CPSC 583 W2021 2ND PROJECT HAND-IN

Sketching and buddy system contract

The second part of your project mainly focuses on deciding on a design direction for your project. It is important to get this part right, as this will inform what you will implement in programming code for the remainder of the term.

This hand-in consists of four phases. 1) Describing how you intend to support each other in your group. 2) Creation of sketch-able data subsets. 3) Creating sketches based on these subsets following the 10+10 method. 4) Describing your process, the reasoning for how you created your sketch-able data subsets, and arguments for the design direction you expect to pursue in the next project hand-ins.

BUDDY SYSTEM

Your projects are individual and will be graded as such – you each need to follow the instructions in this document for your own dataset. Your buddy group is to provide the benefits of group working, especially – connection with your peers, constructive feedback, and exposure to a diversity of perspectives. You may help each other with problems you encounter, but you may not just solve them (read: provide blocks of code) – this is plagiarism. If ever in doubt, contact your instructor or TA immediately.

To create good conditions for working in your buddy group, you should discuss and describe in writing how you intend to collaborate, your expectations to one another, and how you might handle any conflicts that arise. You might take inspiration from the attached buddy group contract template.

DATA SUBSET

Following the introduction and activity of the idea of sketching from a data subset (introduced in Lecture 7, Feb 1), you will first need to create sketch-able subsets of your chosen data set. Remember that it is important to have actual data points, and to have chosen them well, such that they can portray features of your full data set in sufficient detail to be able to sketch from them. In creating the subset, consider that it needs to:

- be small enough to use for ideation
- capture key data features
- contain samples of data of interest
- relate to tasks that you might think your visualization could be used for
- be representative of the full data set (for example, it might include outliers)

There is clearly a tradeoff between sketchability and how well it represents the full data set. Try to think about this tradeoff and how you might create something that strikes a good balance between the two.

10+10 SKETCHES

Next, you use the 10+10 method (introduced in Lecture 6, Jan 27) to create visualization sketches based on your sketch-able data subset. You first create 10 sketches. Then you choose one to three ideas from your sketches to develop further, and sketch 10 variations of these ideas. You include photos/scans of your sketches in your pdf hand-in (consider the medium that you are sketching in – see Figure 1). For this part of the hand-in, you might consult the sketching workbook [1].

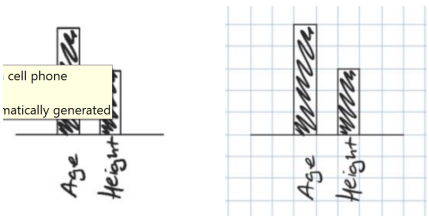

Figure 1: The medium that you sketch on can be important for showing it well in a photo or scan. Note that this is NOT an example of a good visualization idea. It uses dual axes, briefly; y-position encodes two different variables of a data set.

Remember the importance of COLOR. First, use different colors when sketching. Second, sketches often look pale when photographed or scanned, so consider increasing the saturation to reflect your sketched idea.

NUMBER OF SUBSETS AND SKETCHES

You should create two subsets and 10+10 sketches for each subset. This gives in total 40 sketches.

Each subset should focus on something different. For example, most subsets might focus on raw values, but for different columns in the data set and a single subset might consider possibilities for aggregation. In creating the subsets, consider the foci of the different subsets.

While this hand-in does not ask you to decide on the direction to take based on your sketches, it is a good idea to start reflecting on this.

HAND-IN

You summarise what you have done in writing and submit this as one pdf hand-in. You describe the approach you took to creating your sketch-able data subset, you present your arguments for your design direction, and you describe your process.

You should structure the hand-in according to the following section headings. You may use up to 500 words for each section.

- Sketch-able data subsets
  In this section, you describe your sketchable subsets. For example, what was the focus of the subset and how did you handle the tradeoff between sketchability and how well the subset represents the full data set?
- Design direction in sketches
  In this section, you describe your sketches on a general level. Perhaps there are clear similarities or differences between your sketches?
- Discussion of process and results
  In this section, you describe and discuss the process of creating the data subsets and the sketches, as well as the results from it. This might include considerations such as limitations of the results due to the process, issues in collaboration, thoughts on the value of creating and sketching based on "sketchable subsets" versus other possibilities you might image, etc.
- Conclusion
  In this section, you might briefly conclude on the results from creating sketches of your data sets. Perhaps you now have a sense of what is interesting in the data, the limitations in the data, or ideas for how to proceed with some of the ideas in implementations?

The hand-in should include your data subsets and photos/scans of your sketches within these sections. Typically, 4-8 sketches can fit on one page. Make sure to clearly separate each sketch, to number them, and briefly describe each sketch in a caption, so that the idea is clear to a reader. You may curate the sketches shown in the section about the sketches and only show all of them in an appendix (this might also make it easier to work in your preferred text processor, as you might then keep the main writing and appendices in separate documents).

The data subset, sketches, and captions of each subset or sketch does not count towards the word limit.

In an appendix, you include your description of how you intend to work together in your buddy group (everyone should upload this).

SUBMISSION

You submit your hand-in as a pdf.

DEADLINE

Sunday February 21, 11:59pm Calgary time.

NEXT STEPS

You will receive formative feedback on your work in D2L and in brief group meetings with Emma and Zahra.

REFERENCES

[1] Saul Greenberg, Sheelagh Carpendale, Nicolai Marquardt, and Bill Buxton. Sketching user experiences: The workbook. *Elsevier*, 2011. https://ebookcentral-proquest-com.ezproxy.lib.ucalgary.ca/lib/ucalgary-ebooks/reader.action?docID=809159&ppg=12