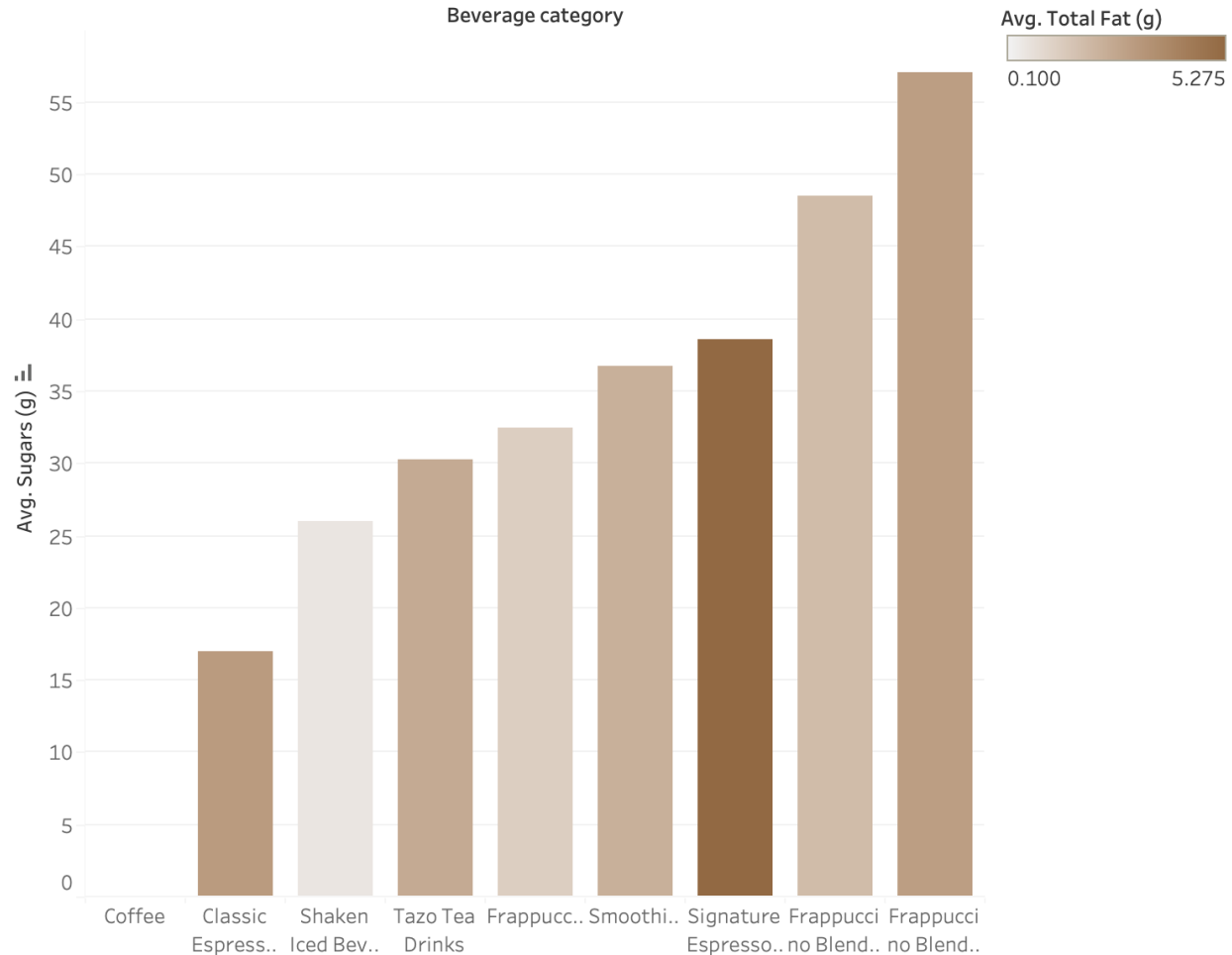
Beverage Contents Data Visualization with Tableau

Caffeine Content vs. Calories



- Viz 2
 - This involved creating a scatter plot by placing Caffeine (mg) on the X-axis and Calories on the Y-axis. Colored the different marks of specific beverage.
 - The scatter plot shows the relationship between caffeine content and calorie count in beverages. It can reveal trends or outliers, such as high-calorie but low-caffeine drinks. I found that there was not a correlation between calorie and caffeine.
 - Tableau is great for visualizing correlations using scatter plots. However, the challenge was the ability to adjust different drink sizes. The system provides a good set of tools for manipulation and analysis, but it requires some data literacy to interpret complex scatter plots effectively. I liked the automatic implemented brushing and linking for the data visualizations.

Sugars and Fat Content in Beverages



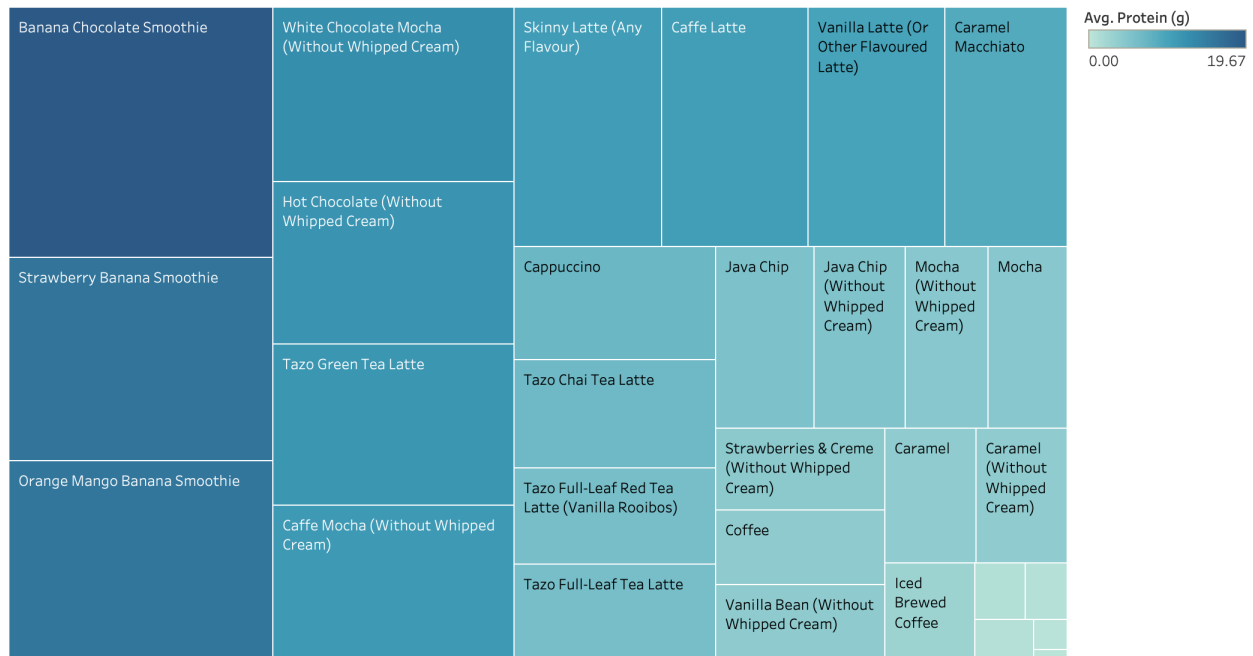
Average of Sugars (g) for each Beverage category. Color shows average of Total Fat (g). The view is filtered on average of Total Fat (g), which ranges from 0.100 to 5.275.

- Viz 3
 - Create a bar chart with each bar representing a beverage category, and average sugars in the y-axis with the bar chart and the different shading of brown showing the fat content. I sorted the bars by increasing average of sugars. The most helpful feature is the ability to shade the different beverage categories when selecting color for average total fat.
 - This visualization highlights the sugar and fat content in each beverage category, showing which drinks are high in these contents. It's useful for health-conscious consumers. It seemed expected that the less you do to coffee the lower the sugar and fat would be. However, I did expect that the more sugar there was the more fat would also be in the drink.
 - The data has many beverage types, the chart can become cluttered. The system requires users to be cognizant about which data to include or exclude for clarity.

Yaphet Gebrecristos

Beverage Contents Data Visualization with Tableau

Average Protein Content Across Different Beverages



Beverage. Color shows average of Protein (g). Size shows average of Protein (g). The marks are labeled by Beverage.

- **Viz 4**
 - Used a tree map for the different protein averages of the different beverages. The challenge might be dealing with sparse data for some beverages. The most helpful aspect is the simplicity of changing visualization types to find the most effective representation. The visualization shows the average protein content for each of the beverages as well as sorting in decreasing protein content of the beverage.
 - This chart shows the protein content in different beverages, identifying which drinks are richer in protein.
 - Tableau makes it easy to switch between different charts, the key challenge is in presenting a clear visualization when dealing with a wide variety of beverages. The system is very versatile in data representation but requires thoughtful selection. With so many features, it seems the possibilities are endless until a data contains sub categories such a beverage prep that made it a little difficult to implement into the visualization.