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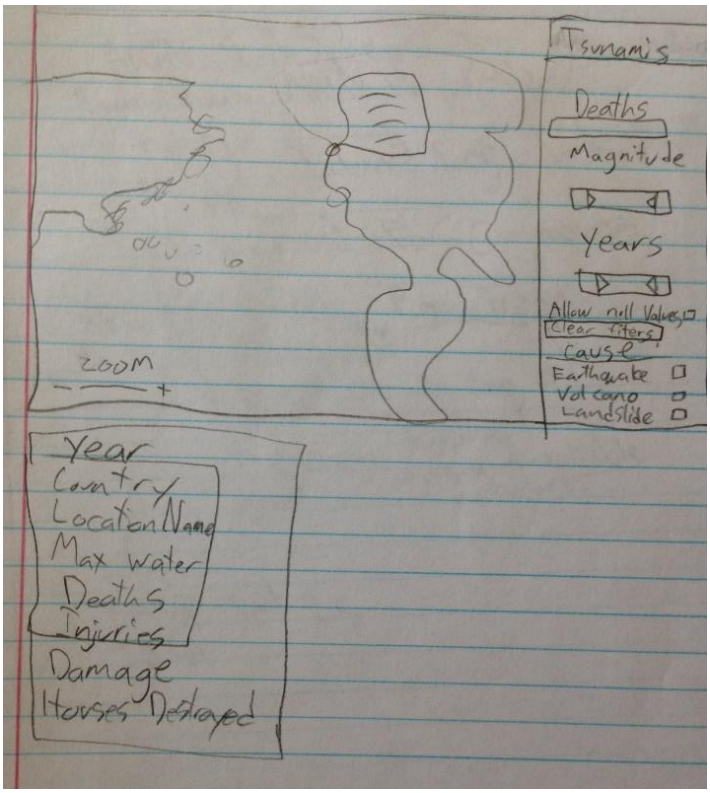
5-6-15

Professor Hullman

Assignment 3: Interactive Visualizations

1. The data domain we are using is Tsunami data collected from the National Geophysical Data Center. We wanted something similar to the Dynamic Home Finder where we could implement sliders and checkboxes for interactive filtering. This dataset was ideal for us because it had a tremendous amount of interesting data about tsunamis. Our visualization allows filtering for a range of years, as well as the range of magnitude of the tsunamis. Additionally, you can filter by the cause of tsunami through checkboxes. The sliders are an effective representation of years and magnitude because they are both quantitative variables, which map well to length visually. The checkboxes map well to categorical variables like cause of tsunami. Hovering over a point will bring up additional details about that point, which is intuitive. Here is an early sketch of what we wanted to build.



Our final interactive visualization is very similar to what we first imagined. One change is that we put the sidebar of options under the map to increase the space for the map, since that was the most important part of our visualization. Robert did the majority of programming work, taking care of the sliders, map, and hover function. John-Martin was in charge of getting the sliders to work, and doing the write-up and storyboarding. Over 20 hours total were spent on this application. Robert spent over 12 hours working with d3 for the visualization (sliders, map, hover details). John-Martin spend about 8 hours on the checkbox filtering, story-board, and write-up. Working with D3 (especially filtering) took up the most time. Here is a picture of our final design. Our visualization can be seen at:

http://students.washington.edu/jmdevera/info498a/a3/tsunamis.html