

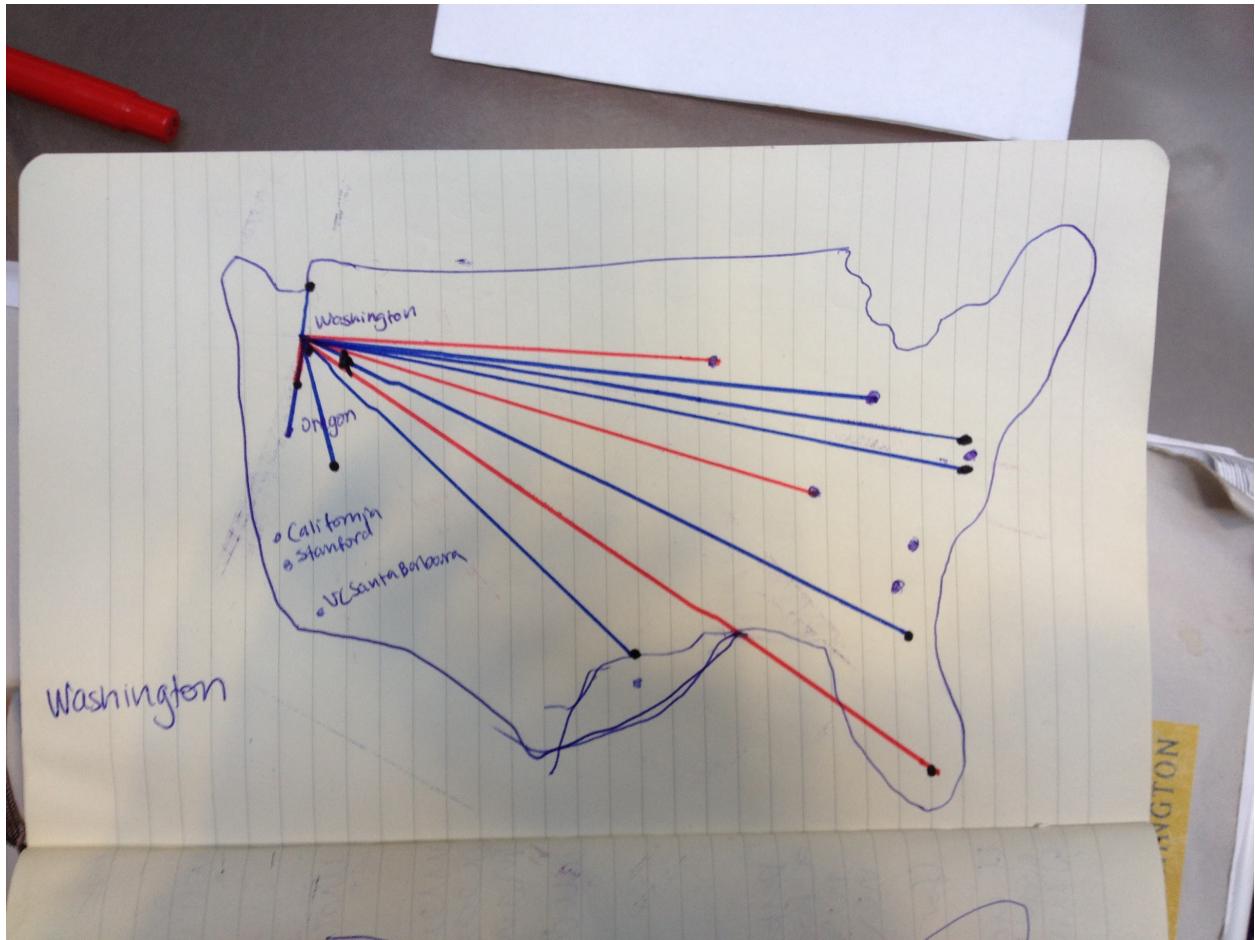
Description of data domain and interaction techniques:

We've chosen to visualize which teams played which during the 2012 college men's ultimate frisbee season. The college ultimate season is structured much more loosely than other national sports competitions. Rather than being given a schedule for the season, teams choose which tournaments to attend. In order to participate in the national championship tournament, teams just need to play at least 10 sanctioned games during the regular season. Some teams play many more than 10 games. Some teams only attend tournaments that are located close to them, and will therefore play nearby teams. Other teams travel to tournaments on the other side of the country and may end up playing from a wide geographic distribution. Right now, there's no easy way to look at who's playing whom, look for geographic patterns, or even just check out all of one team's opponents in map form rather than just list form, where the cognitive load of figuring out where each opponent is located is moved from the user's brain to the page. We thought that a visualization similar to the bubble cursor airport map example could be an easy way for users to explore the geographic distribution of teams' opponents. We chose the bubble cursor as our primary interaction technique because we want users to view teams' distributions of opponents one team at a time, but we'd also like users to be able to quickly move between teams that are close to one another in order to quickly ask questions about the geography of the distributions. This visualization should help users answer questions like the following: are all the teams on the west coast playing similar opponents?

We're also looking considering encoding whether a team won or lost as the hue of the edge between the selected team and its opponents. This would allow users to look more geographic patterns around wins and losses.

There are over 400 teams in our data set of over 5000 games. If all of teams are selectable, the quickness of the changes in which team is selected might be overwhelming. We're considering making only the 20 teams that went to nationals selectable, or perhaps only the top-ranked 100 teams. We'd like to find a balance between having enough teams selectable that there's a wide range of distributions to explore, but not too many to make intentional selection impossible. We're also considering allowing users to select a team using text search by moving their mouse off of the map and clicking on a search bar. This way, even if we only make a subset of teams selectable, users would not miss out on seeing the distributions of teams that they care about. We considered keeping all teams selectable and simply allowing users to zoom in on the map to find teams that they are interested in, but we decided against that idea because a zoomed-in map wouldn't allow the user to see the full geographic distribution of a team's opponents.

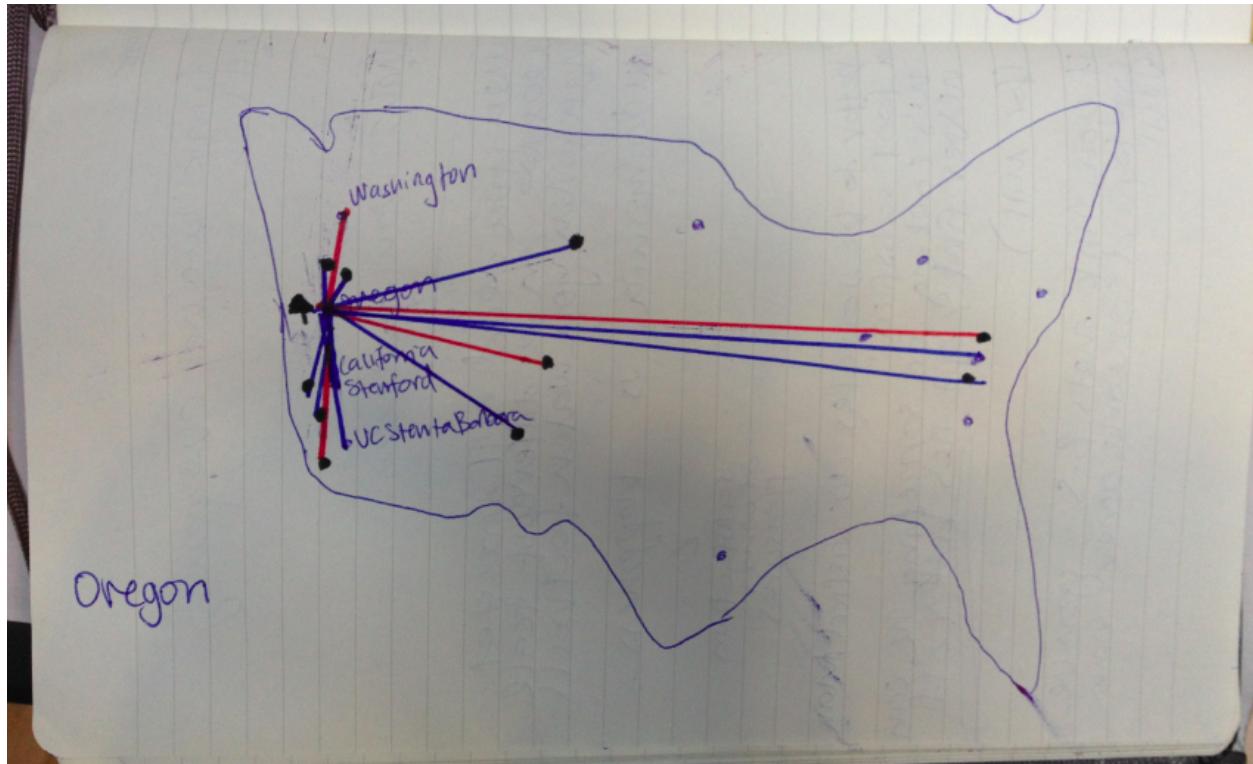
Storyboards:



Washington is selected, so all games that Washington played are represented as edges between Washington and that team. Teams that are represented as black dots were not part of the top 20 teams, so they only appear when there is an edge connected to them. Blue dots are always present.

We're not sure how we will label teams yet. In this storyboard, west coast teams that are part of the top 20 are labeled to show that the top 20 could be labeled, and the team that is currently selected is indicated on the bottom left, but teams that are not part of the top 20 and only appear as opponents to top 20 teams are not labeled. We could label those teams also in our final application.

In the following storyboard, Oregon is selected.



The final storyboard, the user has selected Western Washington by moving the mouse off of the map area and into a search bar, and then typing Western Washington. If we include this feature, then users will be able to look at the geographic distribution of the opponents of teams that are not in the top 20. We'll only implement this if we have time.

