PHASE 4: HAND-DRAWN VISUALS

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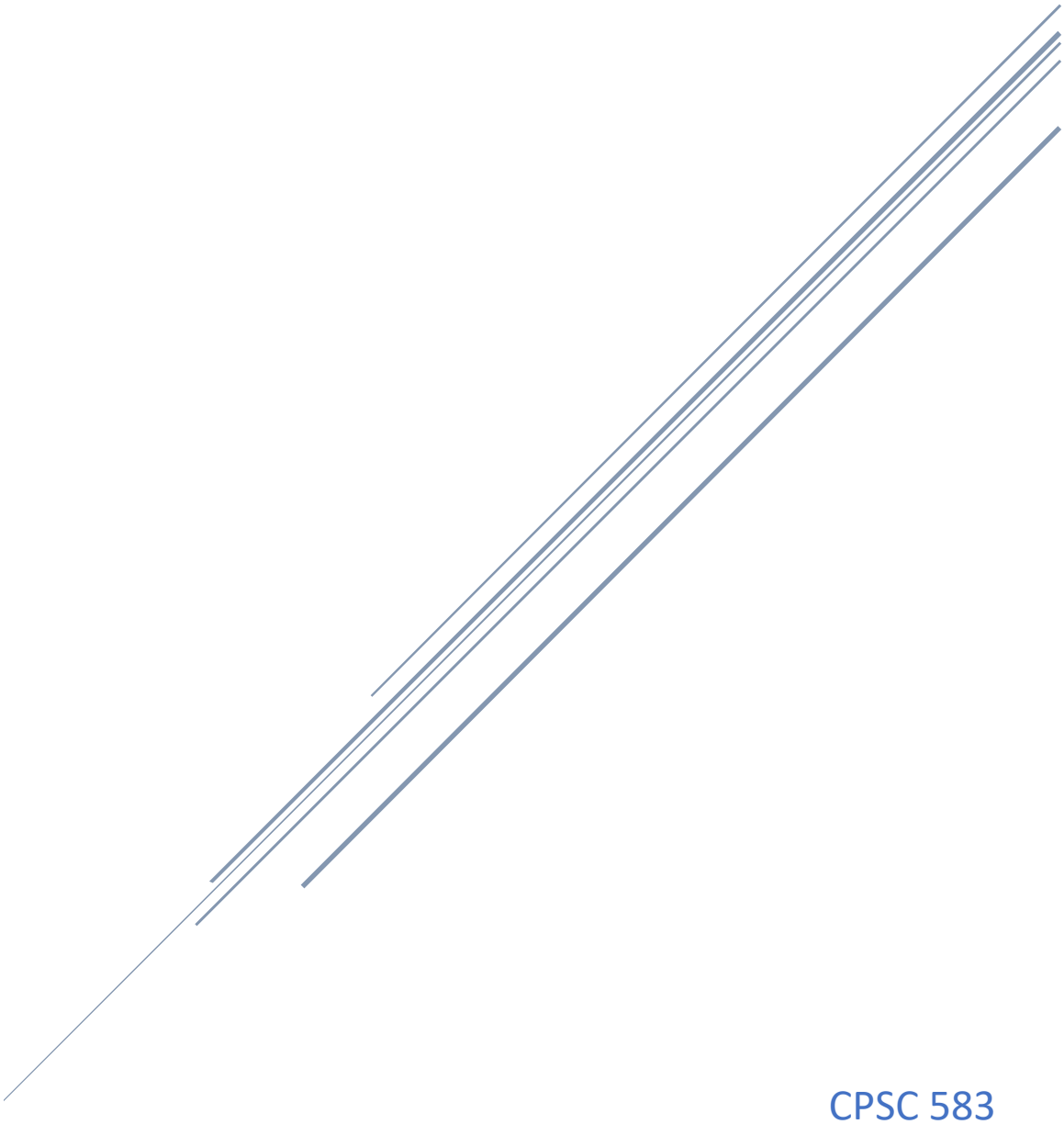

CPSC 583
November 7 2021

Research Questions

A summary of our research questions:
Q1. Are in-person interactions associated with a higher mood rating?
Q2. What category of people do we interact with the most?
Q3. How does introversion affect mood of conversation with different categories of people?

For our full board of sketches/voting process visit our Miro board:
https://miro.com/app/board/o9J_lyJzBXI=/?invite_link_id=82962556870

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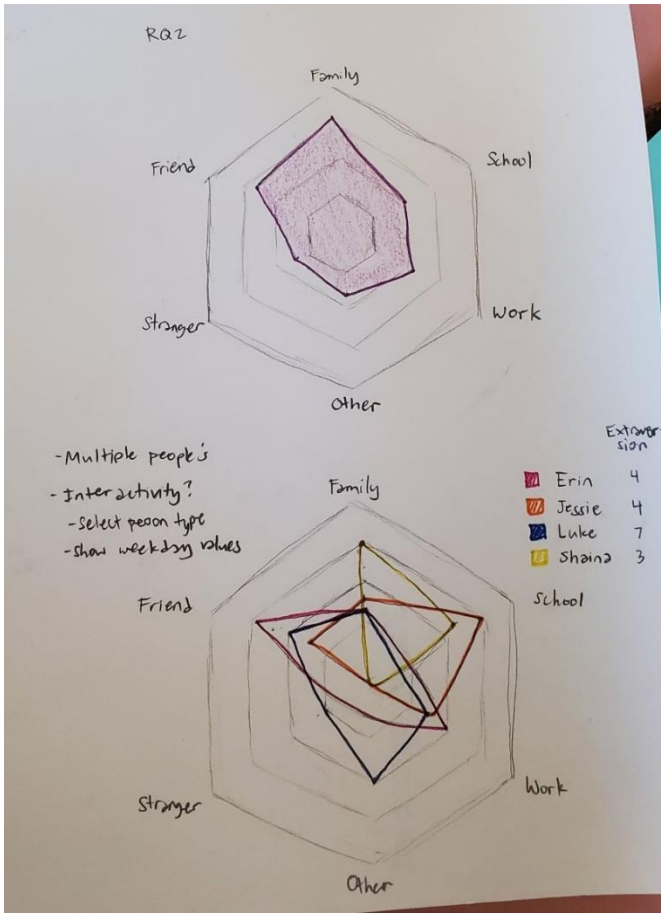
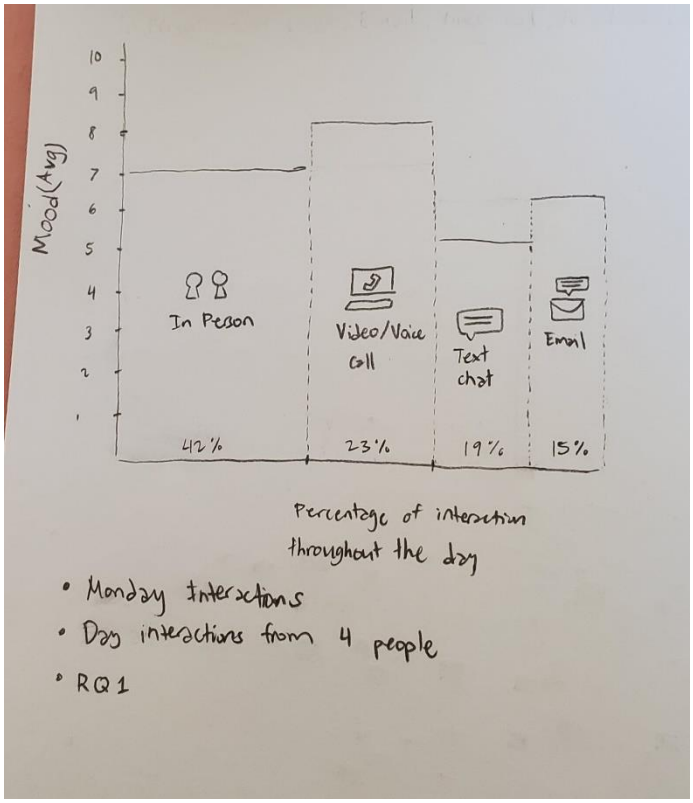
1) The subset of data we selected was all datapoints on the day “Monday.”

Frequency of interactions on different types of People

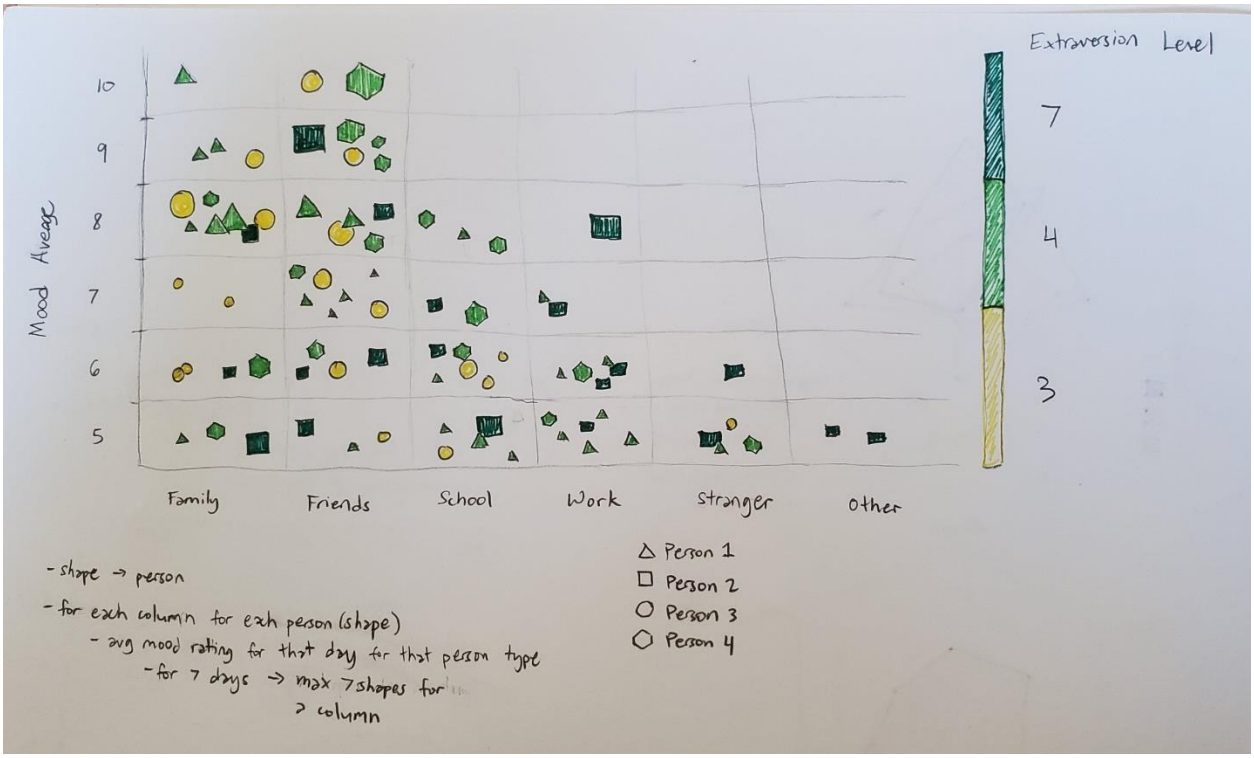


This uses a spider web format since it is useful to visualize the rating of categorical data. The first diagram represents one "web" which is the combined data of all entries for this subset. The second one splits them up to the 4 people that make up the data set.



Using the mosaic plot is useful for representing different categories of data. The height represents the value of the mood. The horizontal area of the bar represents the percentage of the interaction mode used in that subset (for all entries in the subset).

7 day representation of interactions between different types of people, Average mood and extraversion

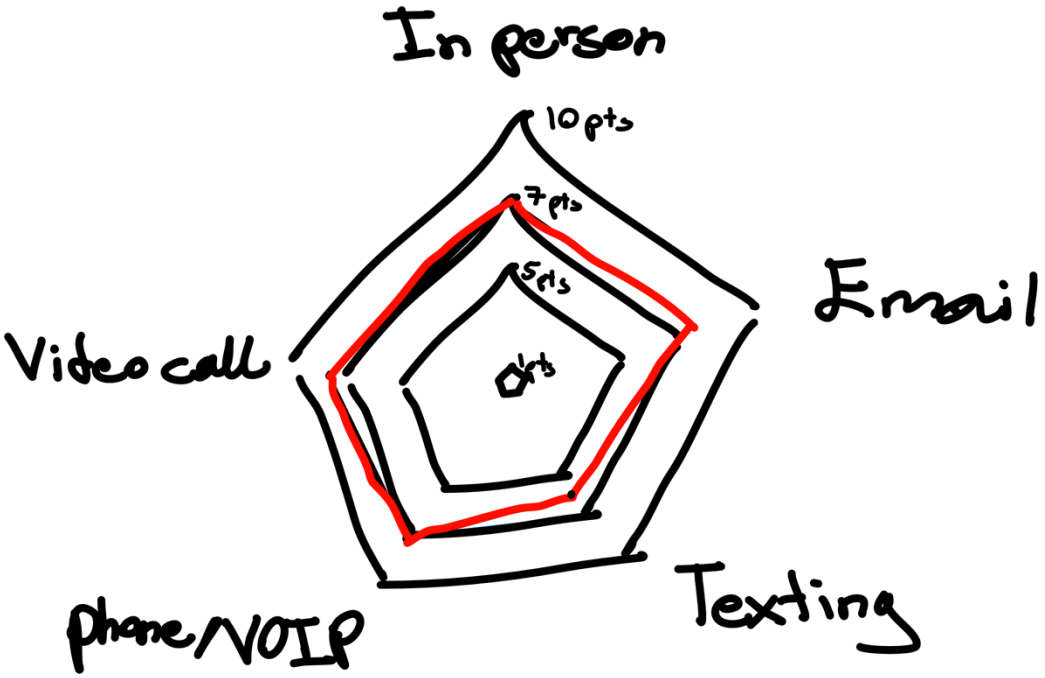


This visualization uses the whole 7 days since it wouldn't work with the small subset we had. This is a scatter plot that uses 4 shapes to represent each person that make up the dataset. The area is divided by cells. Rows represent the mood rating, columns represent the type of person of the interaction. For each of the types of person, a shape is placed for each day out of the 7 on a cell depending which row (mood rating) and column (type of person) it belongs to. Size represents the frequency of interaction for that type of person during that day. Each shape would have a maximum of 7 entries for each column (if they had a conversation for all 7 days for that type of person). Color is used to represent the person's extraversion level.

Mood vs. Group size of a conversation

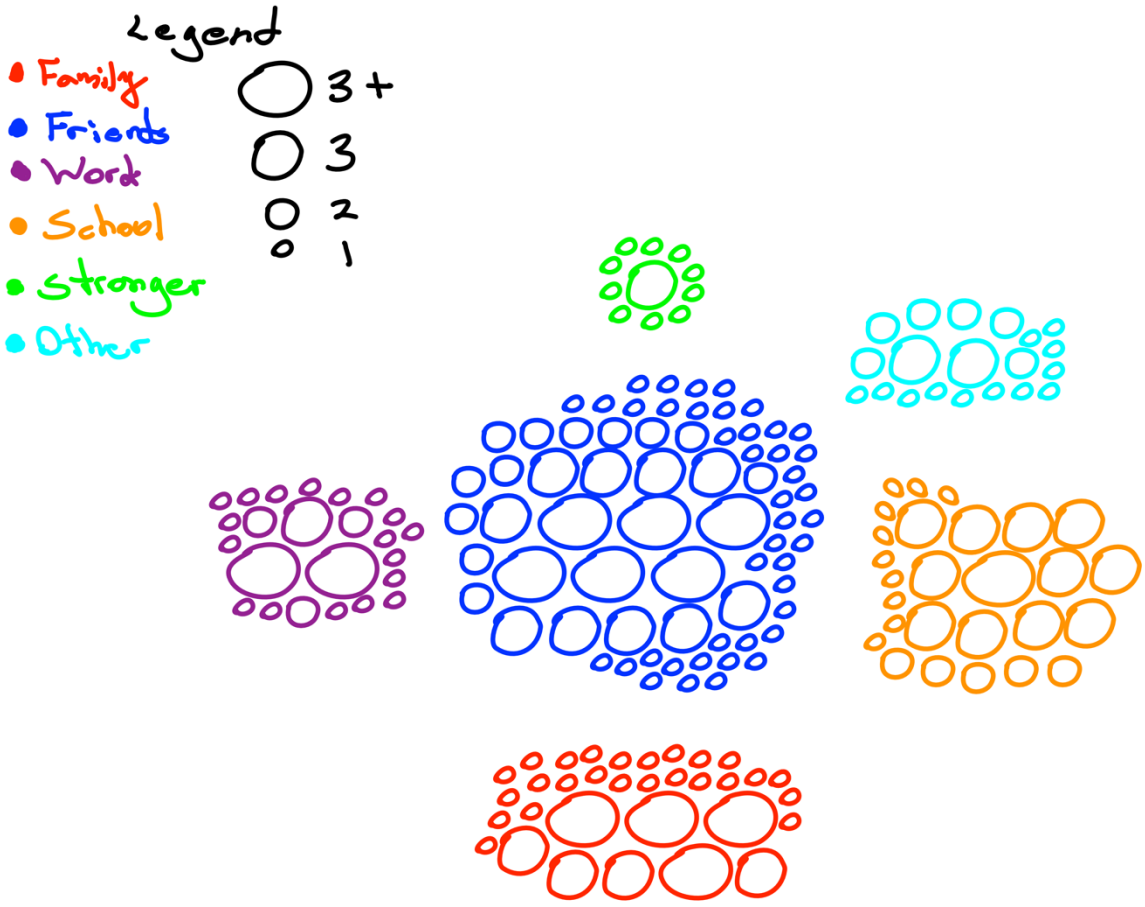
This visualization plots the mood of a coversation (y axis) against the number of people in a conversation (x axis). The colours correspond to the individual, which can also map to the extroversion level. The growing blocks represent the number of values at that point.

Spider web plot of medium of conversation



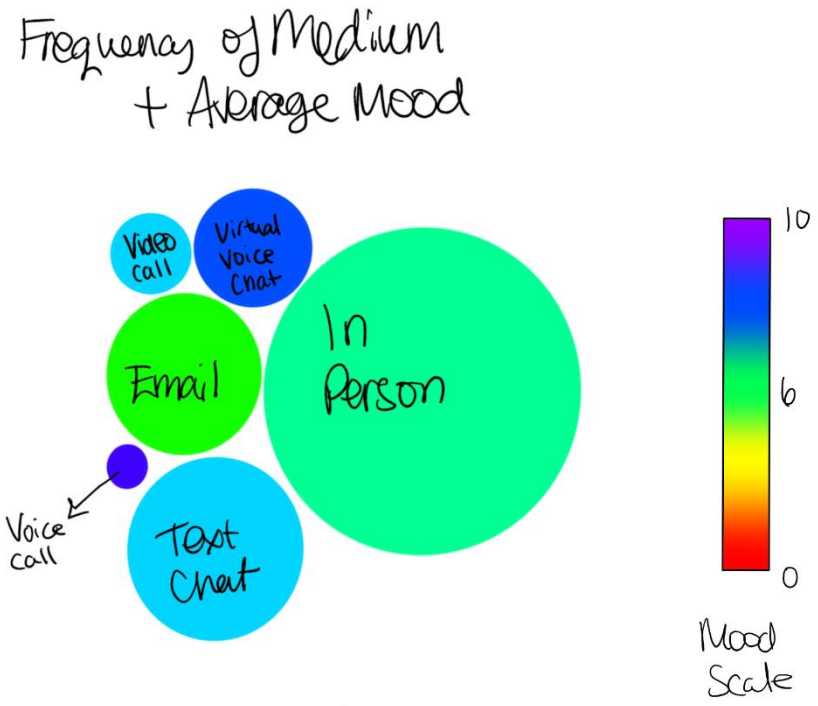
This visualization uses the spider web format as we have five distinct categories with each having its score. The red colour is the score for each category and is different from the black to contrast. The blacks are to show labels for the score.

Bubble chart of category of person during conversation



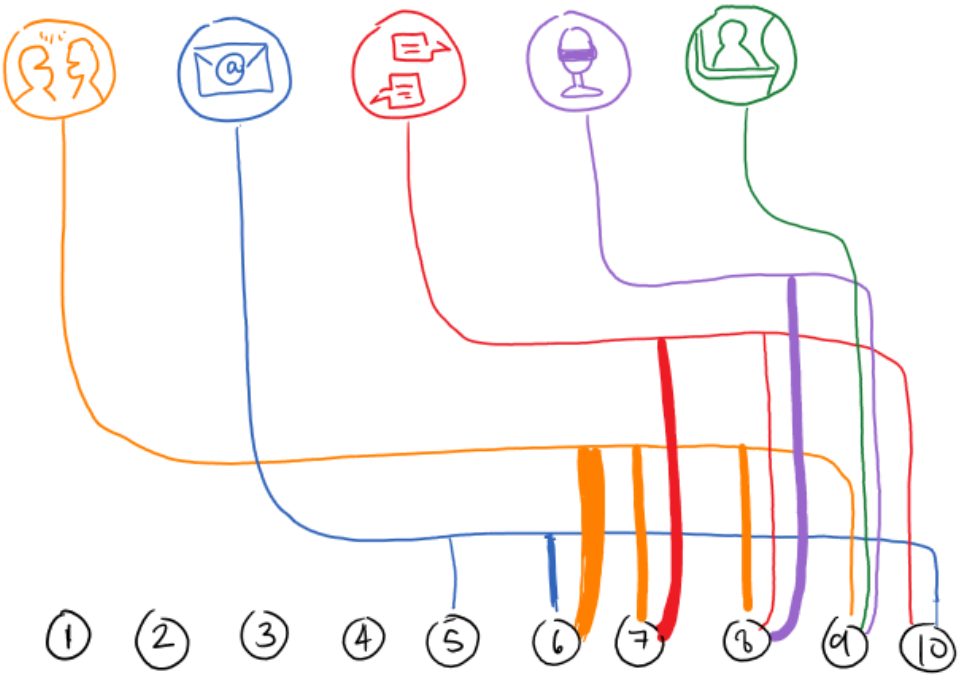
This bubble chart shows us the big picture of with which category of people our conversations take place. The chart uses bubbles to represent each single interaction in the form of a bubble and its size is dependent on how many people that interaction had. While the colour is the cate- gory of people.

Frequency of medium and average mood



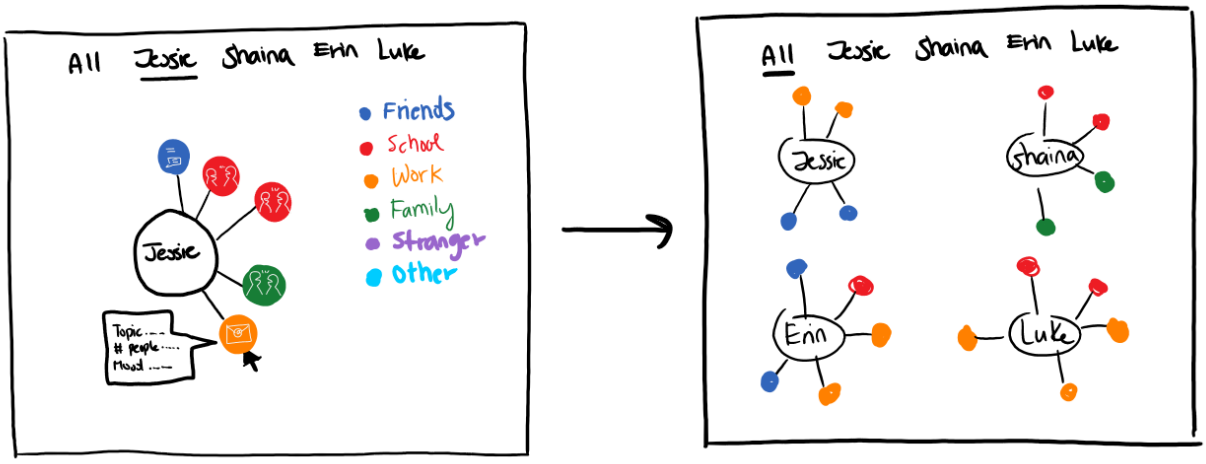
This visualization uses a bubble chart to plot each medium of conversation. The size of the bubble corresponds to the number of conversations in that medium. The colour represents the average mood of conversation for the given medium.

Types of interactions and their corresponding mood rating

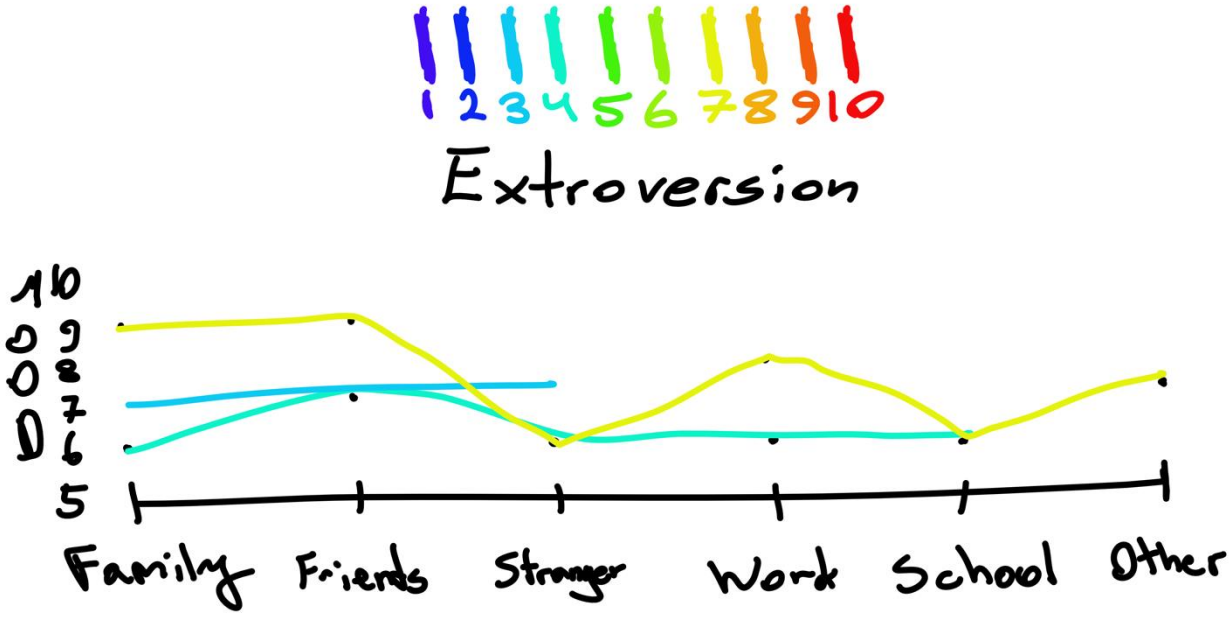


This visualization has the general mood on the bottom numbered from 1-10 and the icons on the top represent a different type of communication (In-person, email, text chat, voice chat video call). All data in this visual were for the day “Monday” (subset). A line is drawn from a type of communication to a mood if there was a data point for it. The thickness of the line represents the number of occurrences

Interactive visualization showing the type of interactions throughout the day for each person



This is an interactive visual where each person can be selected to see the different types of interactions they encountered on Monday. Each interaction circle point can be hovered upon for more details (# of people, mood, topic, etc.).



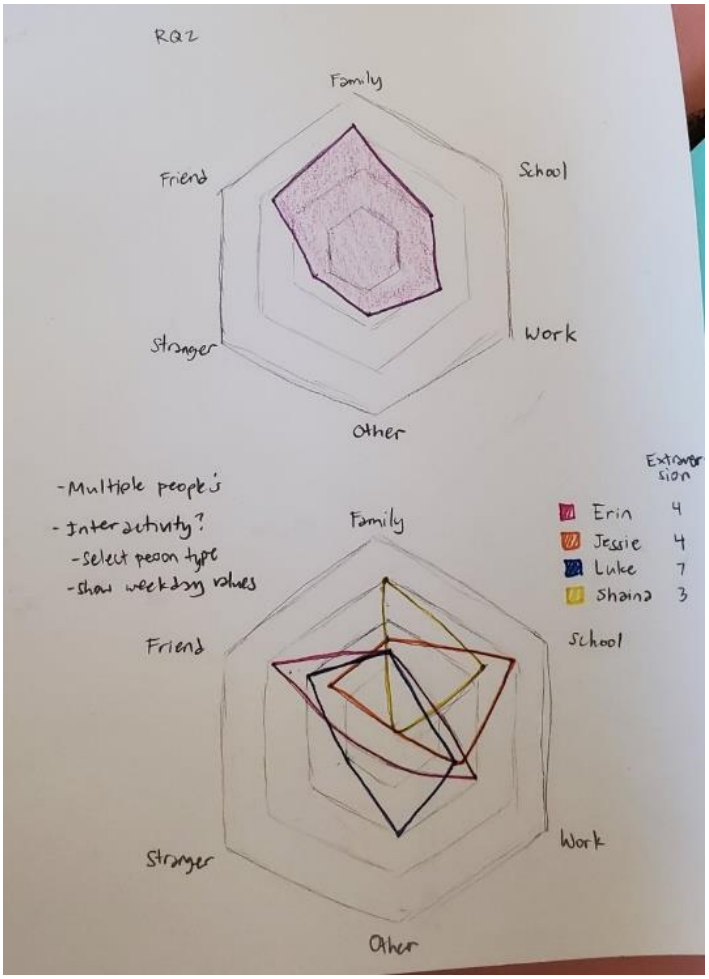
A scatter plot which is supposed to have 10 different lines, each line representing the level of extroversion from 1-10. Due to lack of data this chart only shows 3 groups, namely 3, 4, and 7.

3) Copy and paste your research questions into this document. Then submit 2-3 paragraphs discussing how TWO different sketches may help you to answer at least TWO of those research questions.

Research Questions

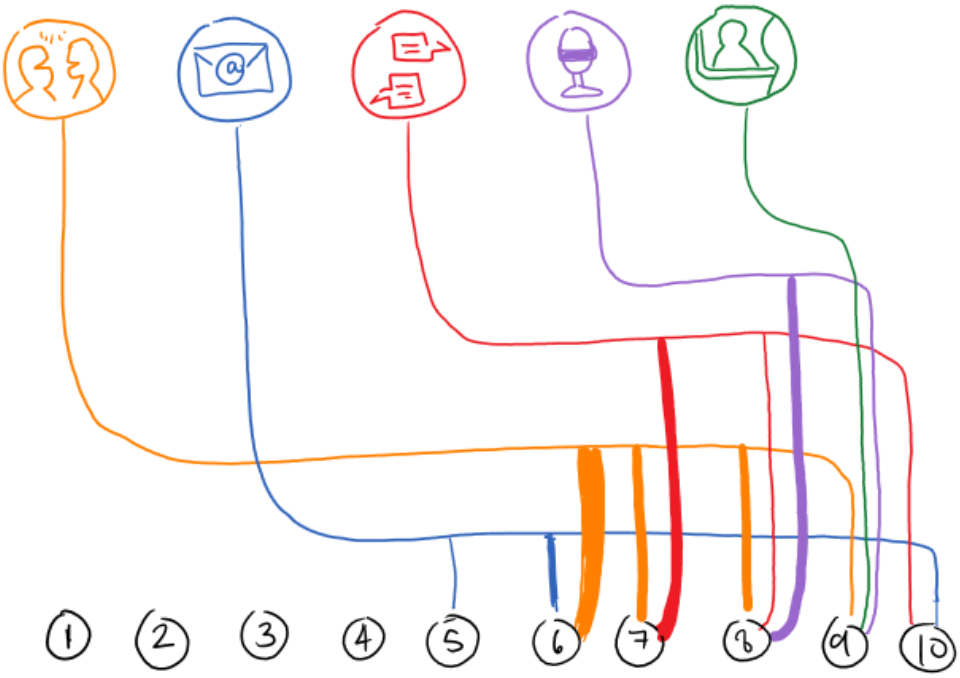
1. Are in-person interactions associated with a higher mood rating?
2. What category of people do we interact with the most?
3. How does introversion affect mood of conversation with different categories of people?

The following visual can help answer research question 2.



This vis helps to answer our research question 1 because what is visualizes. It plots the number of interactions per category of people on a spider plot. The radial values for each category represent the count of interactions for that category. The line colors represent the submitter of the data point. This visual would also be easily tweaked to answer question 3. Instead of the radial lines representing the count per category, it can be changed to represent the average mood rating per person for that category. This change could be interactive or static. Plotting it using mood rating, the viewer could easily tell which categories of conversation are associated with higher mood ratings, per submitter. We can also change submitter to their individual extroversion scale.

The following visual can help answer research question 1.



This visualization has the general mood on the bottom numbered from 1-10 and the icons on the top represent a different type of communication (In-person, email, text chat, voice chat video call). A line is drawn from a type of communication to a mood if there was a data point for it. This visual is meant to give an overview of all the types of mood experienced by each type of interaction. The thickness of the line represents the number of occurrences for that type of interaction and corresponding mood. This graph will be able to help us answer on whether in-person interactions give a general higher mood rating. An alternative way to sketch this graph would be to take the average mood rating for each of the interactions and then just plot single lines with not thickness (although, this would be too simple of a graph).