MicroBiomeViz: Design Study with Domain Experts

1. Abstract
2. Introduction
   1. Layout challenges for visualization, that is, set the framework as to why we need MicroBiomeViz given recommendations from domain experts
   2. Contributions
3. Related Work
4. Design Studies
   1. ***nine-stage design study methodology framework***
   2. From DanteexploreVis: **Core to visualization design studies is a collaboration between researchers and domain experts to address real-world problems using visualization techniques.**
   3. Layout Requirements/tasks
   4. Make visualization systems(Sunburst + Another Diagram) that fulfill requirements. Sunburst + Radial bar, Sunburst + Bar Chart, Sunburst + SteamGraph, Sunburst + Cartogram etc.[Another diagram requires design and customization, sketch out a bunch of things]
   5. Check with a set of experts(**call them group 1**) whether the system fulfills requirements. Qualitative analysis. Get their opinions and incorporate that into the designs. Update requirements. Sort of iterative but not super long.
   6. Based on analysis, finalize visualization.
5. Describe System(Visual Design) and how it fulfills requirements. **Possibly a usage scenario?**
6. System evaluation by different set of experts(**call them group 2**). [No expert may give you more than an hour][10 min at most to do an overview of the system]
7. Discussion on the system concerning(generalizability towards other domains)
   1. Good things
   2. Limitations
   3. Generalizability(Good point to hammer home) to other domains
   4. Future work
8. Conclusion