

# LAB 6 FINAL PROJECT 2022: Visualization for Societal Trends

**Goal:** Make an interactive visualization using D3, record a brief video of your visualization, and write a brief explanation of your choices.

**Data:** We will provide datasets on Canvas (see end of this sheet), or you can find your own. If you choose to use your own dataset, the dataset should have a good number of variables and data points. You should get it pre-approved by the end of the business day on Monday, Nov. 21<sup>st</sup> (see 'Feedback').

**Team:** You can work in pairs. If you don't have a pair, please post in Piazza. Each team member will get the same score (unless we hear from you otherwise).

**Feedback:** Drop by and show your progress to get feedback on Monday, Nov. 21<sup>st</sup>. [Prof. Andris will have project chat hours on Monday, November 21<sup>st</sup>. Please register here.](#) Then put link on your calendar for the time you registered. *If you need the link quick, here it is:* <https://gatech.zoom.us/my/clioandris>

**To turn in on Canvas:** You will turn in three components: code written in JavaScript using D3 (zip file), a video (link in write up), and a brief write up.

**Preferred Deadline (put this one in your minds):** **Midnight, Tuesday, December 13, 2022.** This is the priority deadline, we'll be thrilled (wink wink) if you get it in by this time.

**Absolute, Final, Deadline:** Wednesday, December 14. 5:30 PM **THE DROPBOX WILL BE CLOSED AT 5:30.\*\***  
**So 5:31 is not available for you to submit a project.**

## COMPONENTS

### Component 1: Code (35 pts)

- Code does not need to be scalable or responsive, but it uses D3 as in your labs.
- Relatively clean and readable, with periodic comments wherever possible.
- Copying code between classmates is not acceptable.
- There should be a **readme** file with clear instructions on how to deploy the code.
- It is in a zip file.

### Component 2: Visualization (30 pts)

#### *Visualization quality*

- Should be interactive (User can change the vis and get "details on demand")
- Should have more than one view to examine the data (think of a filter or sorting, etc.)
- Visual appeal (don't use Christmas colors, labels are visible and sized correctly, etc.)
- Appropriate vis for the data and the insights (e.g. don't make a pie chart for things that don't add up to 100%).

### Component 3: Video (20 pts)

#### *Presentation Quality*

- Video (2-3 minutes)
- Shows the visualization
- Has clear narration
- Has a use case “Say my friend wants to find out...”
- Walks through the **insights** generated
- Create a link that your TAs and instructor can access (it does not need to be public to the world). If we cannot open the link, we won’t be able to grade the project. (You will paste it in the write up).

### Component 4: Write up (15 pts)

1-2 pages, single spaced (~600 words). Word doc or PDF is good.

1. Include the link to the video in your write up. (If you got permission to use outside data you *must* list your data source, and a table with the first 5 records so we can see the format.)

Answer these questions (**you can do bullet points, no paragraphs needed.**)

2. What is the title of your visualization?
3. Why did you choose this particular visualization? (For full points: link it to the concept, audience, questions about the data, and data type.)
4. Why did you choose the variables and the encodings? (For full points: link it to the data and course concepts, i.e., use class terminology and stuff you learned.)
5. Explain any other choices that you made. (Did you normalize the data? Did you cut out part of the data?)

No points will be given for any text that describes the design (we can see it from the demo). Points will be awarded for WHY you made these decisions / these choices.

## DATA SOURCES

You are welcome to get data from the links below, but ‘cleaned’ data will be provided on Canvas soon. (Don’t spend time cleaning your own data if you don’t want to!)

**Gun Violence:** <https://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data/>

**Transportation Fatalities:** <https://www.iihs.org/topics/fatality-statistics/detail/yearly-snapshot>

**European Union LGBT Survey:** <https://www.kaggle.com/datasets/ruslankl/european-union-lgbt-survey-2012>

**\*\*Why are we being so strict?** The exam slot is very close to the time that grades are due (this is just by happenstance---per Georgia Tech’s exam schedule). ***We may not get a chance to grade late projects.*** If you turn yours in by the preferred deadline, we will be able to enjoy your project.