

WHAT IS IN YOUR STARBUCKS ORDER?

(ALPHA RELEASE)

PROJECT OBJECTIVES (2 OF 4 COMPLETED)

The objective of this project is to create an awareness about what is in your Starbucks order. It aims to help the customers have a more clear picture and an option to choose based on the nutrition level of each item.

This the project will contain the following:

- Correlation between each nutrition type (calories, carbohydrates, caffeine, etc) ✓
- Analysis of different drink sizes based on sugar and sodium ✓
- Micro-nutritional information (Caffeine, Cholesterol, Sodium) of drinks
- Nutrition analysis of food at Starbucks

DATA: ✓

The data is collected from two sources. The primary source is Kaggle -
<https://www.kaggle.com/starbucks/starbucks-menu?select=starbucks-menu-nutrition-food.csv>

Secondary source is from the Global Assets section from the Starbucks website. The data from the pdf will be collected using python libraries and exported as a csv file.

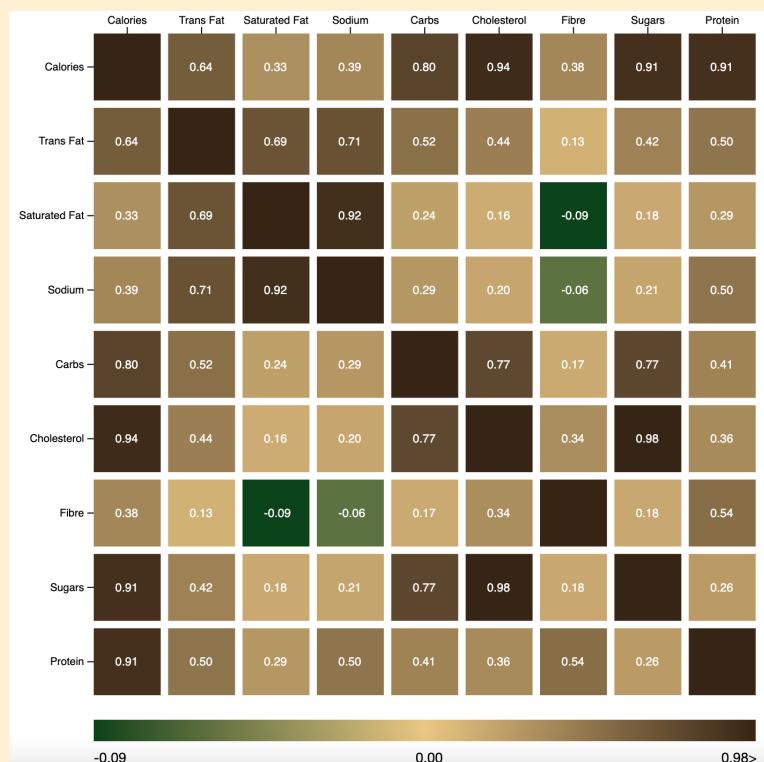
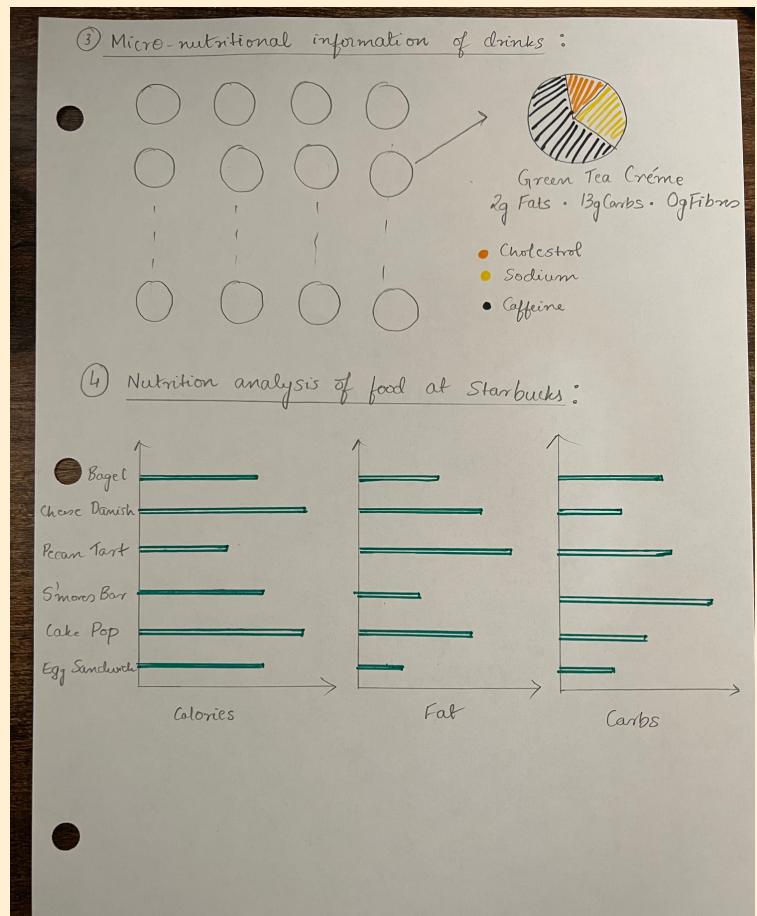
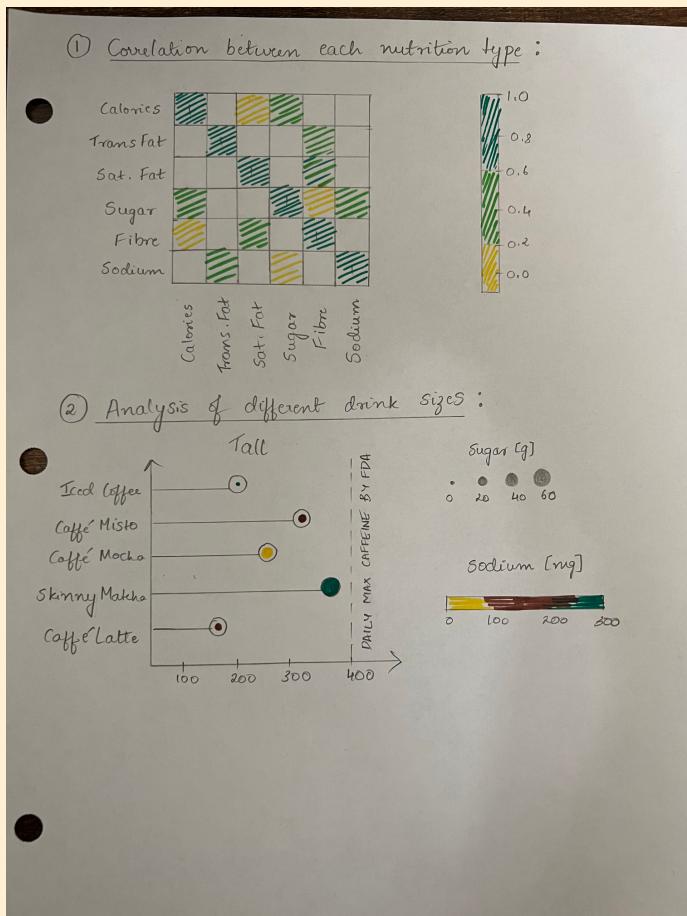
<https://globalassets.starbucks.com/assets/94/fbcc2ab1e24359850fa1870fc988bc.pdf>

DATA PROCESSING: ✓

Data from Kaggle will be processed using Microsoft Excel to filter certain categories and calculate metrics related to each column.

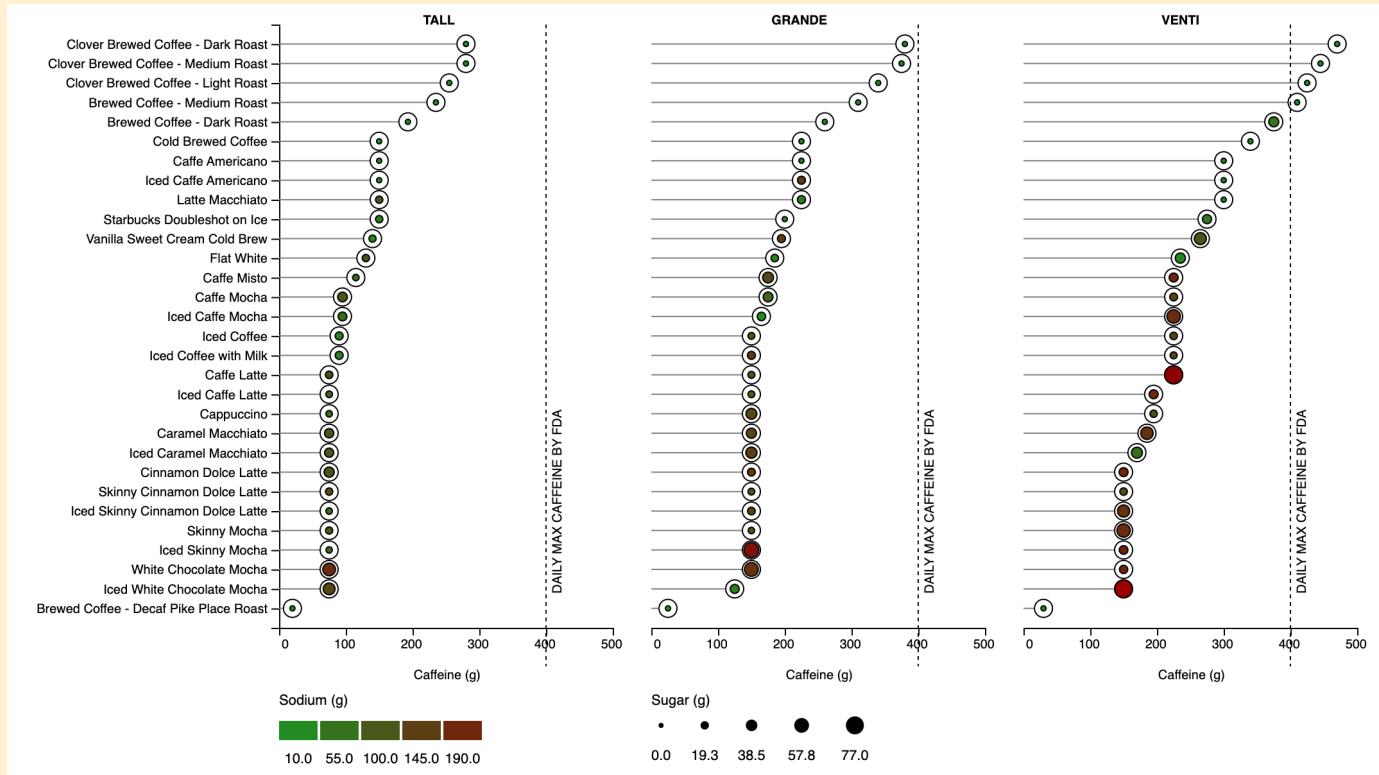
The Global Assets Nutrition Data will be extracted from the pdf using python libraries (PyPDF2) and exported as a csv file.

VISUALIZATION DESIGN

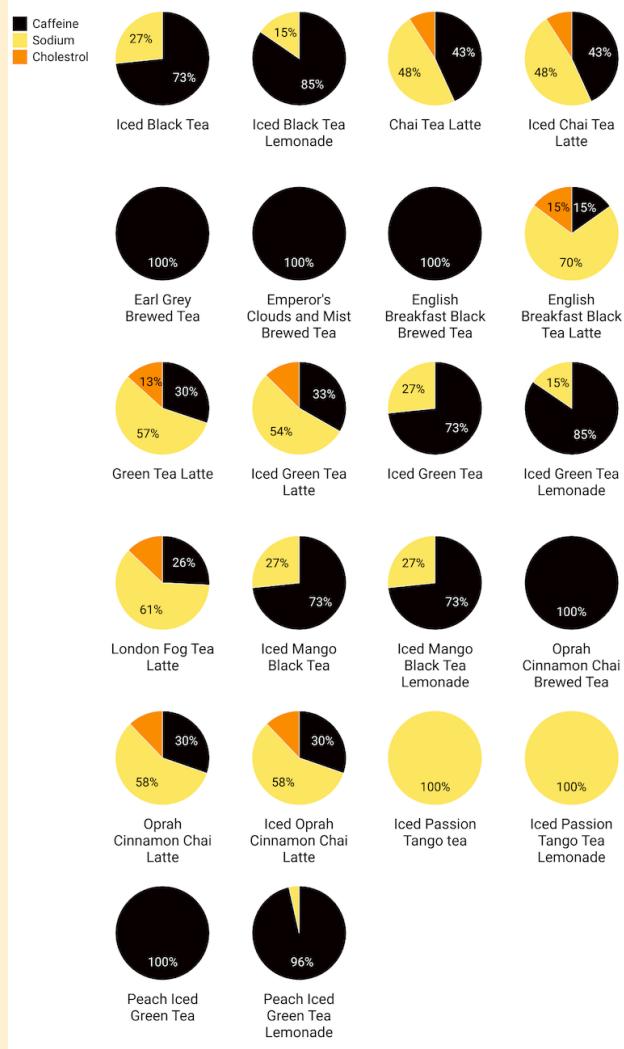


2. Inspired by Datavisualization by Tobias Stalder

3. Inspired by Abdoul ISSA BIDA



Micro-nutritional Information of Teas



MUST-HAVE FEATURES:

1. Page 1: (Meet PO 1)

- Correlation Matrix of different nutrition types and highlighting significant values in the Correlogram. ✓
- Hovering over the Correlogram shows the correlation coefficient for each box in the matrix.

2. Page 2: (Meet PO 2)

- Scrollytelling technique to show the analysis of Tall, Grande, and Venti sizes.
- Implementation of lollipop scatter plot with incorporation of sugar and sodium variables at the end of each lollipop. ✓

3. Page 3: (Meet PO 3)

- Multiple pie charts with proportions of three variables for all drinks.

4. Page 4: (Meet PO 4)

- Small multiples implementation of bar charts for each food product.
- Each multiple depicts each nutrition type (selecting 3 types)

OPTIONAL FEATURES:

Similar to a staked bar chart implementing the proportions of nutrition in top 5 drinks inside a coffee shaped graphic. Hovering over the proportions shows the quantity.

PROJECT SCHEDULE

11 March _____

- Project Proposal ✓

23 March _____

- Revised Proposal, Related Work, and Project Website ✓

28 March _____

- Scrape data from Global Assets
- Post processing data to csv for visualization ✓

04 April _____

- d3 implementation of page 1, 2 meeting objectives 1, 2. (without interactions) ✓

06 April _____

- Alpha Release

15 April

-
- d3 implementation of page 3, 4 meeting objectives 3, 4.
 - Add interactions

20 April

-
- Work on html and scrolltelling
 - Fix any bugs or add any improvements

04 May

-
- Implement d3 visuals in the html and working website

09 May

-
- Final Presentation

12 May

-
- Project Report Draft

16 May

-
- Project Report, Slides, Demo Video, Code & Data, User Manual

UPCOMING IMMEDIATE MILESTONES:

- Finishing the remaining 2 visualisations
- Improving the interactions of Objective 1 and Objective 2

ROADBLOCKS:

- Aligning the visualisations in the html
- Scrolleytelling
- Small multiples pie chart

WEBSITE:

<https://bhumikasrc.github.io/starbucks-nutrition-analysis/>

RELATED WORK:

1. Holtz, Yan. "Lollipop Chart." The D3 Graph Gallery, <https://d3-graph-gallery.com/lollipop>.
2. Wilke, Claus O. Fundamentals of data visualization: a primer on making informative and compelling figures. O'Reilly Media, 2019.
3. Tsai, Shandy. "Data Visualization." Medium, UXeastmeetswest, 26 Sept. 2017, <https://medium.com/uxeastmeetswest/%E8%B3%87%E6%96%99%E8%A6%96%E8%A6%BA%E5%8C%96data-visualization-%E5%9C%96%E8%A1%A8%E8%A8%AD%E8%A8%88-9ef17943a2d4>.
4. Holtz, Yan. Basic Correlogram in d3.js, https://d3-graph-gallery.com/graph/correlogram_basic.html.
5. Tim Brock 42, et al. "An Introduction to Small Multiples: Infragistics Blog." Infragistics Community, https://www.infragistics.com/community/blogs/b/tim_brock/posts/an-introduction-to-small-multiples.
6. "PDF to CSV - Convert PDF to CSV Online for Free." PDF to CSV - Convert PDF to CSV Online for Free, <https://nanonets.com>.