

FINAL PROJECT

groups of two are OK

Purpose:

- apply what you have learned in class to a real-world problem
- must use an interactive + visual + analytics approach in a dashboard

Tasks:

- find a real dataset & challenge that interests you
- determine what aspects you would like to analyze and how

Possible data sources:

- use the same or different sources you used for your project

Deadlines:

- April 10: project proposal (4 pp.): background, problem, approach
- April 24: project prelim report: pictures of first implementation
- May 13: deadline for all deliverables (presentation on zoom)
 - poster slide with all highlights, youtube video, demo presentation, code

GIVE IT SOME PERSUASIVE BOOST

Tie your project to something people really care about (from [here](#))

- safety, from abuse, violence, coercion, threats, etc.
- health care
- nutrition, including variety and quantity in food and beverages
- housing
- employment/jobs
- wealth
- education, including accessibility, quality, quantity
- liberty/freedom/limits ... do things, have things, say things, move
- democracy, to participate in making policy and laws
- justice (laws/rules), including "fairness"
- mobility, to travel, move about, get to places, meet
- environment - beauty, art, air, water, weather, scenery, open space, quiet
- entertainment and community, for socializing and fun

Mine the web for data that tie with yours via some shared attribute

YOUR DASHBOARD

Use a good mix of standard and non-standard visualizations

- standard: bar chart, pie chart, line plot, scatter plot, scatterplot matrix
- non-standard: MDS, PCA, MCA, parallel coordinates, geo-map, area chart, sankey diagram, tree map, stream graph, etc.

Link all dashboard elements together

- fit all elements on a single screen without scrolling
- support interactive story telling with data
- interactive single-screen dashboard that uses linked brushing
- no scrolling, all elements must be visible at all times
- consider [this implementation](#) as an example for good interaction and storytelling

RESEARCH/APP PROJECTS

Alternative to the visual data science projects

Make a proposal for a project that:

- uses visual analytics within a wider application
- uses visual analytics to address a specific problem
- uses visualization for better data understanding
- creates a new visual analytics tool
- a new theory/algorithm/method for visual analytics