

## **P1: General feedback and next steps (10/24/2006)**

### **Data**

You must have a data base or a resource for creating example data and schema (such as a book or website). If you have not identified a source for your data, you must do this ASAP. If you cannot find one, you will need to choose a new project.

Take a detailed look at your potential data sources to develop a schema for the data you will use. List attributes with types and ranges of data values. Are there errors, missing values, or other obvious data issues? Can you modify your data using Excel, Tableau or scripts to create what you need?

In general, we encourage you to use Tableau to start exploring your data, discovering its characteristics, choosing subsets or filtering, etc.

### **Users**

Define one or more users for your project. Different types of users are different and will have different requirements, ask different questions, or think about their results differently.

### **Tasks**

Each type of user will have a set of questions or tasks that they wish to answer or explore with the data. What data is needed to answer each question or task? (Sometimes multiple data items will need to be combined or new data will need to be computed from the data you have already.) Start thinking about some good ways to encode and display this data, keeping characteristics of your target users in mind.

### **User scenario(s)**

These combine the users and tasks into a narrative that helps you understand and characterize them better.

### **Visualization design**

As you consider potential ways to display the data to support the users' tasks, you may wish to look through the portions of the Spence textbook that we have not yet covered (especially the figures). In addition, you may wish to explore other online examples from our Resources page, which points directly to examples and to resource pages from other visualization courses.

### **Implementation**

Every team will first build a paper prototype and test it on at least two but preferably three target users, improving it based on user feedback. If actual target users are not available, please ask your actual users to simulate a target user as best they can.

For the final version, you will need to create one of the following:

- a more polished paper prototype using, for example, Illustrator or Photoshop,
- a Flash-based interactive prototype, possibly connected via HTTP to a dataset,

- a prototype based on an existing infovis tool like Tableau or Treemap (with extensions of your own design to support your particular domain and tasks), or
- a custom application using an infovis toolkit like prefuse.

**Evaluation**

You will conduct an evaluation of your final prototype with a minimum of 3-5 users. Teams who have a less functional prototype (such as paper) should spend more effort on this portion of the project, while those with a more functional prototype can spend less.