Context

This assignment is about ideation for your Visualization Concept design. In class, you use the Five Design Sheets (FDS) method to begin designing ideas for your Concept.

This submission consists of your FDS design ideas.

What to do

Finish the FDS activity

Summarize in a document and turn it in

Details:

In class, you will have completed one (possibly two) of the detailed designs for your visualization (pages 2,3, and 4 of the Five Design Sheets). Finish the Five Design Sheets activity you began in class, and photograph all of the pages.

(In Week 8/9, you will also evaluate your visualization paper/lo-fi prototype with three potential users, and get a snapshot of their thoughts toward the experience of using it.)

Create a single pdf document, consisting of the following:

A one- or two-paragraph synopsis (Links to an external site.)Links to an external site. and short reflection on what you discovered about your final concept from the FDS activity.

Follow this with high-quality, legible (not blurry) photographs of your sheets, arranged in "right-reading" orientation (i.e., top side of the image at the top of the page, whether in portrait or landscape orientation).

Minimum expectation: 1 brainstorming page (Filter, Categorize, Combine & Refine), 3 Design Sheets

You do not need Sheet 5 (the medium fidelity prototype), though feel free to include it.

What to turn in

As single PDF document that is professionally written, well formatted, and proofread.

Notes:

Ideation was difficult as we have been exposed to a lot of travel search solutions already. All of us have used various travel sites and airline sites and thus have been pre-conditioned with certain expectations.

Generated one idea for map-based visualization for discovery new airports. We had a hard time deciding what was the relevant data to show and always wanted to show too much. Concluded with showing average departure delay for origin airport and average arrival delay for destination airport. Felt like that was what matter the most for deciding airports, other than price.

Generated two ideas for the hour of day visualization, one based on a line chart for average delay stacked with a bar chart for the number of flights and a compass rose style chart with length of the rays showing number of flights and color showing average delay binned into 3 categories.

Decided that we will probably have too little data if we only consider only the same day from the previous year. Actually, day of month could lead to inaccurate conclusions because it would represent a different day of week. We need to be consistent with the day of the week the travel is planned for but also account for seasonality. We’ll use all of the same day of week data for the same calendar month from the historic dataset to estimate an average delay and average number of flights.

Breakthroughs

1. Only need departure delay for the origin airport and arrival delay for the destination airport for finding the best airport task.
2. Only need the total delay for the flights for finding the best hour of day to fly.
3. Hour of day is cyclical and thus may be amendable to a compass rose or spider type chart.

Reflection

Found it easy to lock into an idea and not come up with different ideas for the same task. We had to really force ourselves to find an orthogonal visualization scheme to support one of the user tasks. Finally, created a compass rose based chart for the average delay and number of flights for each hour of the day for all the same days in the month specified by the user to be the desired travel day. Our project is scoped very tightly and thus limited the options available. But we felt it was extremely important to stay on task and create a solution for the stated scope.