CS 171: Design Studio / Peer Feedback

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I. GENERAL

I completed Design Studio #3 in class on 10 April 2014, with Jack Davison (the rest of his group was otherwise occupied), and peer-reviewed his group's project on visualizing trends in Q guide data. We shared both design sketches and preliminary prototypes for critique and discussion.

II. DISCUSSION POINTS

A. Audience

In discussion, Jack and I realized a fact that might be useful for both of our projects: our prospective userbases were made up of two relatively-distinct types:

- top-down users, who have relatively little domain-specific knowledge, but are browsing for interesting trends.
- bottom-up users, who have domain-specific knowledge and are looking to draw connections between known facts and additional interesting data features.

In my case, specifically, the former corresponds to users who don't know (or don't care) about individual competitors, but are interested in aggregate statistical results, and the latter corresponds to users who know some handful of competitors by name, and want to explore their results in the context of the field at large.

As these two have different interests and needs, it's important to consciously consider and balance the needs of both groups. Specifically, taking this into consideration led me to place a greater focus on interactivity as a method of revealing data to bottom-up users who might be interested in it.

B. Data-to-Ink Ratio

One of the major critiques Jack had of my design sketches was that their data-to-ink ratio was strikingly poor (or perhaps more properly, their data-per-square-inch ratio). He suggested subdividing the stacked area charts (of one or two groups) into smaller regions making use of color scales to increase data density.

A few premilinary computer sketches later revealed that this was a brilliant suggestion, and that a segmented bar-chart design is a fantastic way to display data where an individual competitor's result is made up of temporal data (what round reached) as well as an aggregate of preceding rounds. I expect to use this as a default view, and to use the previously-described area/stream graph as a secondary, toggle-able option.

C. Tabular Detail View

Ironically enough, as we discussed, the high-density, detail-focused view sparks a desire in users for yet more detail data. If a particular round appears unusual or interesting, a user will want the ability to explore it in more depth. Since we have the data already available, it makes sense to add a sidebar-based detail view that allows for comparison of competitors within a round. (Preliminary sketches seem to indicate that this information could be easily conveyed in a tabular format, not unlike Homework 1.) I will be exploring this possibility further in later prototypes.

D. Overall area vs. Percentage area

Jack suggested that, in views comparing the number of competitors remaining from a selected group to the total, both absolute-scale

and relative-scale measurements might be informative. As such, I decided to add a toggle-option to switch between absolute-scale (number of in-group competitors remaining, stacked with total remaining competitors) and relative-scale (% of in-group competitors, compared to total competitors, per round) in area-graph views of competitors remaining over time.