Final Project Design Process Book

Team: Basket

Project Title: Is the First Amendment Really Coming First?

Leader: Olivia Bryant (51311981, oliviabryant@college.harvard.edu)
Group Member 1: Emily Shoemaker (50988171, emilyshoemaker@college.harvard.edu)

Last Edits:

11/07/2018 4 pm: Added week 0 section, questions we want to answer.
11/11/2018 7pm: Added Week 1 more detailed project plan
11/12/2018: Updated Project Plan timeline and features list
11/18/2018: Updated Process Book with prototype process information

Week 0

Abstract:

There has been a lot of discussion across the political spectrum about free speech and not a lot of data. We want to use data to explore the real situation surrounding free speech and the first amendment. Are college students raging against the constitution? Are they trying to prevent everyone from speaking? Are they betraying the free speech movement of their parents? We want to use data to see how bad the situation around free speech is, if it is even as bad as portrayed online. We aim to take data to draw objective and evidence based conclusions that will add to the online discussion around free speech. Our goal is to take away the dramatic hysteria and present the data in a clear and engaging way. We want to show the objective data surrounding free speech and craft a clear story about its true state in modern society.

Our data is predominantly taken from surveys and research papers from credible researchers. We have put them together in a google doc: https://docs.google.com/document/d/1QTMtLLT7IHMnR5TG7QAe0LaMv_ooQ74fVeJtykRal9M/edit?usp=sharing

Week 1

Questions:

- Is free speech better protected at public universities or private universities? -> private universities have different rights to shut down speech under the constitution.
- Are Ivy Leagues/higher ranking colleges better at protecting free speech?
- Does the type of the speech matter?
- How many disinvitation requests are made and how many are successful?
- What side of the political aisle are pushing more for free speech shutdowns?
- Has the general attitude towards free speech changed over the last few years?
- Does what political party a state aligns with affect free speech at schools in that state?
- Do gender/age/beliefs/etc. affect whether a speaker is protested against?

Project Plan

By: Olivia Bryant and Emily Shoemaker

Goals and Tasks

Our main goal with this project is to easily display data relating to freedom of speech in the United States. We want to provide objective data on this divisive issue, to help people understand the state of free speech in the US. We also want to see for ourselves whether the state of free speech has been exaggerated in online articles, or if it truly is suffering at most US universities.

A secondary goal of this project is to make people aware of the importance of free speech and to make people recognize that it isn't being upheld across the US in different situations. We also want people to understand that it is not a single party issue, especially in our disinvited speakers visualization. We tend to hear about conservative speakers being disinvited to speak at liberal universities, but we want to show that the problem is across all universities. We also want to show that universal attitudes towards free speech issues have changed over time, and we want people to recognize that and decide if they believe it to have changed for the better.

There are a few tasks we want our visualizations to do. For our map of colleges visualization, we want people to be able to click on each school to see its name, whether it is public or private, and whether it is an Ivy league, and zoom in to different areas of the US map. An optional feature of this map would be to also overlay the political leaning of each state in the last election, so we could see how those data match up, but we will only do this if time permits it. Being able to click on each school to see its name will allow the map to look initially less cluttered, but give the user the ability to see if certain schools are more or less free speech friendly.

On our disinvited speakers visualization, we want to add a few ways to filter the data. We want to filter by gender of the speaker, school of the speaker, and what topics made them controversial. We think this filtering would allow people to see trends in the shut down of free speech and make our point impactful- that this issue affects people from many different groups. We also want to add tooltips so you can see who each speaker is and where they were speaker when you hover over each person, making it impactful to see who has been disinvited to speak. This would also allow the user to do further research on those speakers themselves.

On our line graph visualization, we also want to add a number of features. Since we found data answering different questions, we will have to allow filtering by question so the data is more seeable. We will also allow filtering by age, race, gender, and political affiliation. We want to show people that while there are general trends in different populations regarding their views towards free speech, no group is exempt from believing in free speech.

We also want to give an overall view of the history of free speech in America. We want to make a visualization that is a timeline with a multimedia overview of the free

speech movements on college campuses. It will feature images, text and sound clips. The y-axis of the timeline will show how pro-free speech or anti-free speech colleges were at that point/around the time of that event. Adding this timeline will put the rest of the information in the data visualization into context.

These tasks all support our goals because they help people realize the issue of infringement on free speech is universal. It affects people from all over the US and on both sides of the political spectrum, and is something we should all care about.

Description of Data

We have 3 main data sets we plan to use. The first comes from the GSS, or general social survey. This group collects data about the views and attitudes of people around the United States. Since it has been collecting data for a long time, sometimes trends can be seen spanning more than 80 years. Additionally, their data comes from a wide variety of respondents representing the United States. More about the survey itself can be found here: http://gss.norc.org/About-The-GSS . The data from those surveys that we plan to use is centered on free speech. We have data about responses to questions such as "Should a communist book be removed from a public library?", and the age/race/political affiliation of the respondents.

The next data set we intend to use comes from FIRE, the foundation for individual rights in education. FIRE collects data about first amendment rights on different college campuses and holds data about how well their policies uphold freedom of speech. We found a dataset of controversial speakers, whether they were turned away from different college campuses, which colleges those were, why the speaker was controversial, and whether the disinvitation came from the right or left of the speaker.

We are using another database from FIRE for our map as well. They have hundreds of colleges around the US ranked as red, yellow, or green for bad to good policies on free speech. We can use these rankings to create a map of the United States and free speech in schools, and compare those to political leanings of the states the schools are in as well.
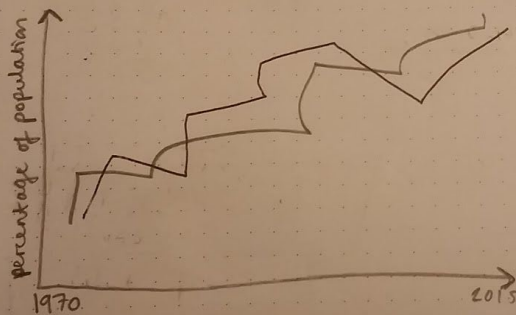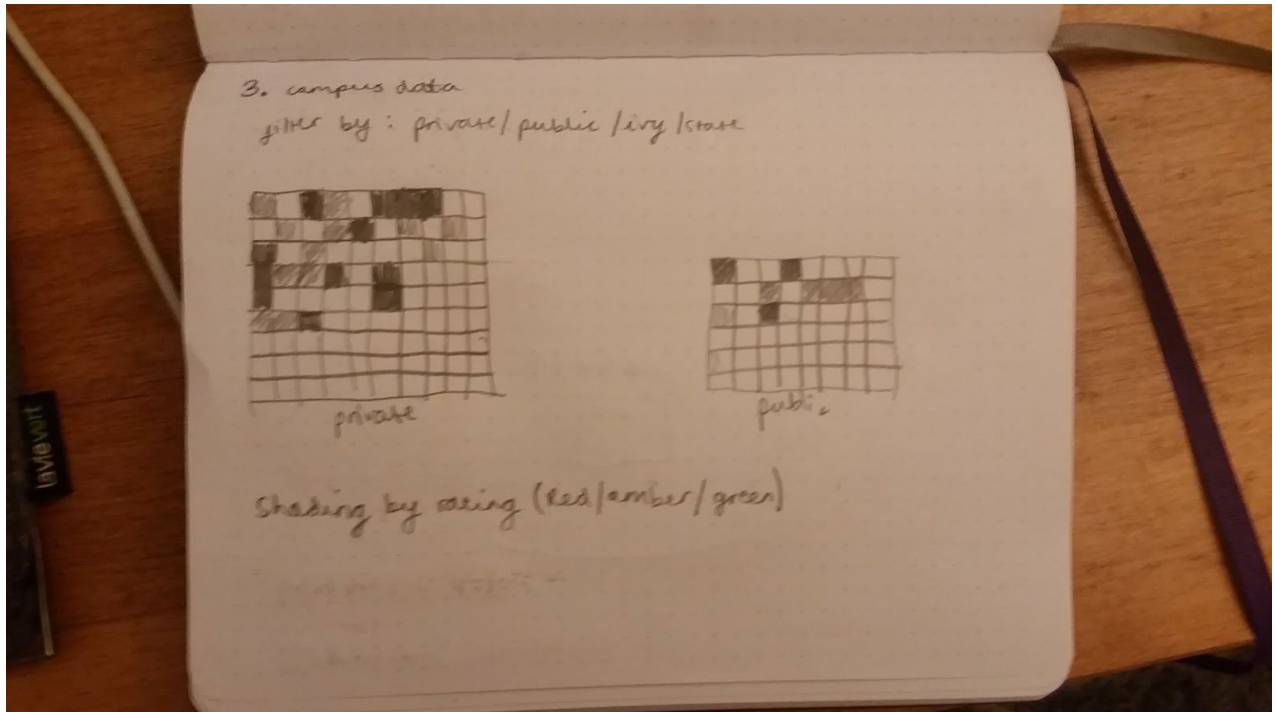
Sketches

(1) disinvitation data

number

Year

Categories:
→ success
→ political allegiance of requestor
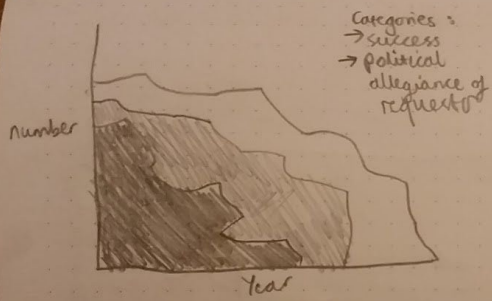
→ change when filtered, move to groupings
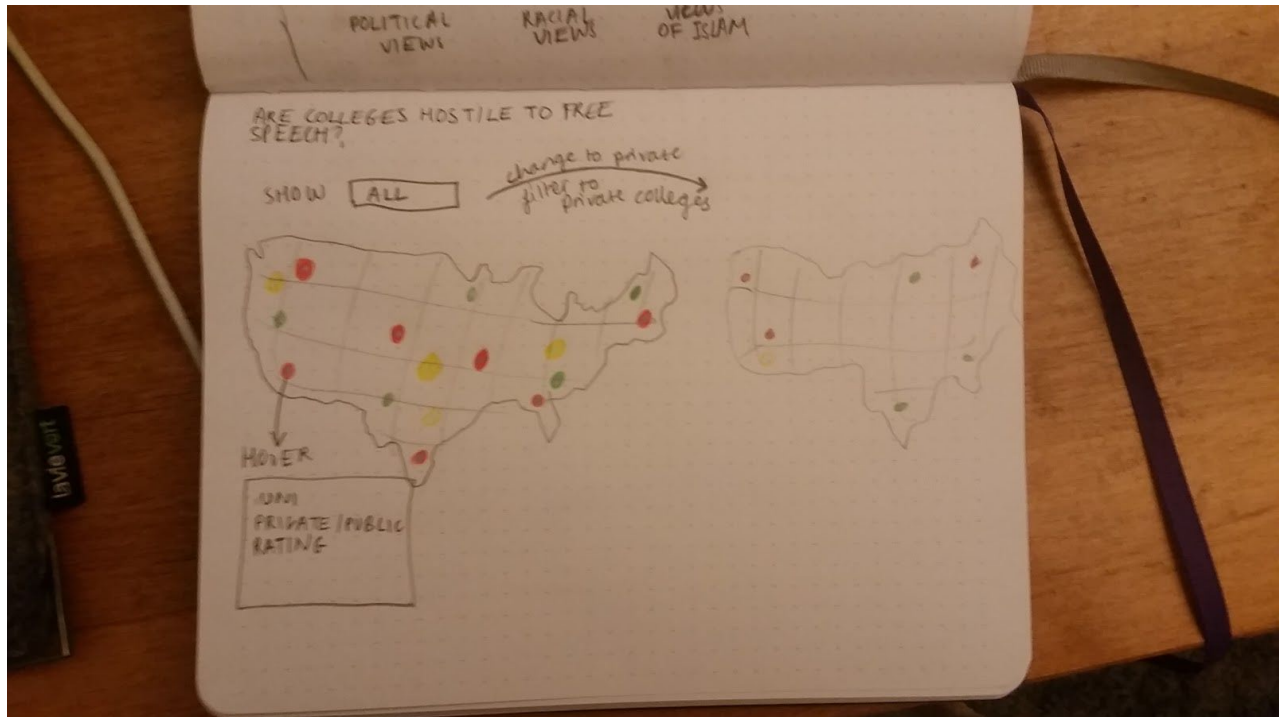
YES

No

2. political attitudes data

filter by: [QUESTION] and [IDENTITY]

Percentage of population

1970

2015

Storyboard

POLITICAL VIEWS   RACIAL VIEWS   VIEWS OF ISLAM

ARE COLLEGES HOSTILE TO FREE SPEECH?

SHOW [ALL]   change to private, filter to private colleges

HOVER

ALUMNI
PRIVATE / PUBLIC
RATING

Webpage

IS THE FIRST AMENDMENT COMING FIRST?

" THE FIRST AMENDMENT "

IMG: THE FOUNDING FATHERS

TEXT: explain relevance of data visualization

ANTI

TEXT: explain relevance of
data visualization

IMG

SOUND
OF
SPEECHES

GIF

TEXT

PRO

1960
BERKELEY

1990

PRESENT

SHOULD: Person be able to context ?

Filter by: AGE (sex/age/highest degree) RESPONSE

Percent of Population

1970   1975   1980   2000   2015

TEXT: changes in
attitude

ARE COLLEGES HOSTILE TO FREE SPEECH?

(public/ Ivy) [PRIVATE] 2 [___] [___]

NAME
PRIVATE|PUBLIC
FREE SPEECH

TEXT

FIRE RATING
Red = hostile
Amber = somewhat hostile
Green = hands off approach

NEWS ARTICLE

↓

DISINVITATIONS

TEXT

FILTER BY: [SUCCESS] (politics of requester, reason, success)

YES

NO
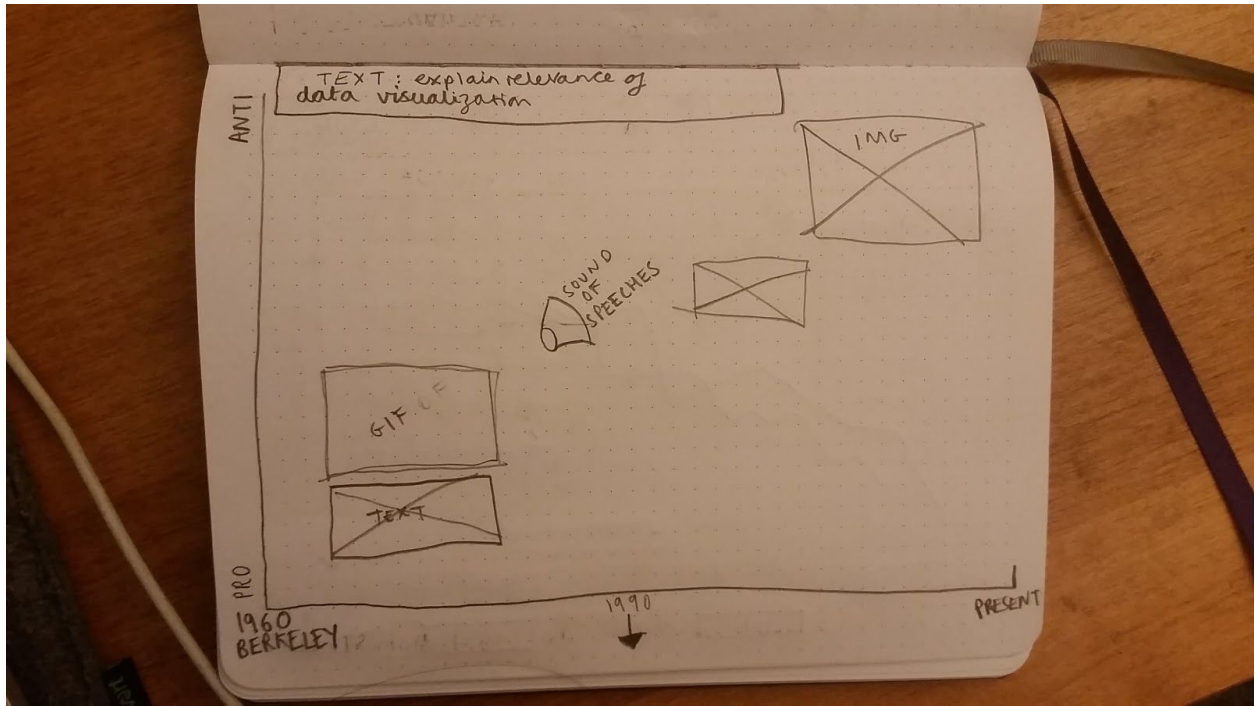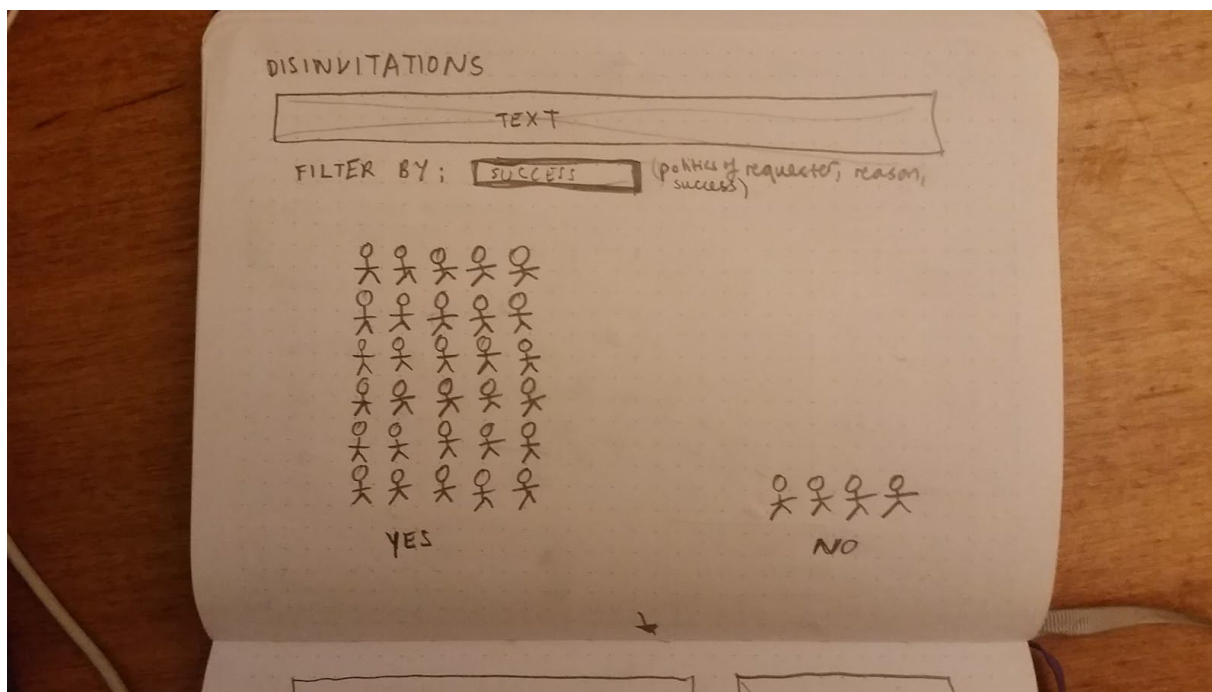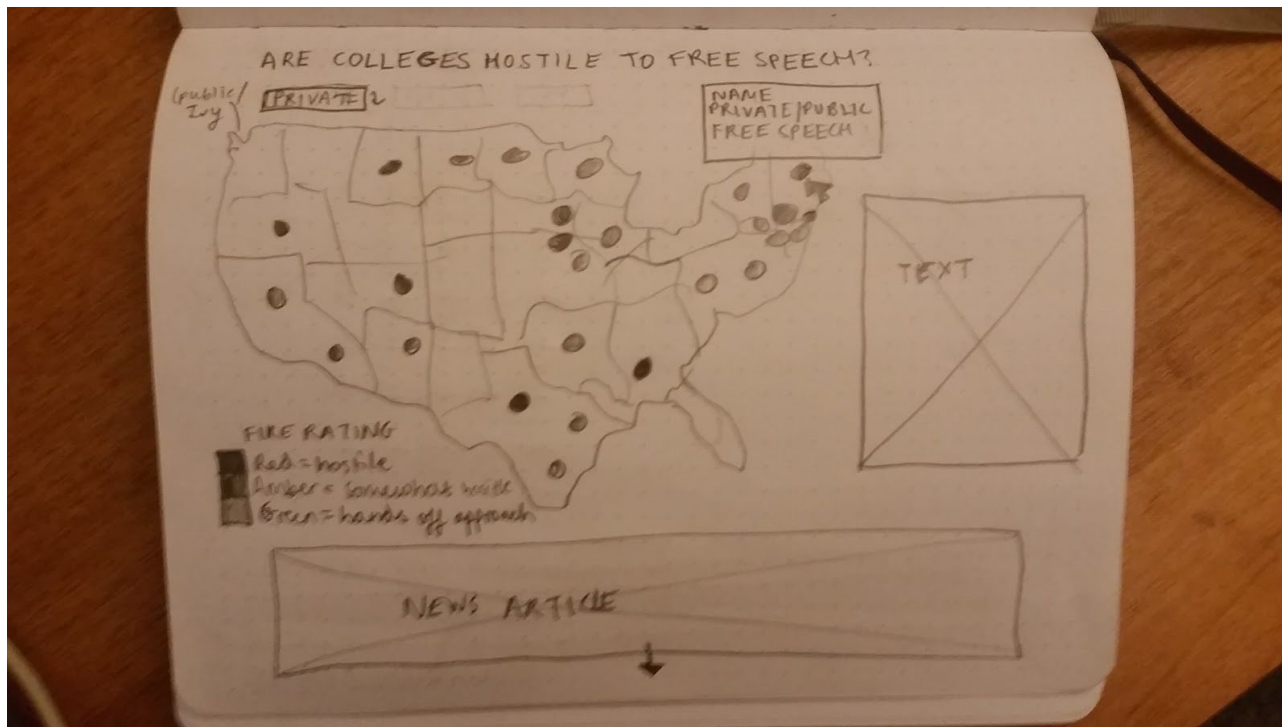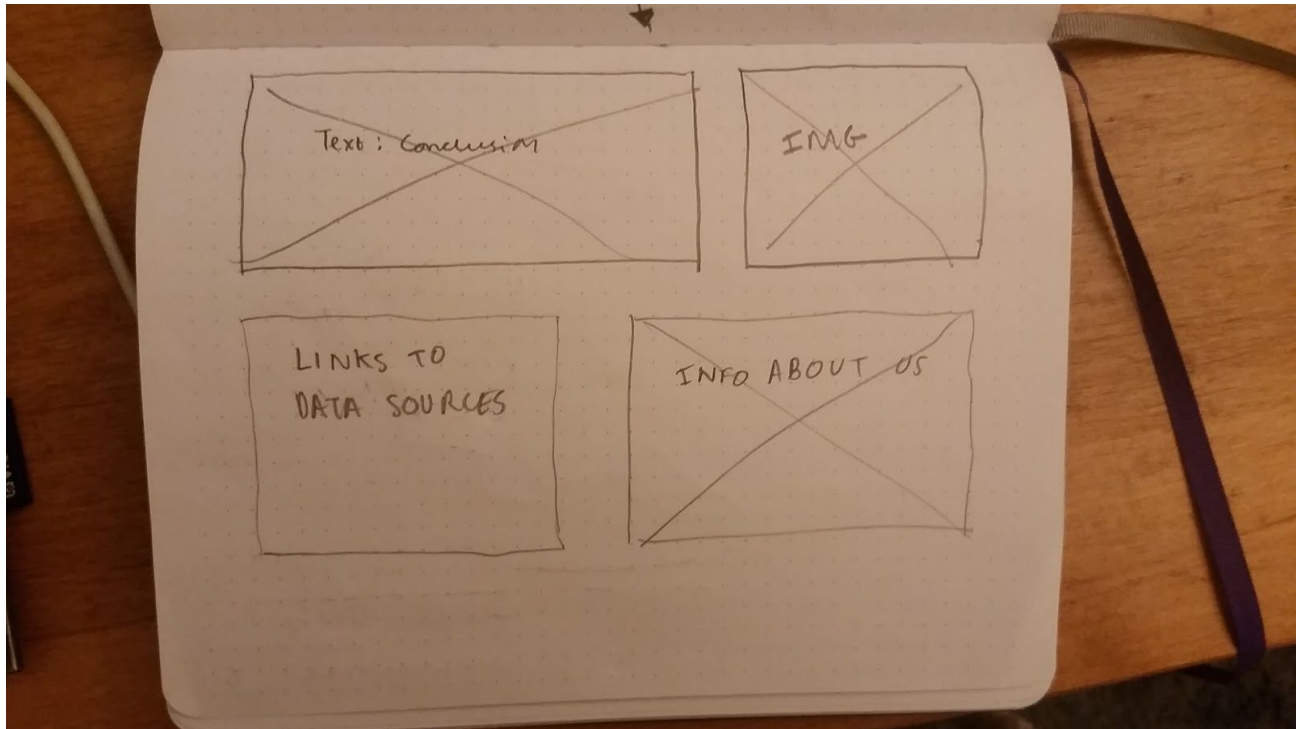
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Timeline

11/11/18: Finish Project Plan

11/18/18: Finish Prototype V1

- 11/13/18: Emily and Olivia will finish cleaning and compiling data
- 11/14/18: Emily will complete initial line chart without filtering, Olivia will begin work on innovative timeline
- 11/18/18: Emily will draft map visualization, Olivia will begin making website with placeholders

11/25/18: Finish Prototype V2

- 11/21/18: Emily will update line chart and map, Olivia will begin disinvited speakers visualization
- 11/25/18: Emily will update website with more quotes/storytelling, Olivia will finish innovative timeline and disinvited speakers visualization

12/2/18: Final version and video

- 11/28/18: Emily will make last updates to visualizations, Olivia will finish website design and storytelling
- 12/1/18: Make video

Feature List

Must haves:

- Map visualization for the college free speech ratings.
- Line chart visualization based on the attitudes towards free speech over time and by different types of people.
- Timeline of free speech events
- Disinvited speakers visualization with moving people who get into groups depending on what we are filtering by (e.g. the political allegiance of the requester, whether the disinvitation occurred, what was 'wrong' with their speech).
- First Amendment - some background to add to storytelling. We want to establish what the First Amendment is and how it has been seen on college campuses over the years.

Good to have
- Filtering for line graph visualization
- Movement in disinvited speakers visualization
- Free speech quotes

Optional
- Sound clips in timeline - interviews with people at the free speech movements.
- Images of speakers to go with visualization
- Add zoom to map
- Add state party leanings toggle to map

Team Roles
- Emily: Make 2 visualizations, add quotes, create initial web page layout.
- Olivia: Clean data, make 1 visualization, create free speech timeline.

Prototype V1

By: Emily and Olivia

Data Scraping

- Disinvitation database: We took this database from FIRE. It was almost ready to be used, but we had to manually edit out a few spelling mistakes. The database has been generated by users submitting their own experiences with disinvitation attempts so there were some input errors.
- FIRE schools database: We manually copied schools, ratings, and longitude and latitude into a spreadsheet.

- GSS attitudes data: After some difficult with trying to convert the .sav data to a csv, we realized we could make an account and download the questions and criteria we actually wanted to look for to a csv file, which meant that the database we were dealing with was a lot smaller and tidier.

Filtering/Interactivity storyboards
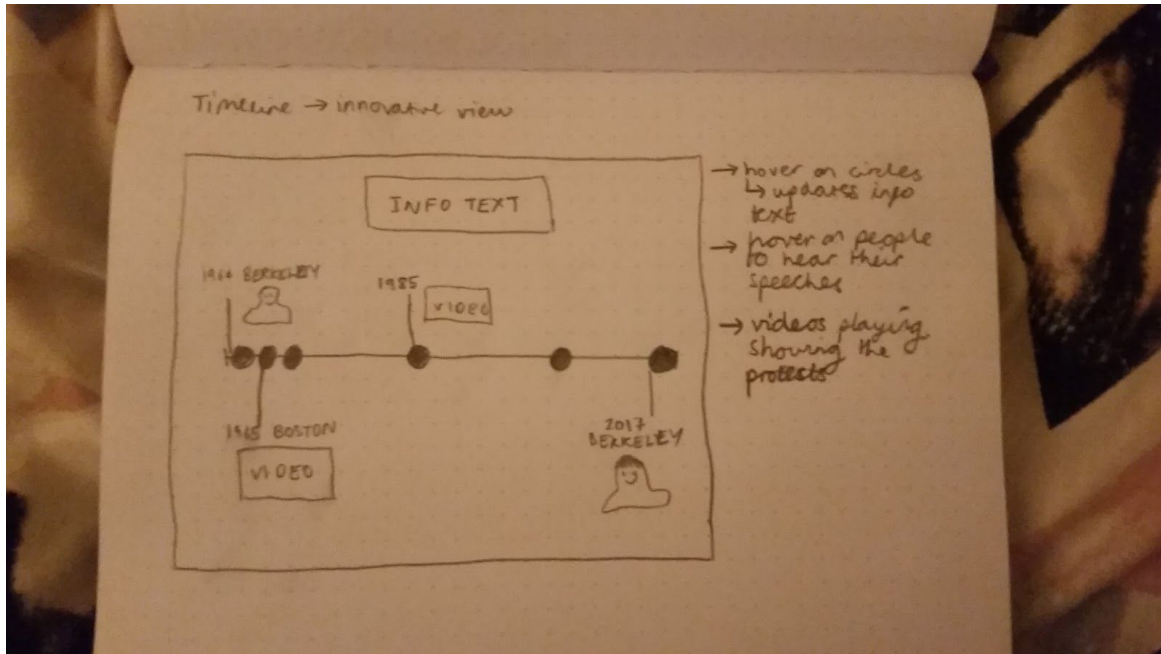
For our innovative design, we want to create a multimedia timeline with sound clips from key players in the free speech movement and videos from the protests. Information about the protest/movement can be found by hovering over the circles and it will update the information box. Prior to anything being hovered over, the information box will contain an explanation of how to navigate the timeline and an overall comment about the importance of college campuses in the free speech movements.

The line graph for the attitudes data already has filtering for the person who's speech we are considering. We will then filter by age, gender, political affiliation and highest degree obtained.

We hope to add zooming and panning functionality for the map, but this is in the 'would be nice to have categories.

For the disinvitation request visualization, there will be filtering options to group the 'people' by the success of the request, the political leaning of the requester, and the reason for the request.

For sketches of the interactivity for the line graph, the map, and the grouping visualization, see the interactive storyboard uploaded as part of the detailed project proposal. We have not changed our plan since then as the data wrangling and cleaning was successful and we believe that our original interactivity plans are possible and feasible to implement.

Storytelling plan

- We will start with an opening explanation of the First Amendment and why it has been a topic of conversation on college campuses recently.
- We will then look at the history of free speech movements on college campuses with our interactive timeline. We wanted to incorporate types of media into it that we have not used before - sound and video. The timeline has circles on it for each of the campus free speech events we are focusing on. When you hover on the circles, it updates the information text to tell the user about that particular event. The first three circles are already implemented to show how this will work. Any people on the timeline play that person's speech when hovered over. So far I have implemented this for Mario Savio's famous speech in 1964 as part of the Free Speech Movement at Berkeley. We also have videos. We have implemented one already showing the anti-Vietnam war protests in Boston in 1965. To dos:
  - Add more information regarding the rest of the free speech events.
  - Add labels and lines coming off the timeline to show which free speech events are available. We will have some going above the axis and some below to increase spacing between the events.
  - Add similar multimedia videos/images/sound clips as already implemented for the other free speech movements.
- We have already implemented most of the line graph visualization. We still need to add functionality to filter it by age, gender, highest college degree and political affiliation. Next to this we will add an explanation of the data and some suggestions as to why some attitudes have changed. We will also point out key trends.
- We will include a map of the FIRE ratings for colleges in the US. Next to this, we will have an explanation of what these ratings mean, and again, comment on key findings, such as the difference between private and public colleges. The map's point will be filtered by the type of the data and whether they are Ivy League or not. As an added extra, we hope to make the map zoomable.

- We will then have a large visualization looking at disinvitation requests provided by FIRE. We want to implement something that sorts the people into categories dependent on the success of the request, the political leanings of the requester.
- We will end on a conclusion that will provide some links to further reading and an overall look at the main takeaways from the visual article. Next to it we will include some photos of free speech on campus.
- In the footer, we will include our data sources and links to the media we used throughout the page.

Prototype V2

Olivia Bryant and Emily Shoemaker

Wednesday 21st November

- After lab 10, we decided it would be a good idea, and save time, to use Leaflet for the map of schools. Emily created the map and we filter by Ivy league status and private/public colleges. The data we had gave the schools one of three ratings - red, yellow, green - but we decided to change the colour scheme because those colours looked quite unsightly on the map. Red was bad, white neutral, and blue is good. Given that we have a lot of filtering throughout our website, we didn't want to overwhelm the reader with buttons that distracted the user from the content. We added hoverable buttons and placed them inside the text so that they filter the schools on the map throughout the story.
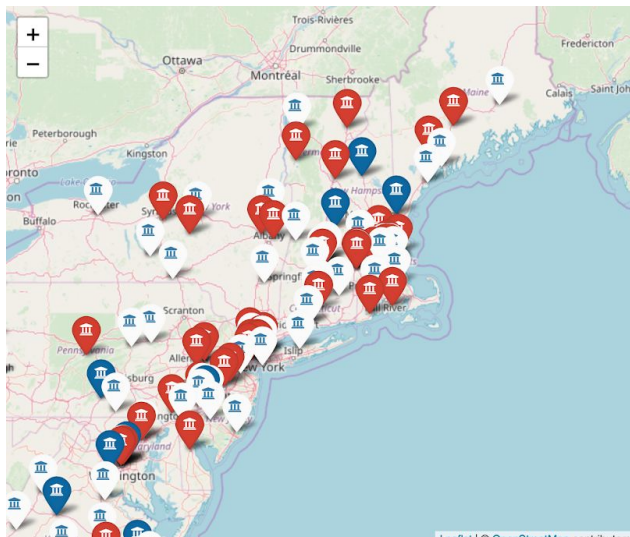
Are college administrators protecting free speech?

The Foundation for Individual Rights in Education ranks colleges according to how the college's administrators allow free speech on campus. A college ranked red has one or more policies that substantially and clearly restrict free speech. An example of this would be having a blanket ban on 'verbal abuse'. A college colored white college has one or more policies that inhibit free speech, but on a much smaller scope, like banning posters that mention drink or drugs. Blue colleges have a hands off approach to free speech. However, this does not mean the college encourages free speech or that its students support free speech.

- Overall, only 10% of colleges have a blue ranking (with 58% ranking as white and 32% as red).
- Only one Ivy League college, the University of Pennsylvania, was ranked blue. Harvard was ranked red.
- Private colleges were twice as likely to be ranked red than public colleges - 50.5% versus 24.7%. This may be because private colleges have a right to restrict speech but since public colleges receive federal funding, they are held to a higher standard when protecting the Constitution.

- Olivia worked more on the header design to make it more eye-catching and modern. We decided to implement a red, white, and blue colour scheme to the webpage, in keeping

Friday 23rd November

- Olivia finished up with the timeline. It was difficult to find video/audio clips for all of the events, and it may have been too much anyway, so three of the events just have photographs. The design is it is something that the user can fleetingly react with so there are autoplaying videos that scale up and audio plays when they are hovered over. They loop over. The concept is that users do not consume every single thing about these events, but get a general gist for that state of free speech at that point in time. You can hover on the photos of Mario Savio and Milo are hoverable and you can hear interviews/speeches with them. If you hover over any of the events (either the titles or the media), information is displayed above the timeline. There was a discussion about which scale to use but an ordinal scale had to be used, despite not being traditional for time scales, because the media was large and the events were closely compacted in the 1960s. An ordinal scale ensured that they were adequately spaced out along the timeline. The items on the timeline had to be manually added for the same reason which meant it was quite time consuming, but it does use very different types of media to what

In response to a no-platforming in 2016, right-wing provocateur Milo Yiannopoulos worked with a conservative group on the UC Berkeley campus to organize a 'Free Speech Week', a 4 day event aiming at promoting free speech and tolerance of conservative ideas on campus. It was estimated that security for the event would have cost over $100,000 for the four days but as the counter-protests were so violent, the event was cancelled less than 24 hours before the event.
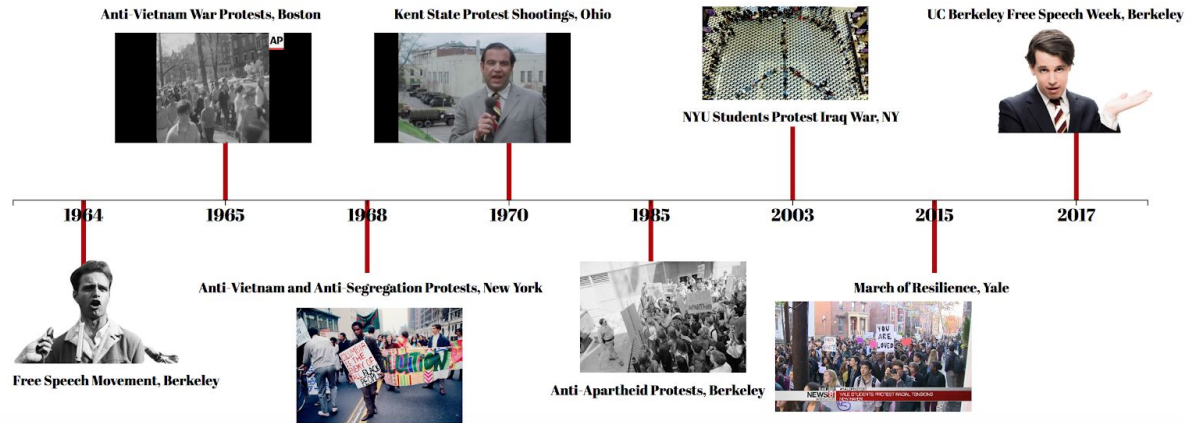
- Emily finished up with the line chart. There were many difficulties with having both transitions and the filtering which took some time to resolve. We decided to filter by age, political affiliation (which required some grouping of options from the survey), gender, and degree. Similarly to the map, we placed the filters inside the text so the user could filter and see the results as they read along. In the text we included general findings related to each of those filtering options.
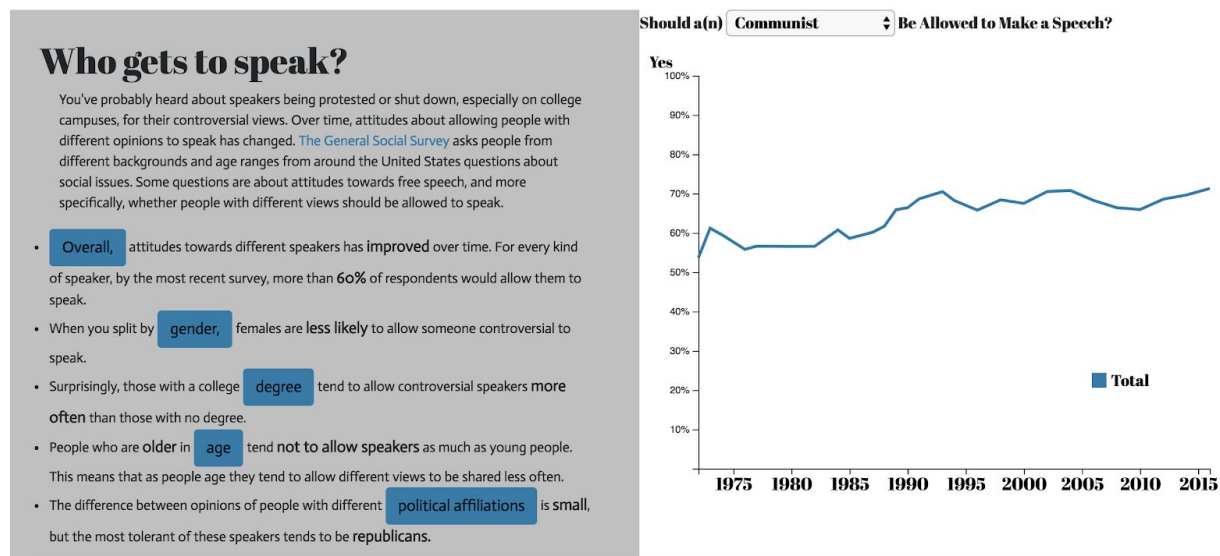
- Emily started work on the disinvited speakers, allowing it to be filtered by how successful the request was and colour it according to the FIRE traffic light system.

Saturday 24th November

- Olivia found an issue with the timeline. Due to Google security, autoplay is blocked unless the user interacts with the webpage beforehand so we needed to come up with a way of making the user interact with the screen beforehand. Before the timeline, Olivia added some background information about the First Amendment, she also added a quiz to go with it. This would provide both information and get past the Google's security issue.

What is the First Amendment?

"Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

In the summer of 1787, politicians gathered in Philadelphia to draft a new Constitution. Part of this new Constitution would be the Bill of Rights, a bill that would safeguard basic civil rights. This Bill consisted of 10 rights and became the first ten amendments to the US Constitution. The Bill of Rights was introduced to Congress in 1789 and adopted on December 15th, 1791.

The First Amendment protects the freedoms of speech, assembly, religion, petition, and the press. This does not mean there are not reasonable restrictions. Speech provoking action that may directly harm people, such as making specific threats or shouting fire in a theatre, is not protected. The press cannot make false statements, known as libel. Freedom of Religion means that states cannot have a state religion nor can they promote one religion above any others. Right to Assembly and Petition can cover anything from signing a petition to filing a lawsuit against the government.

You are banned from a social media platform.	Yes No
You are fired from your job for something you said in public or online.	Yes No
A private university cancels a visit from a controversial speaker.	Yes No
A public university cancels a visit from a controversial speaker.	Yes No
You are arrested for saying something critical of the government.	Yes No
Your post online is deleted.	Yes No
You are fined by your company for not standing for the national anthem.	Yes No

- Emily made more progress on the disinvited speakers visualization. She added tooltips and labels beneath the groupings.

Sunday 25th November

- Olivia finished storytelling on the opening page with the quiz and the conclusion.
- Emily tidied up the disinvited speakers visualization.
- Both began tidying up small parts of the webpage

Ideal to dos before final submission

We are very close to being done but there are a couple of things we would like to work on once we have feedback:

- Adding a 'from the left'/'from the right' filtering option to the disinvited speakers grouping visualization. This is an ideal as we do already have a graph that shows political affiliation and its relation to attitudes to free speech.

- Fix the strange border on the side of the disinvited speakers visualization and the bar at the bottom (that will contain links, see below). We cannot work out what is causing that.
- Add links to the data and sources into the footer at the bottom (we wanted to wait until we were happy with the rest and everything else was set before doing this.
- Adapt some of the padding around text and visualizations.

NOTE: as Prof Pfister said we did not have to make this visualization perfectly responsive, we built it for the screen size of a 13 inch Macbook Pro. (1280 pixels x 800 pixels)

Final Edits

- The timeline went through another two iterations before we decided to settle for something very very simple. Originally, Olivia planned to stack events near the same time on top of each other. However, we decided that this was a rather cluttered look and Nam suggested we look at each event one at a time. There was a thought to add a button that would iterate through the events automatically and play the videos/audio but given that not all of the events had video, and some of the videos were quite long, we decided that this would probably not actually be used at all. Instead, the user would probably rather travel through the timeline at their own pace.
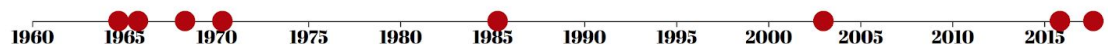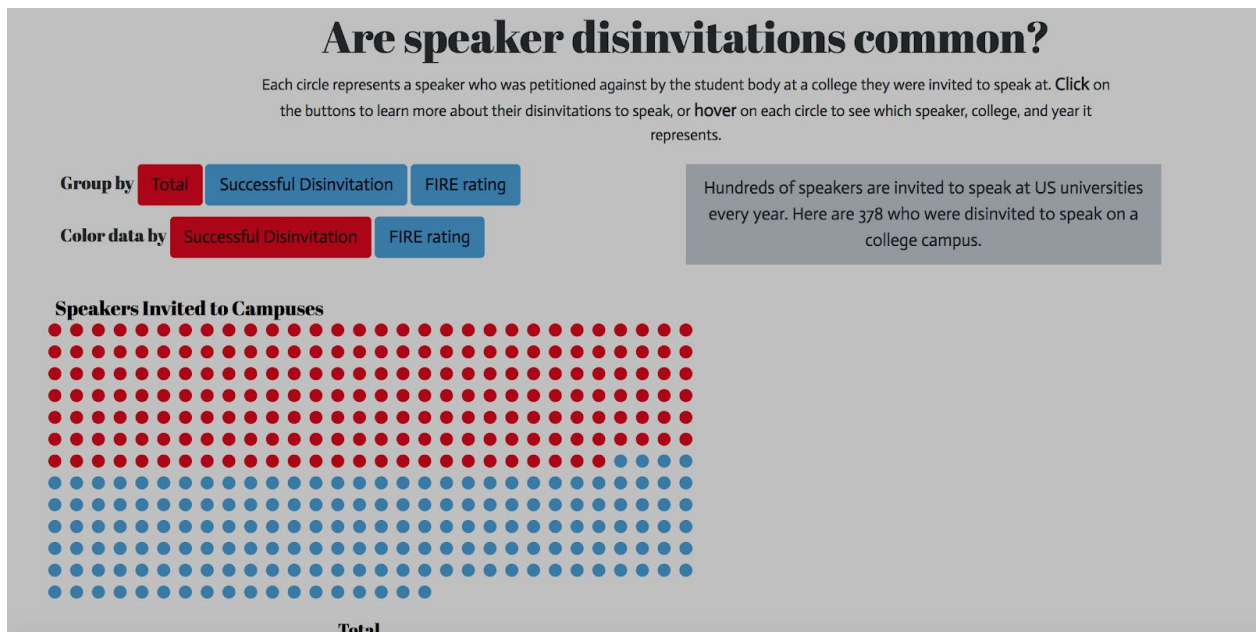

The Free Speech Movement, Berkeley

The Free Speech Movement, was a large-scale student protest on the campus of University of California, Berkeley. Lead by Mario Savio, it was started in response to an administrative decision to ban political activism on campus. On December 2nd 1964, around 4000 students sat in Sproul Hall as a last resort to negotiate with administrators. Over 800 students were arrested and it took police officers over 12 hours to clear the hallways. The Free Speech Movement is seen as the birthplace of student activism on campuses. It has been critiqued for the methodology, however, as it prevented other students who did not want to participate in the sit-ins and protests from receiving an education.

- We went through the website and fixed padding issues. Again this is optimised for a 1280x800 screen.
- Emily changed the colouring issues on the disinvitation request visualization so that colours were stacked together, rather than being in time order, which is the order in

which   the   data   is   processed.

Are speaker disinvitations common?

Each circle represents a speaker who was petitioned against by the student body at a college they were invited to speak at. **Click** on the buttons to learn more about their disinvitations to speak, or **hover** on each circle to see which speaker, college, and year it represents.

Group by | Total | Successful Disinvitation | FIRE rating

Color data by | Successful Disinvitation | FIRE rating

Hundreds of speakers are invited to speak at US universities every year. Here are 378 who were disinvited to speak on a college campus.

Speakers Invited to Campuses

Total

- We added a key to the map so that somebody less interested in reading what was going on but still wanted to understand what was happening on the map.

Restricting Speech Codes   Neutral Speech Codes   Good Speech Codes

- We developed the conclusion further to include some basic and simple suggestions of what we can do about the free speech issue on college campuses. We then added links to the bottom of the page to our GitHub (where all of the code and data can be found) and our process book, as well as creating the screencast.

What we are happy with

- We believe the story is quite cohesive throughout and everything seems relevant and in a good order.
- We like the fact we used a lot of different types of media - video, text, line graphs, geographical data, iconography and grouping - to use a wider range of the marks and channels discussed in lecture.
- We like the colour scheme and think it is an effective way to convey the information throughout, incorporating it into our visualizations (e.g. the different characteristics are shown with red, blue, grey etc on the line graph, the maps' markers at red/white/blue instead of red/yellow/green as we were given).

What we would change

- It would have been nice in class to learn how to make these responsive as we had different screen sizes and it was quite difficult to make everything look ideal on both which is why we have had to specify the size of the screen.
- For the timeline idea, it would be have been good if we could have found historical data on protest participation. With a simple Google search, we couldn't find much, but if we had the time, we could contact specific organizations that collect data on protest participation/arrests that may give us the data. We wanted to focus on qualitative data with that visualization anyway but it would have been interesting to incorporate this into a quantitative visualization too, combining the two data types.

Olivia's Review of Project

I am overall very happy with the result of the final project. I worked well with Emily and we got a lot done together, delegating tasks as appropriate. I also think we did a good job at staying in contact with Nam and incorporating feedback throughout the project. I would have liked to have to knowledge to make this responsive, but it didn't work out. My vision of the timeline never came to fruition and required a lot of iterations just to go back to a far simpler design, but I think I learned a lot from that process. Sometimes simple is best and conveys the information more clearly!

Emily's Review of Project

This was a really fun project to work on and I enjoyed learning more about the first amendment on college campuses. We worked well together, but also had a lot of fun together. The most frustrating part for me was working on the transitions for the line chart. It was such a simple thing, yet took me so much time to figure out. Luckily Nam helped out over email, and sitting down and thinking about what each line of code did was helpful for my understanding of the whole project. The part I am most proud of is the disinvitation request visualization as it was novel and allowed me to really understand the data. It was great fun and encouraging to know that after this class, I could build other things that interested me.

Live Website:

https://emilyshoe.github.io/firstamendment/

Github Repository:

https://github.com/EmilyShoe/firstamendment

Screencast:

https://www.youtube.com/watch?v=vNvRCPCGx2A&t=1s

optimised for 1280 x 800 screen