REFLECTIONS ON WORKING WITH FELLOW TOOL BUILDERS

ALEX BIGELOW

In a visualization design study, it can be risky to rely on fellow tool builders’ inferences about user needs, instead of learning from the end users directly. In practice, however, tool builders are often the only point of contact, and the actual users are not available. This poster presents two systems developed in this kind of scenario.

**Open house map**
- Map areas, research areas, and individual posters can be selected.
- Under the hood: Illustrator-friendly SVG IDs correspond to values in collaborator-friendly CSV for assigning areas.
- Deployed on a touch table.

**Ping pong tournament interface**
- Three views: pool play adjacency matrices, playoff bracket, and force-directed view of all matches.
- Under the hood: Google forms, spreadsheets used as a collaborator-friendly database.
- Deployed on large monitor with keyboard + mouse.

**Similar challenges to deciphering end-user needs**
The conversation with a Staff Developer that resulted in this design change was initially framed as a simple style suggestion; fellow tool builders often have excellent insights, but they can easily be lost among less important (or even poor) feedback.

**Role**
- Mid Grad Student
- Mid Grad Student
- Staff Developer
- Research Faculty
- Senior Grad Student
- Senior Grad Student
- Senior Grad Student
- New Grad Student

**Research Area**
- Biomedical Computation
- Biomedical Computation
- Scientific Computing
- Information Visualization
- Biomedical Computation
- Biomedical Computation
- Scientific Computation

**Student Committee**

**Collaborator Help**
- Technical involvement did not seem to have any relationship with a collaborator’s specific expertise.
- Collaborators most readily contributed data when the tools were familiar.

**Collaborator Feedback**
- Most of the feedback that collaborators provided was helpful.
- Some feedback was too specific or failed to capture the scope of the project.

**Implications for Visualization Techniques and Deployment**
- Adjacency matrices were confusing to a subset of a technical audience.
- Encoding direction with triangular shapes was ambiguous and confusing.
- Presenting a visualization on a touch table proved more engaging than a fixed monitor.

**Two Projects**

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