Homework 1

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INFSCI 2415 / LIS 2690: Information Visualization

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Homework 1 I

Task: Generate visualizations to compare the Educational Attainment data by states, by categories, and by time.

- Download the Educational Attainment data from US Census

  (Educational Attainment by State in Excel)
- Work in groups (3-4 members per group) to create three visualization designs using D3
- Submit your report in PDF, and your code in *.zip, via courseweb. One submission per group.
- Due: 2016-09-28 8am
- Demo time: to be scheduled

Homework 1 II

1. Read the description about Educational Attainment at Census.gov.
2. Generate three visualizations to compare the data by states, by categories, and by time.
   a) To compare data across categories and over time, generate a time-series plot to show how the (overall US) educational attainment of the three categories change from 1990 to 2009. You need to show at least three time points in the plot: 1990, 2000, and 2009.
   b) To compare data across states and categories, generate three bar charts corresponding to educational attainment of the three categories in 2009, where each bar represents a state.
   c) Use your creativity to design and generate a visualization to show how the data change between 2000 and 2009, across states and categories. The visualization can include multiple charts or mix different types of charts.

Homework 1 III

3. All visualizations need to be properly annotated and labeled to help clearly explain what the visualizations show.
4. Explain in your report:
   - what you intend to show in the visualization
   - the rationale for each design (why is it an effective representation for the things you intend to show?)
   - in the beginning of the report, describe your team contribution, including (a) names and PITT IDs of all members, and (b) one paragraph to briefly describe the contribution of each member