

CPSC 436V: Final Project Submission

Submission (Publish Release)

Tag a release of your project with tag version `v1.0-final` by **Apr 8, 11:59pm**.

Your release must contain the final implementation, a thumbnail of your vis (`thumbnail.png`), and a **PDF** with your writeup. We decided to use PDF instead of markdown because it is easier to include screenshots and figures. See further details below.

In addition, each team member must fill out this form with a project self-assessment by Apr 8, 11:59pm:

<https://forms.gle/wQeHZrDesrN9Vec67>

Reminder: In-person demo

You will need to give us a short demo of your final visualization project (approx. 5-8 minutes per group) after the final submission. Exact time slots will be announced.

Implementation

Continue to develop your visualization project by using your git team repository (don't forget, we'll be considering your commits when grading your project).

Turn your project proposal into an interactive web-based visualization with D3 that is ready to be deployed and that can be consumed by your intended audience.

- Make sure that your code is well-organized, easy to read, and contains code comments. Use separate files for visualization components, use functions to promote code reuse.
- Recall the minimum requirements (from proposal):
 - At least 3 different views / visualization components (e.g. 3 bar charts only count as 1 component).
 - At least 1 of these views must be an innovative view that is either (a) an extension of an existing visualization type, or (b) a novel visualization type.
 - Multiple views coordinated with linked highlighting. A click/hover/selection interaction within one view must trigger a change in a different view. At least 2 views need to be linked. Ideally, these views are linked bidirectionally.
 - At least 2 UI widgets that allow users to filter the data or update certain views interactively (e.g. dropdown, radio button, range slider, calendar).
 - Interactive tooltips are shown when users hover over marks, in at least one view.
- We don't allow custom backends (Node.js, Python, etc) and database systems, such as Postgres or MySQL, although they could facilitate more powerful applications. Your web application should be stand-alone and have an `index.html` file as

entry point. You can either store static (*maybe preprocessed*) datasets in your git repo or access live data through an API.

- **Refine the features you started earlier and implement the rest of the features you outlined in your proposal, paying close attention to usability.**
- **Your interface should be as self-documenting as possible, with appropriate labels for panes, axes, and widgets, a legend documenting the meaning of visual encodings, and a meaningful title and description for the app.** Apply what you have learned in the *color* foundation lectures and choose appropriate color schemes.

Write-up

In addition to the implementation, you must submit a final report as PDF.

Your final report should be a standalone document that fully describes your project.

You can build upon your write-ups from Milestones 1 and 2. The report should be at least 5 pages of text (~2500 words) without screenshots. Please include the following sections in this order:

1. Overview

- *Teaser image* (screenshot) of your visualization.
- Concise summary of your project (max. 250 words).

2. Data

- Description of your data in both domain-specific and abstract language (dataset type, scale/cardinality).
- Include a URL linking to the source of your data.
- Briefly describe your current data preprocessing pipeline, if there is one.

3. Goals and Tasks

- Description of your intended task(s) in both domain-specific and abstract language.

4. Visualization

- Describe the visualization interface that you have built. What views are there and what do they allow users to do? For each view, describe your visual encoding choices and include the rationale for your design choices. How can users interact with your project within each view, and how are views linked?
- Include screenshots.

5. Reflection

- Describe how your project has developed from your initial proposal, through your first submission, to your final product.
- How have your visualization goals changed?
- How have your technical goals changed?

- How realistic was your original proposal in terms of what is technically possible in D3?
- Was there anything you wanted to implement that you ultimately couldn't figure out how to do? If so, then what workarounds did you employ, or did you abandon your original idea?
- If you were to make the project again from scratch (or any other interactive visualization), what would you do differently?

6. Team Assessment

Briefly describe which team member worked on which tasks and their responsibilities throughout the project.

Thumbnail

We would like to publish all your amazing projects! Please create a thumbnail (size: **1280 x 720 px**) named `thumbnail.png` and add it to the root directory of your repository.