# Week 8 Notes

#### Warm up Activity:

- The visualization plot demonstrates the distribution of Pre-Silent, Silent, Boomers and the millennial from 1960 to 2018.
- The method use the data from 1960 to 2018 to plot each year's proportion of the three categories and make the plot looks continuous rather than individually presentation.
- Strength: the visualization plot will rapidly catch people's eyes since the shape of the distribution. We can see that the proportion of the Pre-Silent members of the congress gradually reduce by year.

Weakness: I think that this data visualization plot can be more interactive, such as adding the scroll tool to highlight the specific data of the year.

### Today's Topic:

- Evaluating Visualization Systems:
  - A. Evaluating Visualization –

Do we need to pay extra fee for the engine? And what kinds of visualization engine should we use once we get the choices? Does the functionality of the engine easy to use? How about the interface of the engine?

- i. Costs
  - 1. Monetary Cost for software and for some people to know the works
  - 2. Time Cost for setting up the software
  - 3. Cognitive Cost for learning and using the system
  - 4. Transmission Cost for sharing works
- ii. Functionality
- iii. Aesthetics –

Need to be trendy and not the old version of the data visualization We don't want to spend lots of times and money and then obtain the old fashion DV creation style

- B. License: Software
  - i. What to do
  - ii. Study accessibility
  - iii. Who to share
  - iv. Who to give (DV works)
  - v. Share or Share-alike check it on "choose an opensource license"
  - vi. Mostly we use MIT license

#### C. License: Data –

Remember to share the source of the data, most of the people do not tend to note it

- i. How to credit the data set
- ii. Accessibility to redistribute, remix and modify
- Markdown -> IDYLL
- Maps
  - A. The earth projections
    - i. Common Preservation (distortion will be minimized)-

Area

Shape

Distance

## B. Distortions –

The circles on the map show the relative size base on their locations LanbertCylindrical: Precice in the middle of the map and distorted when the latitude increase

## C. Casrtopy

Axes projections

Coordinate representations – geodetic distance base on the earth curve Shapes