<p style="text-align: center;"><u>HW #15 – BELLY BUTTON BIODIVERSITY</u></p>

Project Overview

This project required the visualization of a data set representing various types and quantities of bacteria harvested from the umbilici[1] of a sample of humans.

Data and Project Description

The dataset contains data of for each individual of the clinical test group. Specific data was available for ethnicity, gender, age, geographic location, umbilicus type, wash frequency, bacteria types, quantities of each bacteria present per sample. This data was available from a JSON source file.

The project required minimal manipulation of an HTML index file which allowed input and output display interface capability for the user client. A JavaScript program was written to read in, process and display the results of the analysis in graphical form to the user client.

Project Results

This project made available a large amount of information available to the user client in graphical form. While the actual usefulness of the data is not obvious, the ways that a dataset can be analyzed and understood were developed and appreciated.

Future Development

- Refactoring: some of the code was written very much in brute force mode, and could be made significantly more elegant and maintainable by re-implementing with looping techniques
- Functions: related to the above, but worth mentioning separately, is some section of the code should be broken out into independent functions
- Clean up comments: lots of notes and questions not necessary or appropriate for production code.
- Get working the mouse select code that came with the starter original starter code in index.html. This could not be made to function properly, and it was not obvious why. Due to time limitations, the simpler approach, without use of the "this" method was employed. Worth answering: Why did it not work? Why is there more than one way to do it? Which is better? Why? Specifically...
    - `<select id="selDataset" onchange="getData(this.value)">`
    - `<option value="dataset1">DataSet1</option>`

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[1] The clinical term. Often referred to as the "navel" or possibly even "belly button" among the more ignorant classes.

Conclusion

This visualization of a data set representing various types and quantities of "belly button" bacteria was somewhat fun and worthwhile. I would be proud to have someone play with this program as proof that I have learned something in this unit.