

Programming Assignment 9
Data Visualization (Cloud)
Due: July 8, 2015, 04:00 (UTA time)

Description:

1. Obtain a US Census Data Set from:
<http://www.census.gov/data/developers/data-sets.html>
It does not need to be more than a few hundred to a few thousand tuples, however, if it is bigger, you may reduce it, as discussed in class.
For example: http://www2.census.gov/acs2011_1yr/CD113/
has a state by state, district breakdown of number of people who have certain incomes, size of household, if they are employed, and many other attributes.
2. Get D3.js from <http://d3js.org/>
Using a cloud service provider:
3. Plot (understandable) scatter charts from pairs of attributes in the dataset.
4. Plot bar graphs (at least two)
5. Using k-means clustering, cluster into a user selectable number of clusters, Plot those clusters in different colors.
6. Please submit your results (text, html, or doc file, a few pages), and all code and Configuration files, but NOT executables, binaries or raw data files.

For inspiration, you may want to look at:

<http://fivethirtyeight.com/>

<http://www.gapminder.org/>

Regardless of the number of people in your "team", you will need to understand the implementation and results of this assignment.

You may work in groups of up to 3 people. All referenced information, including sources of data must be cited and referenced in your write-ups and in each relevant section of your code.

Please, Email ONLY to the class account. All work must be your own.

You must e-mail this lab, working (or partially) by the due date. The e-mail subject should clearly state the lab number.

You may (optionally) demonstrate this lab, working (or partially) to the GTA before the due date.

Your program should be well commented and documented, make sure the first few lines of your program contain your name, this course number, and the lab number.

Your comments should reflect your design and issues in your implementation.

Your design and implementation should address error conditions.

Please, Email ONLY to the class account (CloudAtUTA@gmail.com).

All work must be your own, you may reference web sites, books, or my code but You MUST site the references.