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CS 171 Design Studio 2 - Github Commit Graph

This design studio is synchronized with Homework 3. You will sketch multiple solutions to visualize the world population data acquired in Problem 2 of Homework 3. You must submit your (and your groups) solutions with Homework 3 and then choose one solution to implement as part of Homework 3. There is no need to hand in anything at the end of this design studio.

PART 1 - ANALYSIS

Individual or in small groups (2-3); Time: ~20 minutes

See word doc for written answers drawings on back

Take a look at the population data.

- What trends do you see in the data?
- Analyze how big the differences between various estimates are. Do you see a trend, i.e., do the differences become smaller or larger over time?
- Think about these differences relative to the estimates at the respective time points and in absolute terms. When are the uncertainties the largest in absolute, when in relative terms?
- Do you think you can faithfully represent the uncertainty and the data in the same plot? Why, or why not?
- What effect do you think will the linear interpolation have on the uncertainty?
- Is linear interpolation a suitable method for this data?

PART 2 - SKETCHING

Individual or in small groups (2-3); Time: ~30 minutes

Design two alternative visual representations for representing the data and the uncertainty in the data. Consider different scales, both for time and for population numbers. You should design for an interactive system, i.e., you should not assume that you have to fit all content onto paper.

Here are some points you should consider:

- To get a feeling for the final visualization, try to draw the data to scale.
- Instead of or in addition to showing 5 conflicting lines, develop a visualization that shows the data and the ambiguity. You can use a single visualization, or you can use multiple views.
- Your visualization should show the divergence between estimates in absolute terms (i.e., the difference in number of people) as well as in relative terms (i.e., % of divergence/uncertainty relative to a consensus value for a given year).
- Your visualization should make it easy to read a specific "consensus number" for every year.

PART 3 - Group Reflection

Group of up to 5 people; Time: 40 minutes, or as long as you like.
Take your analysis and ideas and share it with up to 4 of your fellow students. Discuss your priorities and your designs. Do you find a consensus? Come up with one visualization that you agree is ideal.