## CSE591-Homework1

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## A good example of visualization

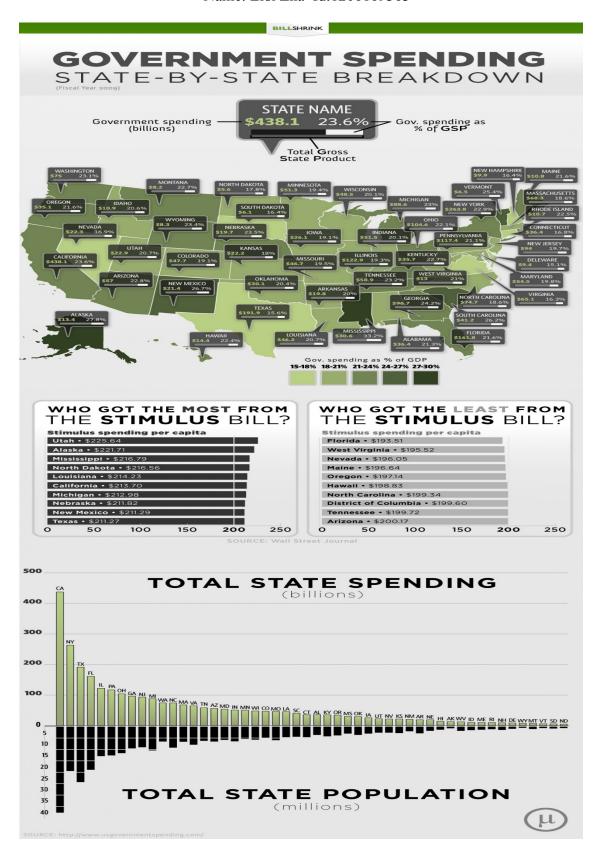
From my own perspective, the image on page 2 is a good example of visualization. This infographic represents the information about state-by-state government spending in United States. In my opinion it is a very good visualization example because it transforms the statistics into very clear information by utilizing various types of graphic representation. Obviously, comparing to the pure statistics, the visualization method provides people a more efficient and effective way to understand the data.

First, this infographic utilizes a US map to represent the state government spending and government spending as % of GSP. And all of the 50 states are marked with different colors to represent the different Gov.spending as % of GSP, it is a very powerful approach for people to understand the comparison of 50 states. For example, we can easily tell that Alaska and Mississippi have the highest Gov.spending as % of GSP while Texas and North Dakota have the lowest Gov.spending as % of GSP.

The next part of this infographic provides people a clear overview about the top ten states who got most and least from the stimulus bill by using rectilinear diagrams. People can quickly have a basic understanding of these statistics since these two rectilinear diagrams rank the statistics and indicate the accurate stimulus spending per capita.

Finally, this infographic utilizes orthogonal diagrams to describe the total state spending and corresponding total state population. The orthogonal diagrams sorts the total state spending and represent the corresponding total state population in descending order, which give people a clear and effective presentation of the data. People can readily evaluate and compare the statistics of different state and figure out the relationship between total spending and total population. For instance, by viewing the diagrams, we can simply conclude that the government CA, NY and TX spend most money and generally these states has larger number of population than other states. The amount of states spending is proportional to the states population.

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## A bad example of visualization

In my opinion, the image on page 4 is a bad example. This infograhic represents the most popular coding languages of 2013. First of all, it is a good idea to use circular digrams to express data because circular digrams offers a very clear way for people to understand. Altough this infograhic utilizes circular digrams, there are also two drawbacks.

First, these overlap parts of coding languages circles would possibly make people confusing. As shown in the diagram, Python occupies 29.8% in coding languages market while Java occupies 25.8%,however,what does the overlap part of Python and Java means? I don't think that there are significances of these overlap parts. It would convey people unreasonable information so that we should separate these coding languages circles instead of overlaping them. My another suggestion is that we can use one circle and cut this circle into different pieces. The proportion of these pieces in the whole circle are based on the percentage of these coding languages.

Furthermore, since this infograhic try to tell people the popularity of coding languages of 2013,but it doesn't provide a clear rank and contrast. From my point of view,the visualization would be more easily perceived if we display these coding languages circles into a descending order. Therefore, people would have a more effective understanding of the pouplarity of different coding languages. Another alternative method is to replace the original diagrams with orthogonal diagrams.

In conclusion, there is still room for this infographic to improve.

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## Most Popular Coding Languages of 2013

