Challenge 14 Belly Button Challenge:

You will find a starter folder consisting of the index.html file, the samples.json dataset file holding the data and images, and a static folder. The static folder includes the D3 library JavaScript code.

Using the D3 library and VS code, read the JSON file from the URL https://2u-data-curriculum-team.s3.amazonaws.com/dataviz-classroom/v1.1/14-Interactive-Web-Visualizations/02-Homework/samples.json. Created an interactive dashboard using JavaScript to explore and analyze the Belly Button Biodiversity dataset revealing that a small handful of microbial species (also called operational taxonomic units (OTUs)) were present in more than 70% from a total of 153 individuals while the rest of OTUs were relatively rare.

The Belly Button Biodiversity dashboard comprises a bar, bubble, gauge interactive charts, and a dropdown demographic information panel.

A screenshot of a computer

Description automatically generated

All were plotted using the Plotly library to visualize the data. You can visualize the plots by opening the JavaScript file in the Chrome web browser. You will see the individual's demographic information panel and the responses of the three charts by selecting Test Subject ID from the dropdown menu. The metadata or individual's demographic info panel displays each key – 7 columns (id, ethnicity, gender, age, location, bbtype and wfreq) and value pair for the individual. The horizontal bar chart displays the top 10 OTUs found per subject; the bubble chart illustrates the OTU and related sample value; and the gauge chart represents the individuals' weekly washing frequency (wfreq) ranging from 0 to 9. All four plots are updated when a new sample is selected.

References:

<https://d3js.org/>

<https://plotly.com/javascript/gauge-charts/>

google and StackOverflow