

Welcome to

Asia American Studies-191A

Web Development and GIS

for Social Change

Critical Data for Transforming Civil Society



Join at
slido.com
#ucla

Albert S. Kochaphum
Week 1 | April 4th, 2023



Join at
slido.com
#ucla

How are you feeling?

Excellent =P

Nervous

Amazing

Good

Alright

overwhelmed already 😅

tired but excited for the class

Calm

Headempty

Great

hungry

tired

Splendid

coding 😄 😄 11

excited



Join at
slido.com
#ucla

What did you think of the pre-course survey?

Just right



Needs more puns.



What pre-course survey?



Too long



Too short



Web Development and GIS for Social Change

Welcome



- Welcome**
- Introductions**
- Lecture**
- Wrap-up**

Today's Agenda



Web Development and GIS for Social Change

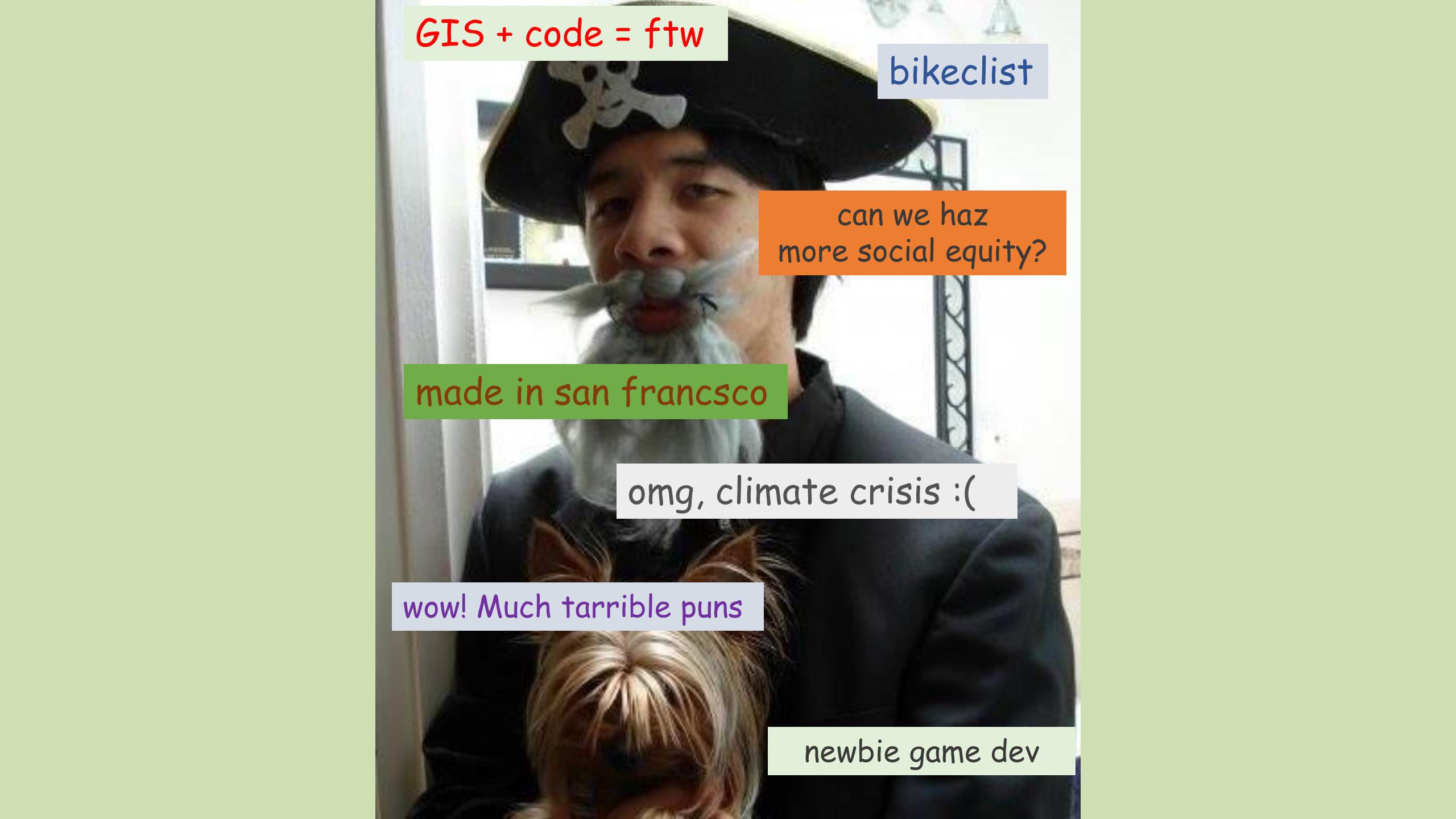
Introductions



Welcome
Introductions
Lecture
Wrap-up



About me



GIS + code = ftw

bikeclist

can we haz
more social equity?

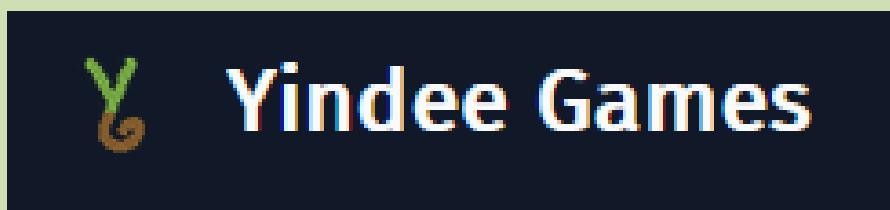
made in san francisco

omg, climate crisis :(

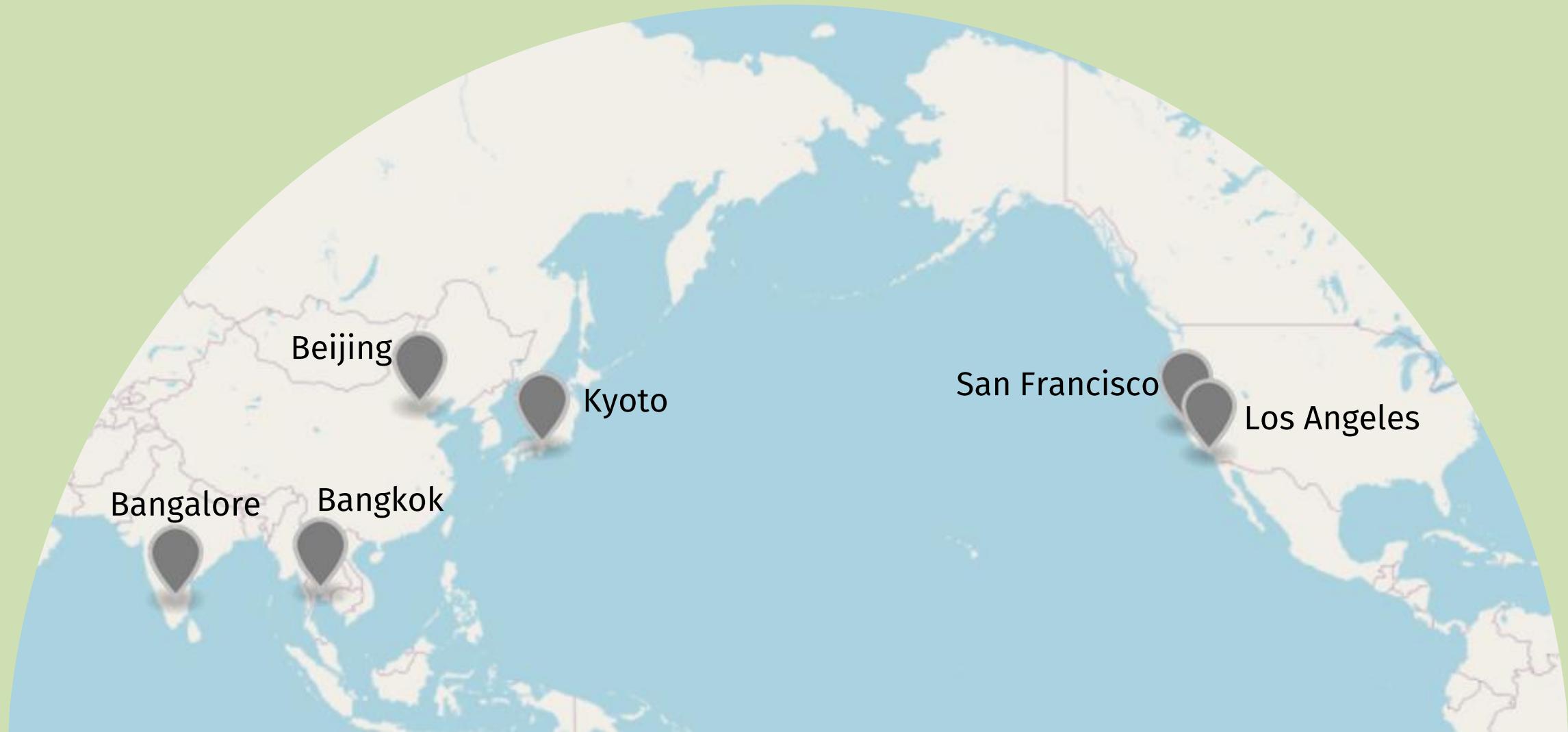
wow! Much tarrible puns

newbie game dev

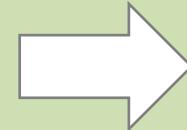
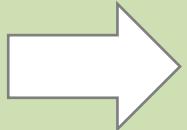
About me person**AL**ly



About me person**AL**ly



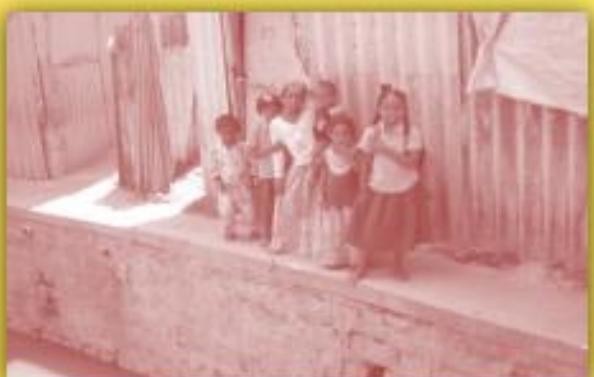
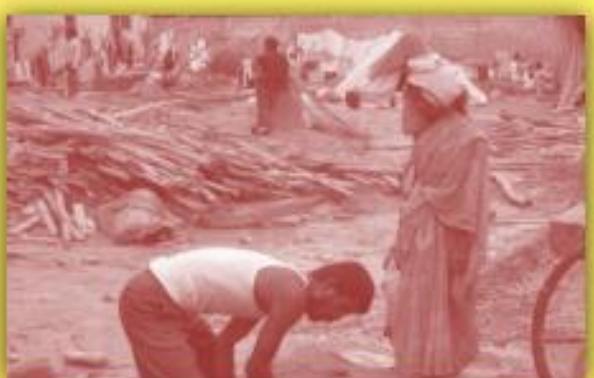
About me “profession**AL**ly”



wHAT that really means is.....



I wear many **HATs**









Jane Map

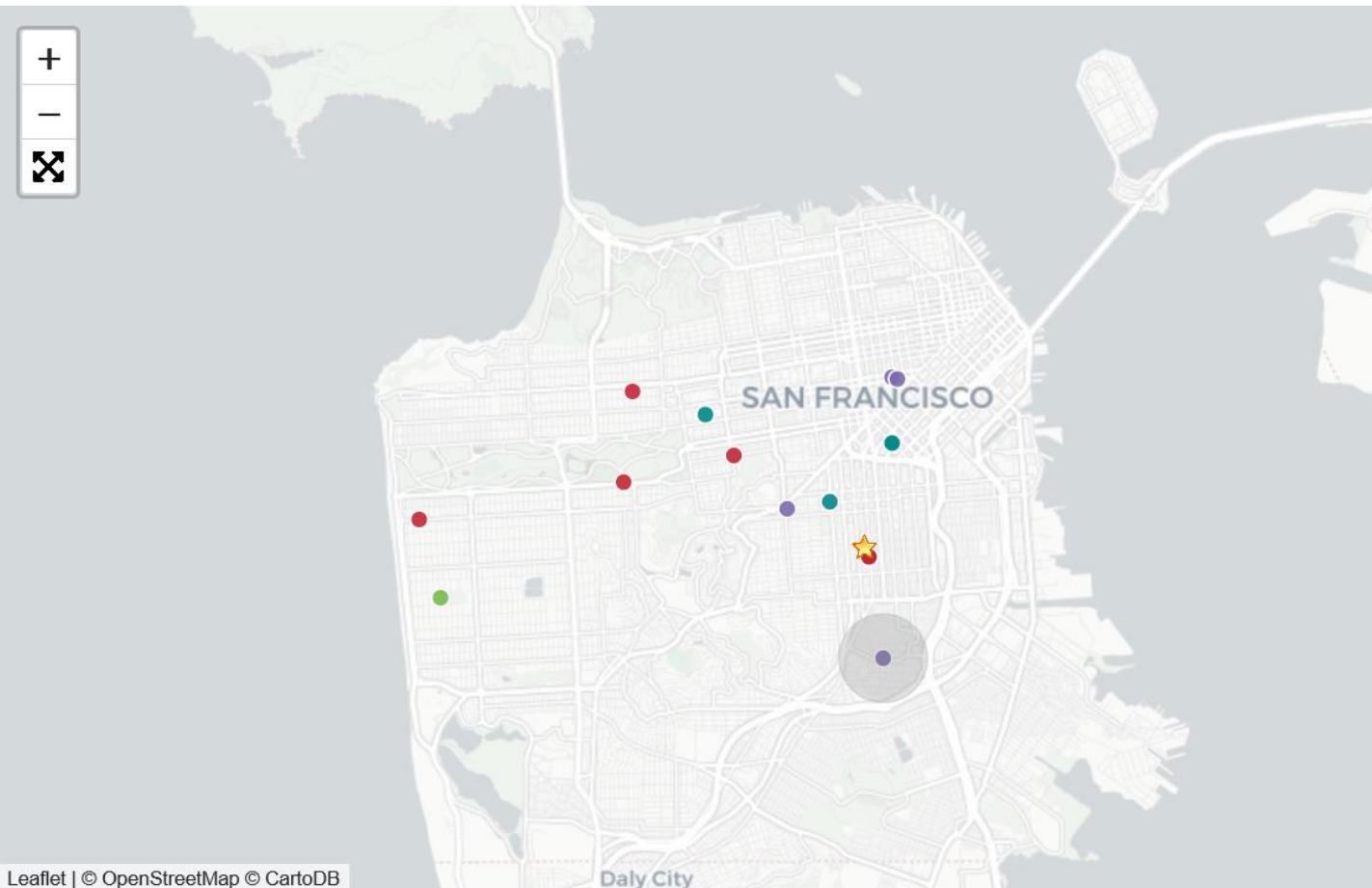
Let's get started on electing a progressive mayor for San Francisco.

f Share

t Tweet

Reddit

Host an Event



Search

BY ZIPCODE

SORT BY

ENTER ZIPCODE

Date Distance

Hide Filters

FILTER BY TYPE

★ Campaign Office

● Canvassing

● Meet

● Forum

● House Party

Mar 15 (Thu) 7:15 PM to 8:30 PM

[Bernal Heights Democratic Club Forum](#)

Forum

See Jane at the forum!

Hosted by [Bernal Heights Democratic Club](#) 515 Cortland Ave.
San Francisco, CA

RSVP

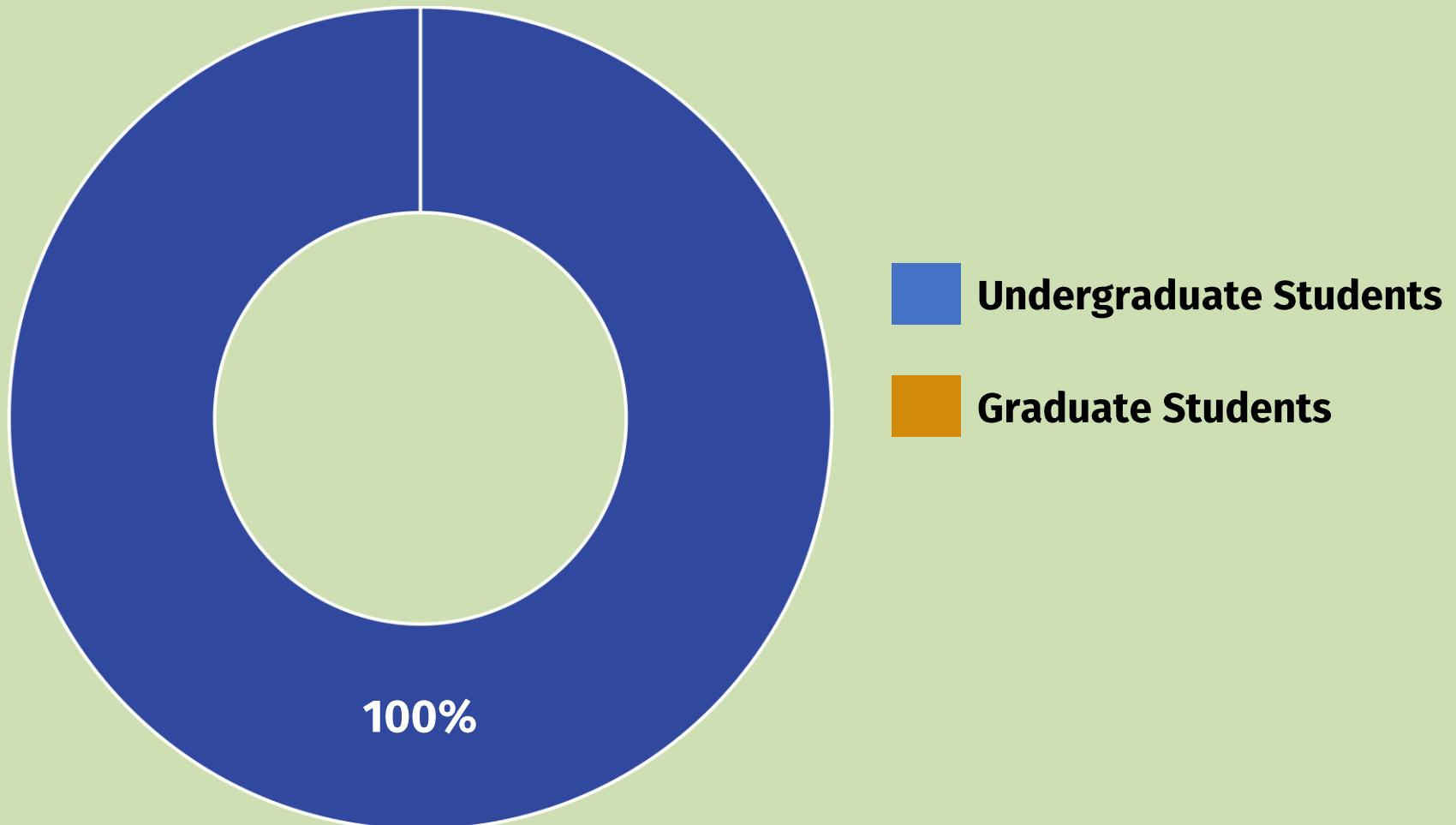
Get Directions

What type of web application we will be making!

About you*

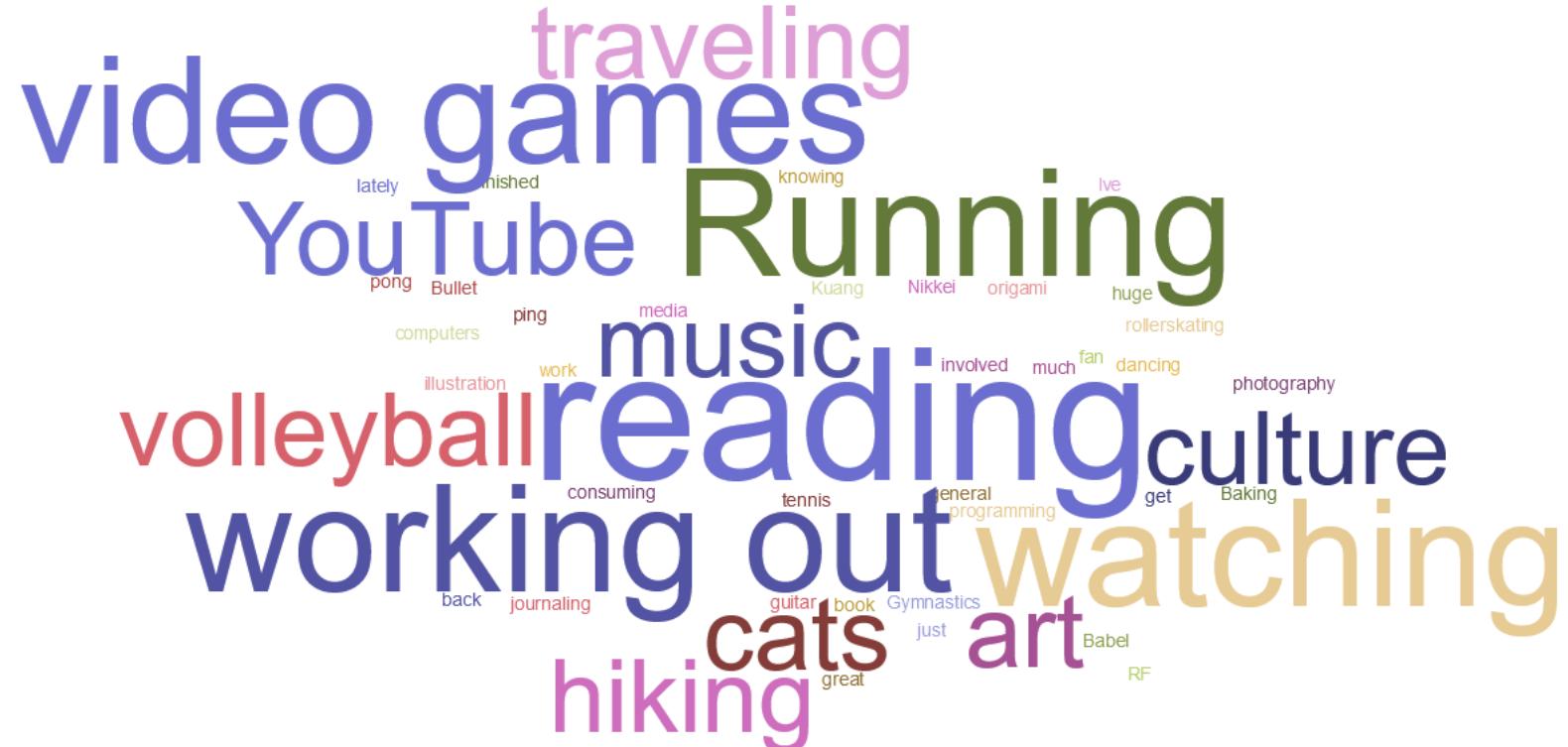
(*respondents before 4/4 and
said “yes” to sharing their surveys)

About you: Enrolled Student Status



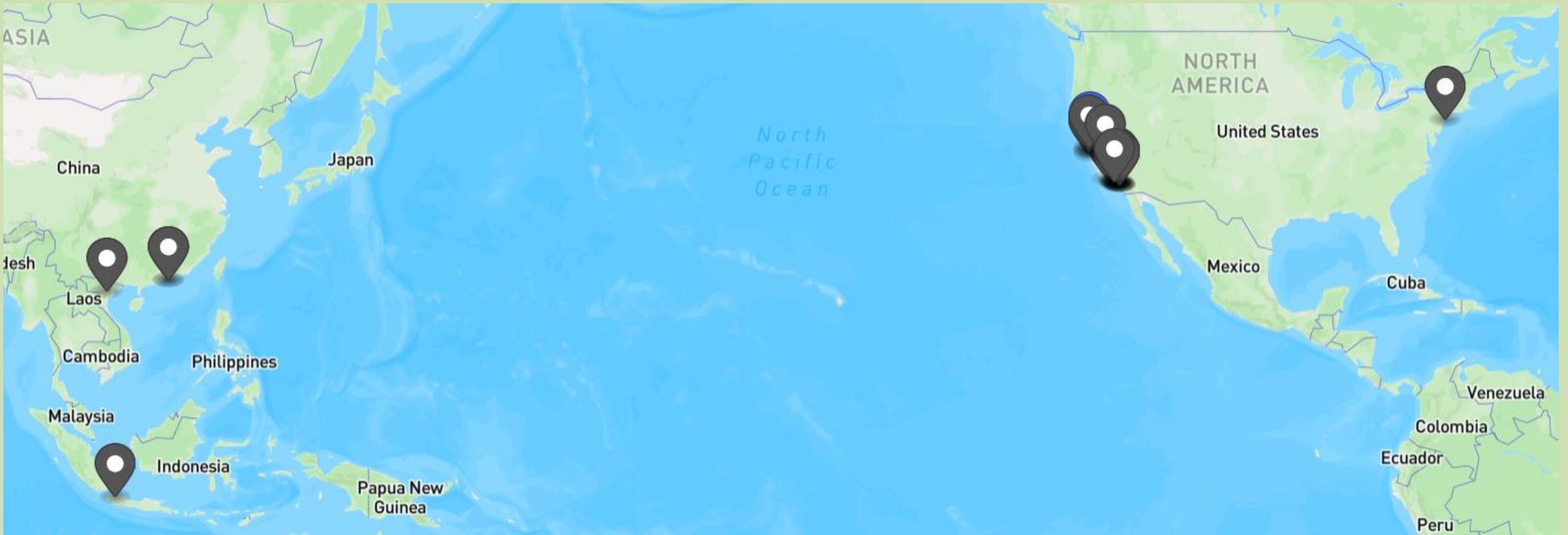
First time teaching only undergraduates! Exciting!!

What you like to do!



Lots of great hobbies!

Hometowns



Most students are from California, but next largest country is Vietnam!

Post-Graduation Plans



Quite a few people mentioned finding **meaningful** work!

About you! GIS

What is your familiarity with GIS?

Radio buttons

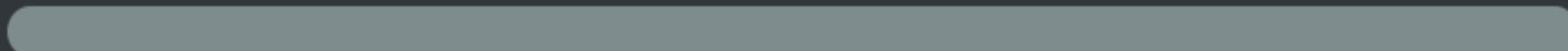
16 (59%): **None, the course title was the first time I heard about GIS**



11 (41%): Some, I got the GIST of it and I can make some maps



0 (0%): Lots, I'm a spatial GenluS!



No one is coming in as a GIS expert!

About you! Data

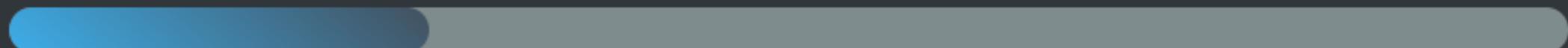
What is your familiarity with cleaning data?

Radio buttons

18 (69%): **Some, I've cleaned up data before and made some charts**



7 (27%): None, isn't that a Star Trek character?



1 (4%): Lots, you can find spreadsheets on my toast because they are my jam.



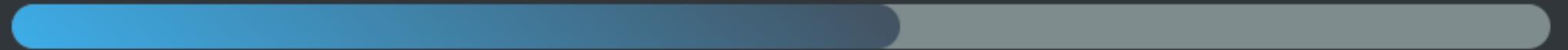
But most people are coming in with some data experience!

About you! Civil Society

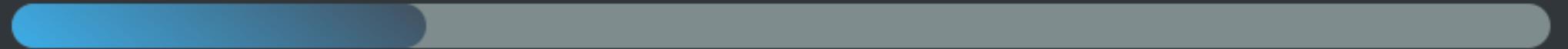
What is your experience with civil society?

Radio buttons

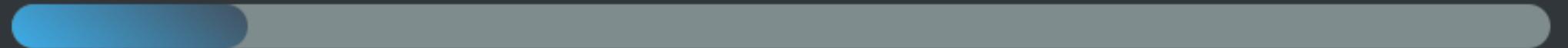
15 (58%): **Some, I have done things like volunteering at a non-profit before**



7 (27%): **None, isn't society already civil?**



4 (15%): **Lots, I put the PRO in protests.**



Majority have either some or no experience with civil society!

About you: Civil Society Groups



Majority of volunteer organizations connected through UCLA

About you! Coding

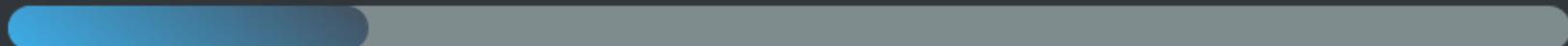
No programming experience is necessary for this course, but if you have programmed before, how comfortable are you with it?

Radio buttons

12 (46%): **Some, I have written code before, but it's kind of intimidating.**



6 (23%): Pretty comfortable, I enjoy it.



4 (15%): I have no experience, so I cannot say.



4 (15%):

0110100100100000011010110110011011101110010000001100010011010010110110011000010111001001111001



Most people have some experience! Quite a few enjoy it!

About you! By you!

Please (**optionally**) introduce yourself with
the following

Name

Major

Favorite Map

Remote students: Let me know in the chat if you want to introduce

About the course

About the course

- No **GIS** experience needed
- No **coding** experience needed
- No **civil society** experience
needed

Learning objectives

HTML

CSS

JavaScript



Acquire technical web development skills relevant to mapping for civil society



Apply an ethical framework to mapping projects

Civic Engagement

Critical Cartography

Learning objectives summarized:

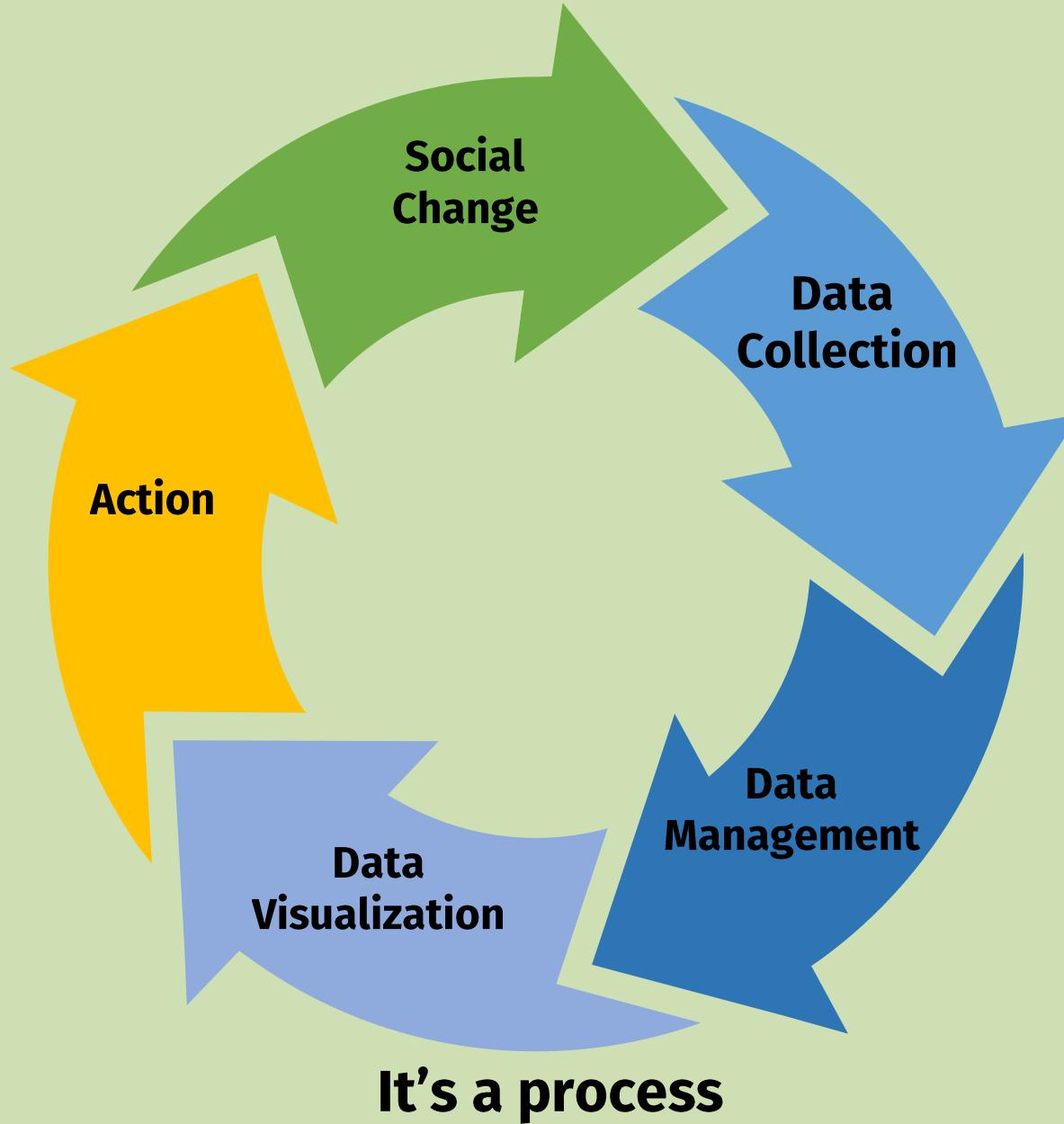
I HAVE NO IDEA WHAT I AM DOING





THIS ISN'T SO RUFF

What is this course?



What is this course?



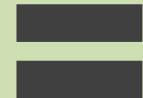
Ethics



Coding



Mapping

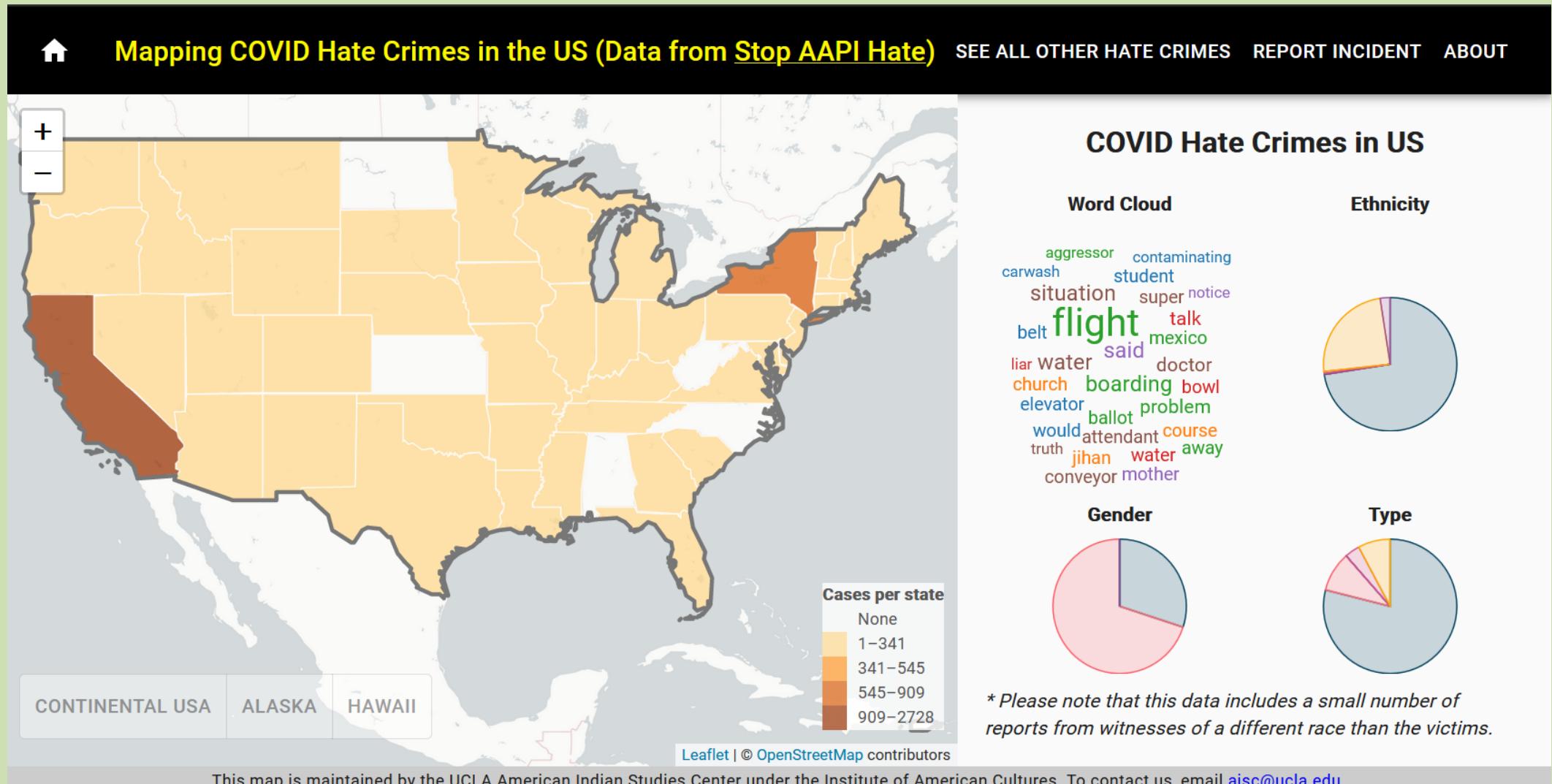


Social Change

What is this course, really?



Another example project



This map is maintained by the UCLA American Indian Studies Center under the Institute of American Cultures. To contact us, email aisc@ucla.edu.

www.hatecrime.map.com/covid

About the Course

Details

General Course Structure*

Tuesdays



Thursdays



Lecture



Discussion



Lab

Course structure may shift around
i.e. Labs can occur Tuesdays

Assignments

Individual



Readings

Weekly



Labs



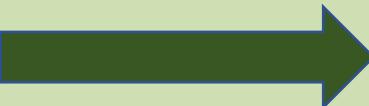
Posts

Group



Project Milestones

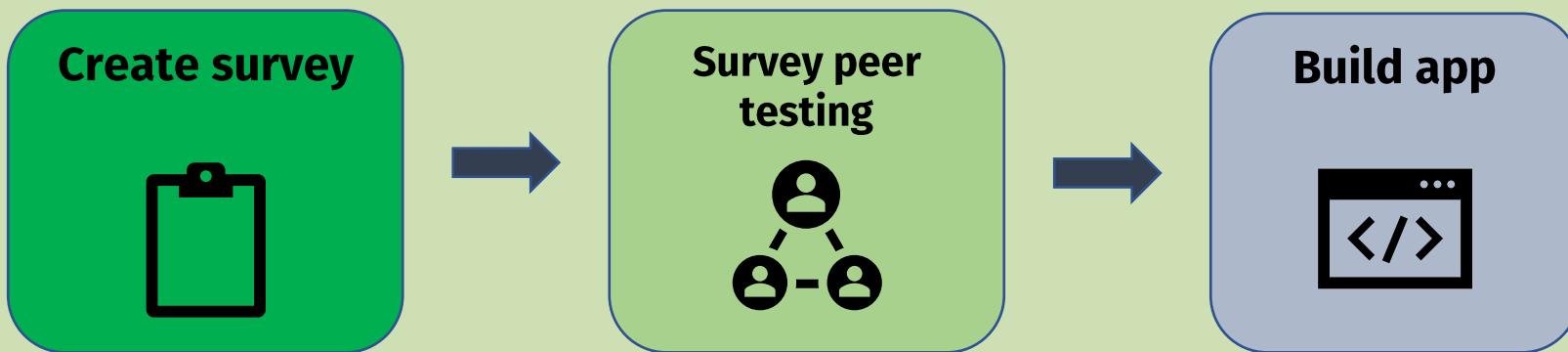
Intermittent



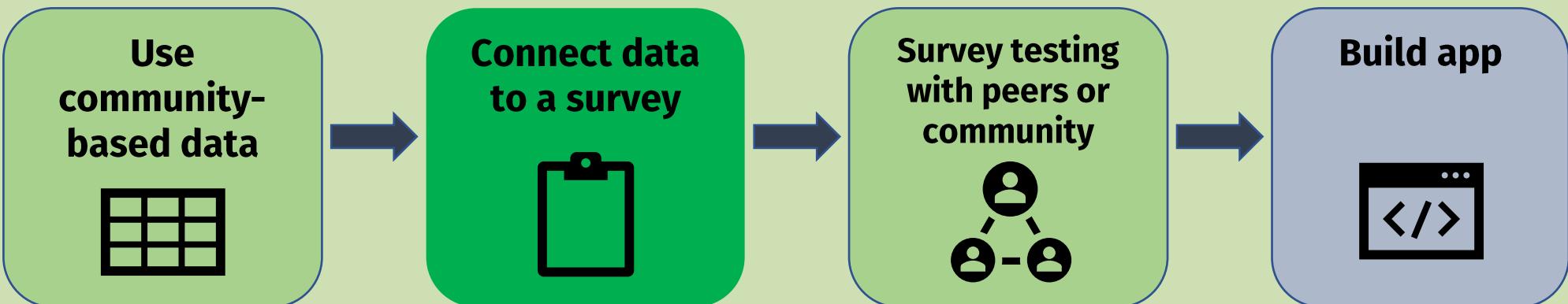
Final Project

Final Group Project

Option A:



Option B:



Past Student Projects

What Does West LA Have to Say About Food Insecurity?



Choose a zip-code: [Include All](#)

Where am I?: 90025

Services Used: Community Fridges

Reasons for Use: They were closer to my home and didn't require ID

Problems of Service:

Testimony Submission Time: 5/20/2021 14:18:34

Where am I?: 90024

Services Used: Food Banks, Food Pantries, Community Fridges, CalFresh

Reasons for Use:

Problems of Service: My application process took 3 months to go through, the entire time I was struggling to afford food. The process was complex and confusing and I lost track of all the documents and info I needed

Testimony Submission Time: 5/20/2021 14:22:48

Where am I?: 90095

Services Used: Food Pantries

Reasons for Use: Because they did not require ID

Problems of Service: I don't qualify for calfresh, I wish I was

Testimony Submission Time: 5/20/2021 14:22:53

Where am I?: 90095

Services Used: Food Pantries, CalFresh

Reasons for Use: resources offered through the school

Problems of Service: food pantry hours of operation are limited and require documents I am not comfortable offering

Testimony Submission Time: 5/20/2021 14:23:31

Where am I?: 90024

Services Used: None

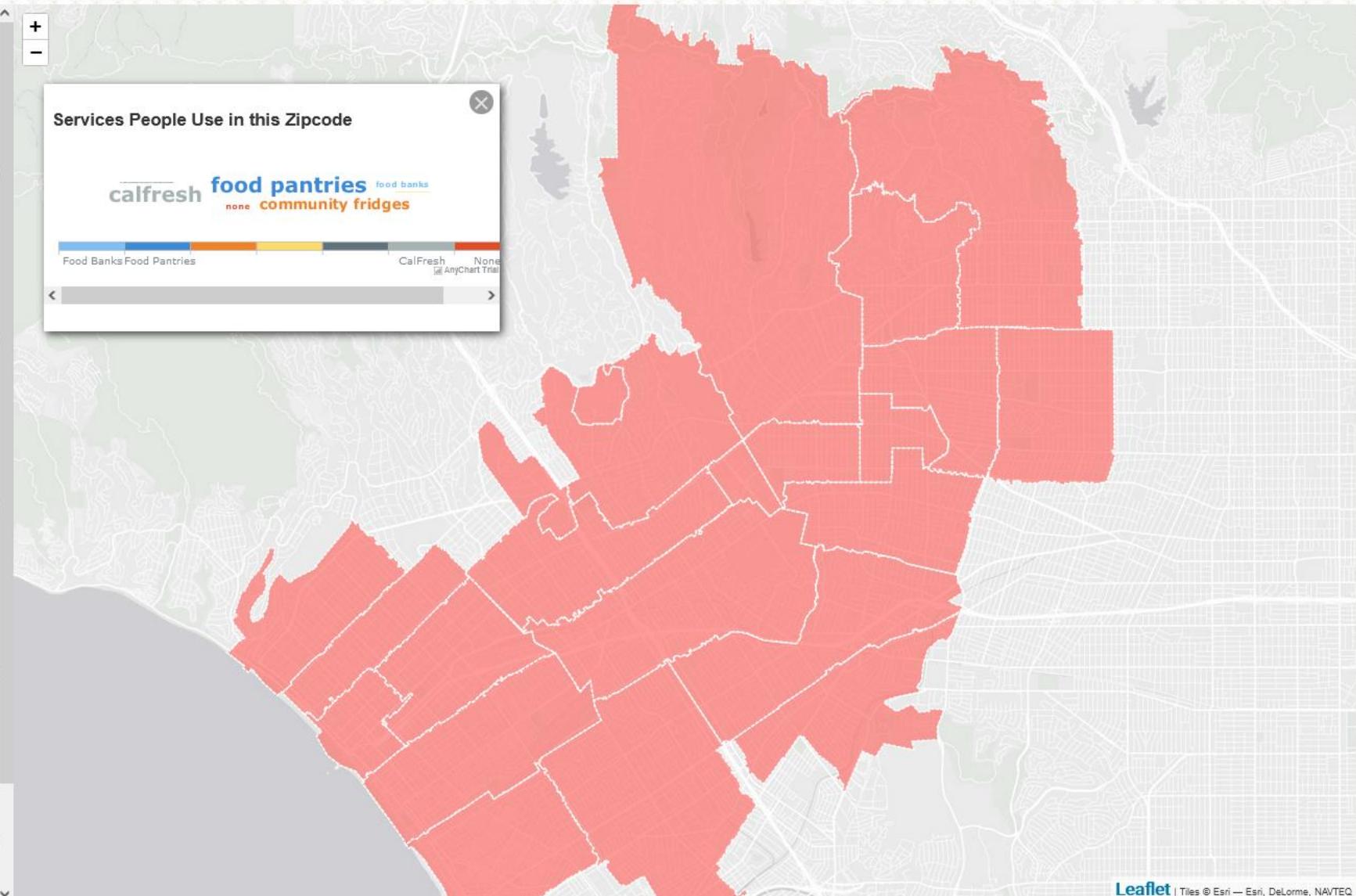
Reasons for Use:

Problems of Service: I haven't been able to access any food aid services. The closest one to me is still too far away and I'm uncomfortable with the information I need to share to apply.

Testimony Submission Time: 5/20/2021 14:25:41

Where am I?: 90210

Services Used: CalFresh



Reimagine 6th Street

[English Survey](#)[Encuesta en Español](#)[한국 설문 조사](#)[Github](#)[Contact Us](#)[About](#)

Select Language  Powered by  Translate

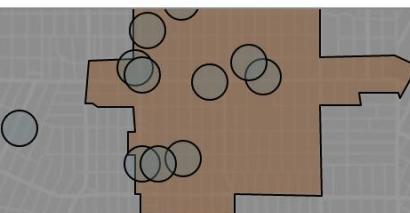


Reimagining 6th Street

"Reimagine 6th Street" is a project to repurpose 6th Street in Koreatown from Normandie Ave. to Vermont Ave. for a public pedestrian plaza to support existing Koreatown community members and stakeholders. The goals of this project are three-fold: to provide open-space in Koreatown, reduce traffic violence, and boost existing small businesses.

"Reimagine 6th Street"는 한인타운의 6번가에 (Normandie Ave.과 Vermont Ave. 사이) 공공 보행자 광장을 조성하여 기존 한인타운 커뮤니티 구성원과 관계자를 지원하는 프로젝트입니다. 이 프로젝트의 목표는 한인타운에 열린 공간을 제공하고 자동차 사고를 줄이며 기존 중소기업을 돋는 것입니다.

"Reimaginar 6th St" es un proyecto para reutilizar 6th St en Koreatown de Normandie Ave. a Vermont Av. para una plaza peatonal pública para apoyar a los miembros de la comunidad de Koreatown y a las partes interesadas existentes. Los objetivos de este proyecto son tres: proporcionar espacios abiertos en Koreatown, reducir la violencia de tráfico e impulsar las pequeñas empresas existentes.



Yes 100%

90010

Total Responses: 5

Yes 100%



Barriers Across Borders

[Home](#)[About](#)[Survey](#)

Access to Opportunity: Barriers Faced by International Students From Across U.S. Borders



You are invited to ...

Web Development and GIS for Social Change



Final Presentations

June 10th, 2pm - 4pm PST

Join via Zoom: tinyurl.com/21s-191a-finals

More Information: tinyurl.com/21s-191-groups

Featuring community stories from ...

Against Asian Hate - Elderly Asian Americans during COVID-19 in California.
Ana Gu, Adhavith Vijay, Rachel Chan

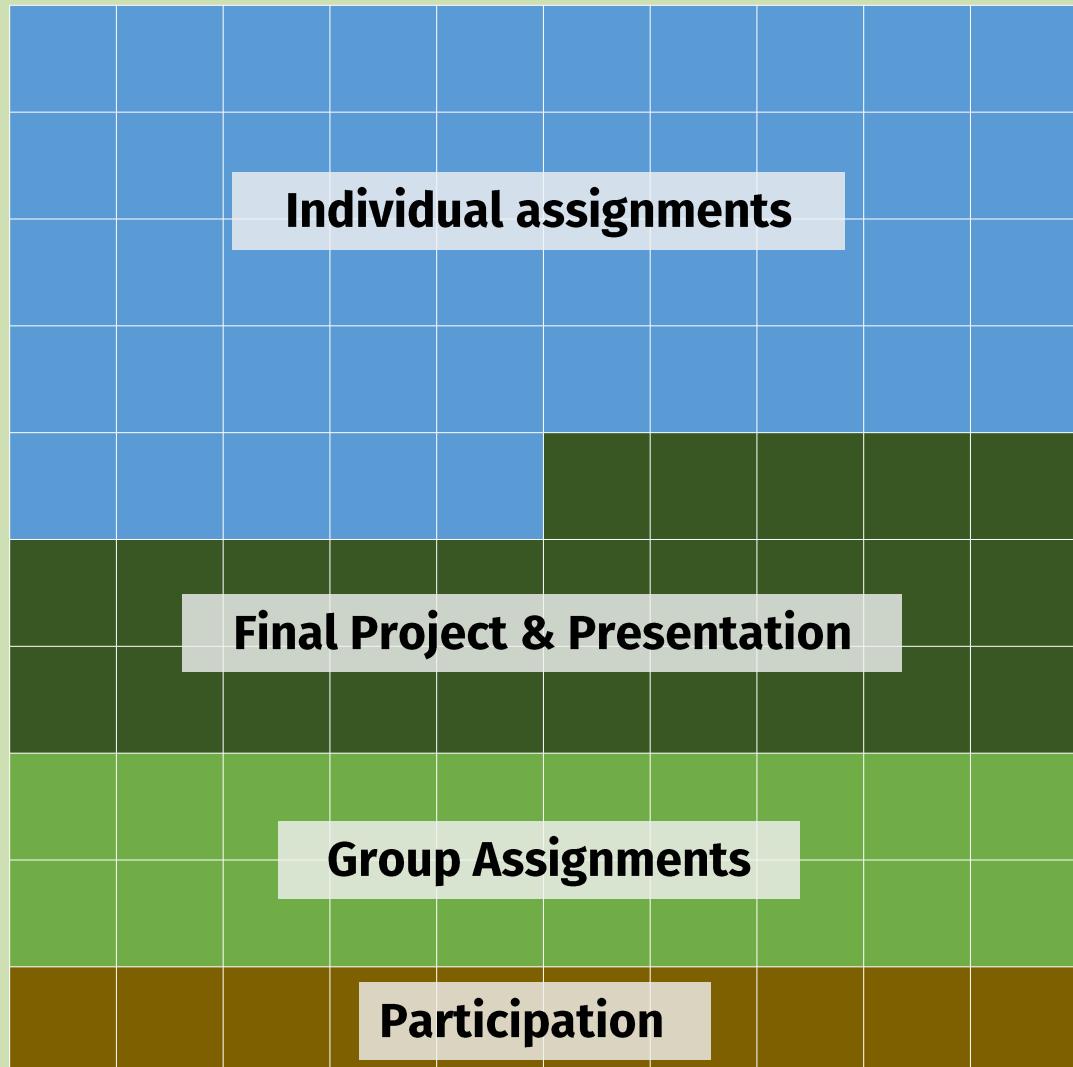
Re-Imagining 6th Street - Community insights into street pedestrianization in Ktown.
Lauren Valles, Nina Long, Kathryn Greenler

LA Tenants Survey - Experiences about harrassment by landlords in LA.
Sam Karakas, Ray Hsiao, Brian Zamora

Food Equity - Food insecurities & food services in West LA.
Ericko Halim, Latisha Sumardy, Wilny Duong

Mental Health - Use and availability of mental health services at UCLA.
Michelle Nguyen, Nathakin Leepreecha, Vanessa Ta

Evaluation



45%

25%

20%

10%

About the Course

Class website and syllabus

We will be using GitHub exclusively

The screenshot shows the homepage of the course website. At the top, there is a blue header bar with the course name "AA191A-Web Development and GIS for Social Change". On the left of the header is a small circular logo for "191A ASIAN AMERICAN". On the right is a search bar with a magnifying glass icon and the word "Search". Below the header is a navigation bar with links for "Home", "Weekly Materials", "Assignments", "Labs", "Discussion" (with a globe icon), "Syllabus", and "Help". The main content area has a white background. On the left, there is a link "Home" in blue. In the center, the word "Home" is displayed in a large, dark gray font. Below this, there is a small blue box containing a person icon and the text "6 online". To the right of the "6 online" box is a paragraph of text: "Welcome to the course website where you can find all the material for the class. Remember to use the [Discord](#) , [GitHub discussion board](#) , [email](#) , or utilize [office hours](#) if you have any questions!". At the bottom left of the main content area, there is a link "Class Links" in black.

<https://albertkun.github.io/23S-ASIAAM-191A/syllabus/>

Lost? Weekly Materials is your friend!

AA191A-Web Development and GIS for Social Change

Home Weekly Materials Assignments Labs Discussion Syllabus Help

Home

6 online

Welcome to the course website where you can find all the material for the class. Remember to use the [Discord](#), [GitHub discussion board](#), [email](#), or utilize [office hours](#) if you have any questions!

Class Links

Weekly materials is your reference for the week!

Weekly Materials has it all!

AA191A-Web Development and GIS for Social Change

Home Weekly Materials Assignments Labs Discussion Syllabus Help

GitHub   2  0

Week 1 - GIS, Data, and Ethics

Date	Type	Description	Slides	Recording
4/4	Lecture	Introducing the course, GIS, data, and ethics		
4/6	Lab	GITting Used to Web Development and JavaScript		

Lecture
Introducing the course, GIS, data, and ethics

Lab
Group Work
Getting Started help

Assignments
Due Tuesday 4/4
Due Thursday 4/6
Due Tuesday 4/11



Links to the slides, recordings, lab, and upcoming assignments

Course Outline

Week	Lectures	Labs
4/4	GIS, Data, Ethics	GitHub, HTML, CSS, JavaScript
4/11	Critical Cartography and Civil Society	HTML, CSS, JavaScript
4/18	Open Source and Web Mapping	HTML, CSS, JavaScript
4/25	Web Developing for Civil Society	HTML, CSS, JavaScript
5/2	Society, Technology, and Ethics	HTML, CSS, JavaScript
5/9	Human-Centered Design	GitHub and HTML, CSS, JavaScript
5/16	Communication Design for Social Change	HTML, CSS, JavaScript
5/23	Mentorship and Collaboration	HTML, CSS, JavaScript
5/31	Connecting Activism and Technology	HTML, CSS, JavaScript
6/4	Beyond Web Development and Social Change	HTML, CSS, JavaScript

= Visiting Voice

Course Software Requirements*



– completing assignments



VS Code – writing code



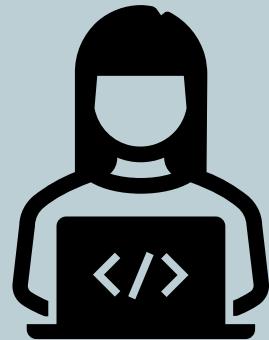
Firefox – web debugging

* You may freely use other software, but it will not officially be supported

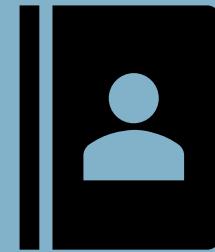
Labs



Pre-Labs



In-Class Lab

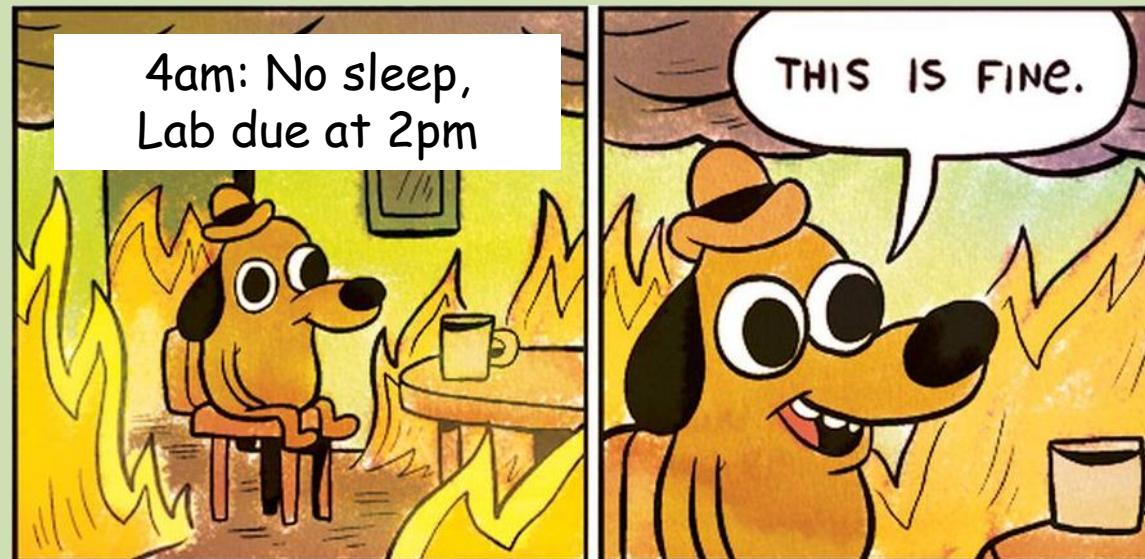


Lab Assignment



Homework

Try to avoid this situation:



Get help early and often!

Places to get help

- **Search online**

StackOverFlow.com

- **Ask the class!**

- **Discord**

<https://discord.gg/awktuEcAqW>

- **GitHub Discussions**

<https://github.com/albertkun/23S-ASIAAM-191A/discussions/>

- **Drop by office hours**

- [After class](#)
 - [Online: https://calendly.com/aa191a/office-hours](https://calendly.com/aa191a/office-hours)

- **Email the instructor**

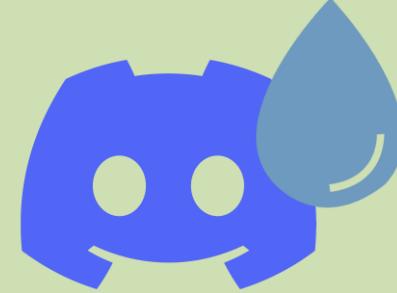
albertkun@oarc.ucla.edu

The screenshot shows the Stack Overflow interface for a specific course. At the top, the Stack Overflow logo and search bar are visible. Below the header, the course title "AA191A-Web Development and GIS for Social Change" is displayed. The navigation menu includes "Home", "Weekly Materials", "Assignments", "Labs", "Discussion" (which is highlighted with a red box and has a red arrow pointing to it), "Syllabus", and "Help". Under the "Discussion" tab, there are links to "Weekly Materials Summary" and "Week 1 - GIS, Data, and Ethics".

The screenshot shows a Calendly booking page for "Albert Kochaphum". The page title is "Office Hour". It specifies a duration of "20 min" and a note: "Meet to discuss course work, lab software, lab materials, group projects, or any other general inquiries." To the right, a "Select a Date & Time" section shows the month of April 2023. The days of the week are labeled from Sunday to Saturday. Specific dates are numbered: 1, 2, 3, 4, 5, 6, 7, and 8. A small "POWERED BY Calendly" logo is in the bottom right corner.

Discord(er)ly Conduct

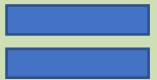
- Use appropriate channels
- Use your real name
- Respect others time
(don't expect a quick response)



If you don't post in the right place or use your name,
I cannot give you credit for participating!

Goals for helping

Getting help



Participation

Giving help

Trying to create an active learning environment for everyone.

Core Principles in summary:



About the Course

Questions?

GIS, Data, and Ethics

Welcome

GIS
Data
Ethics
Discussion
Assignments

Albert Kochaphum
Lecture 1 | April 4th, 2023

GIS, Data, and Ethics

GIS



GIS
Data
Ethics
Discussion
Assignments

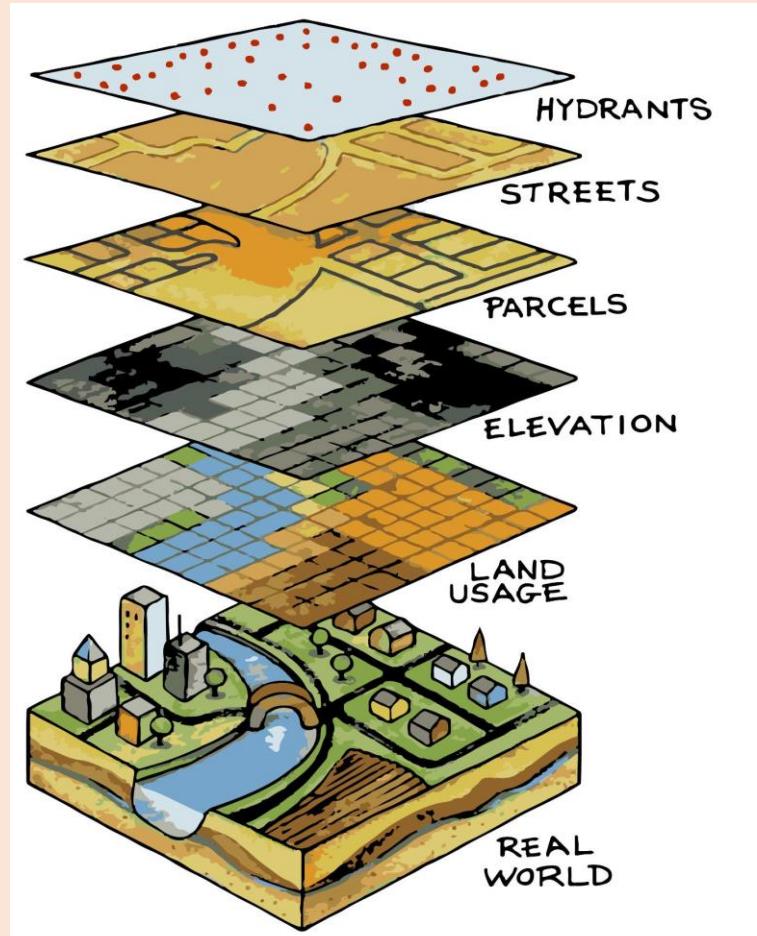
What is GIS?

A) Geographic Information Systems

or

B) Geographic Information Science

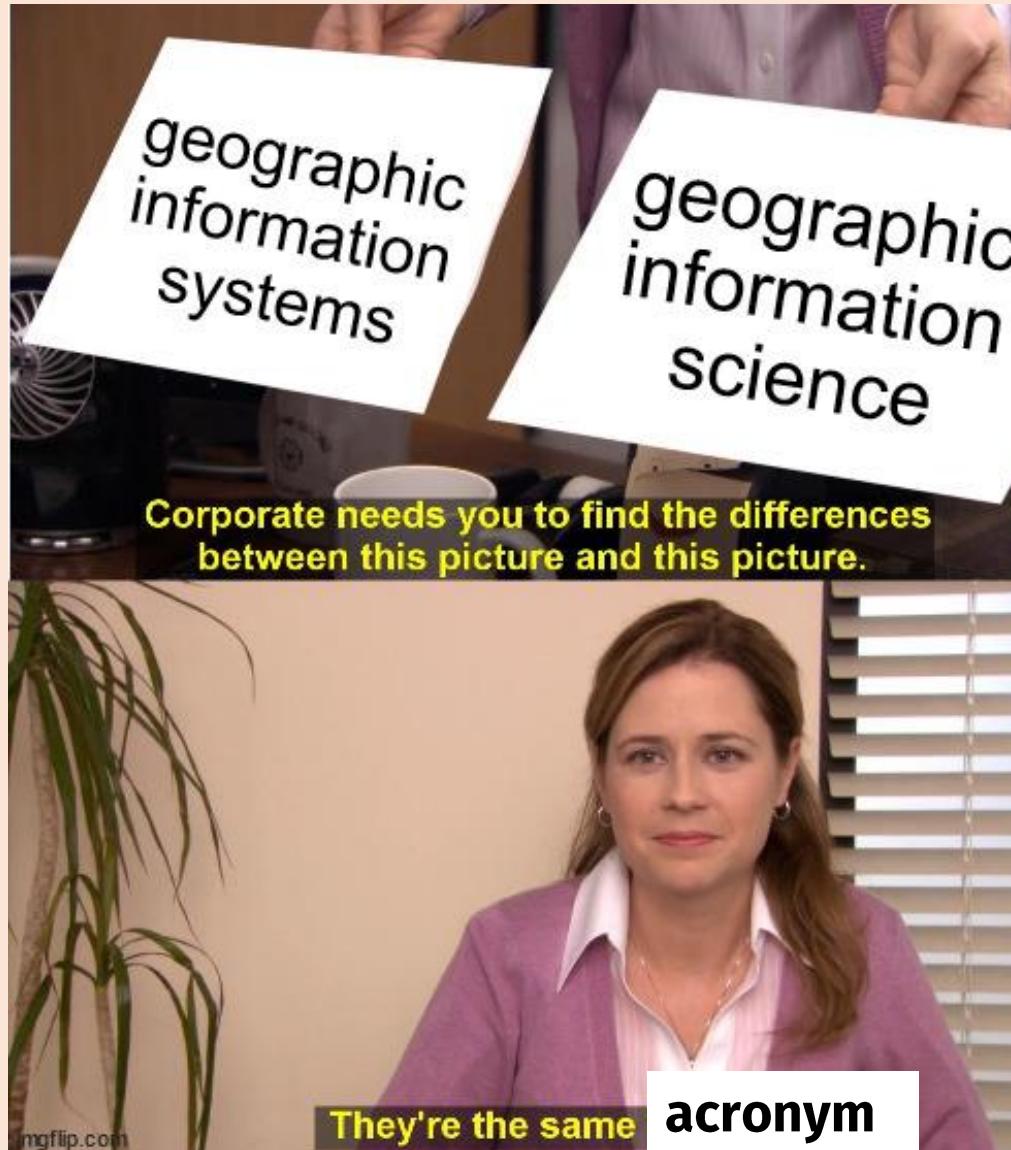
What is GIS?



With GIS, data is layered with time and space

Source

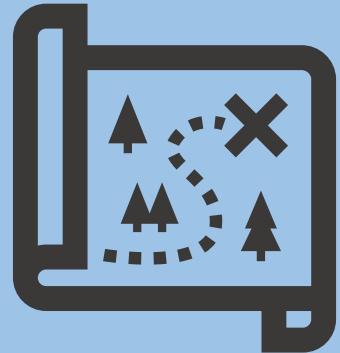
What is GIS?



What is GIS?

GISystems

=



Spatial tools

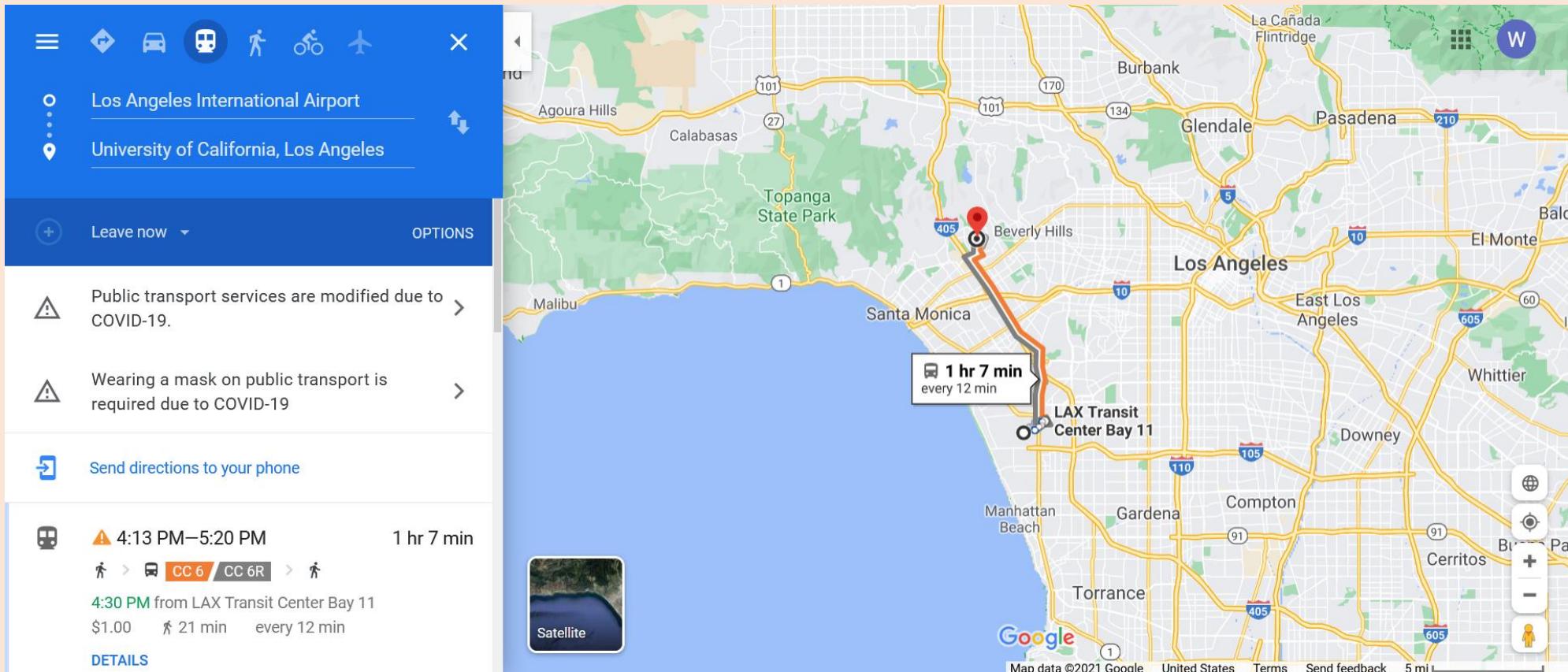
GIScience

=



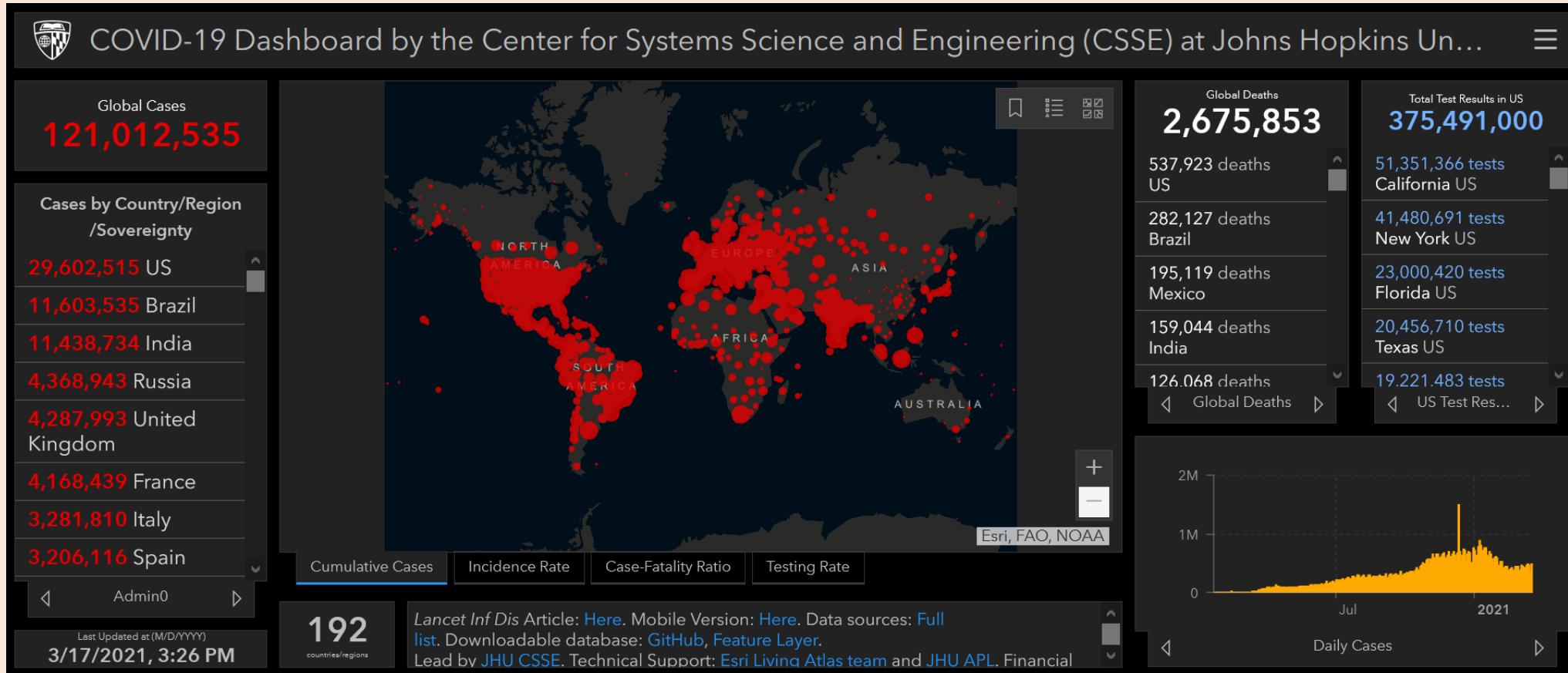
Spatial thinking

Examples of GIS



Google Maps Directions from LAX to UCLA, <https://maps.google.com>

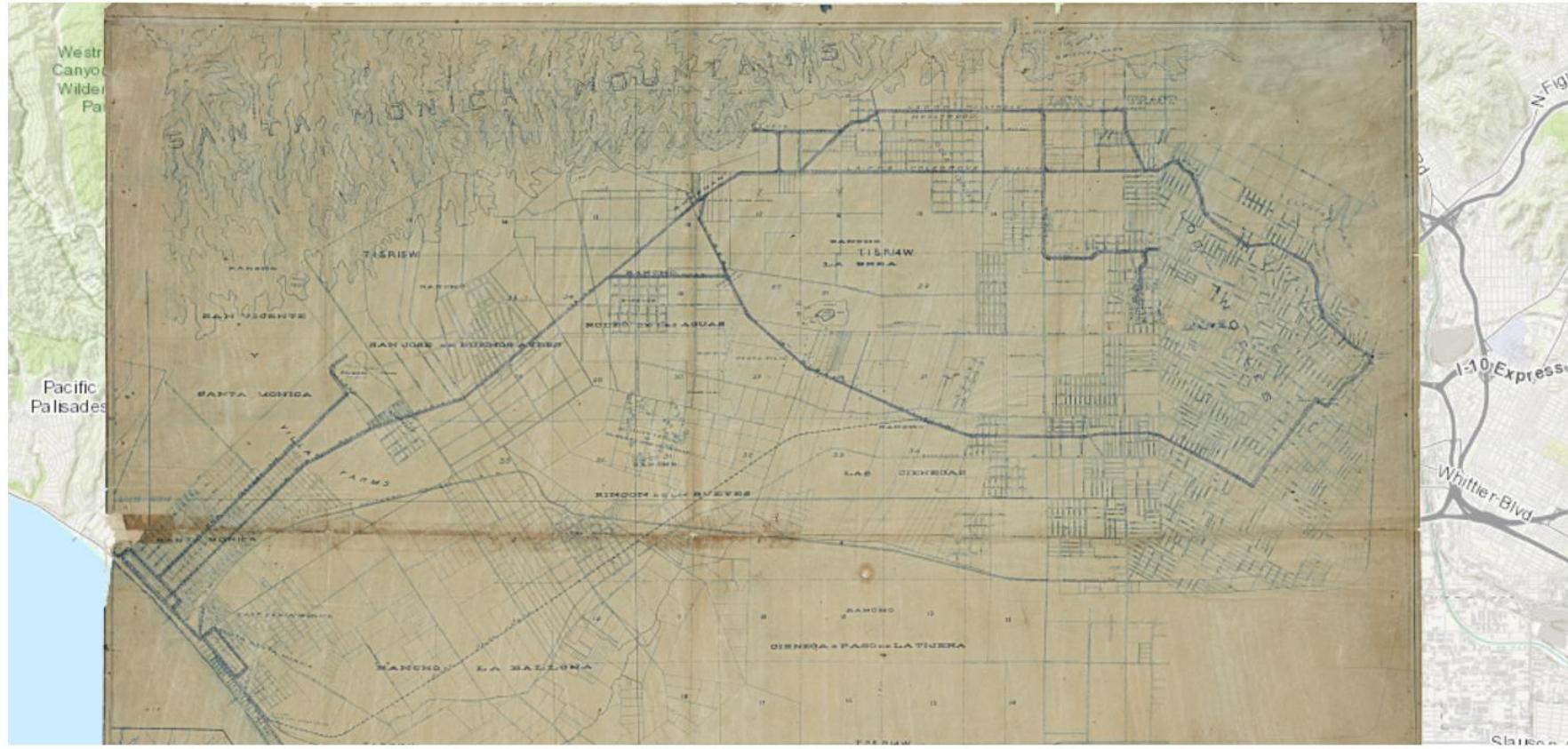
Examples of GIS



Johns Hopkins University COVID-19 Dashboard, <https://systems.jhu.edu/>

Are historical maps GIS?

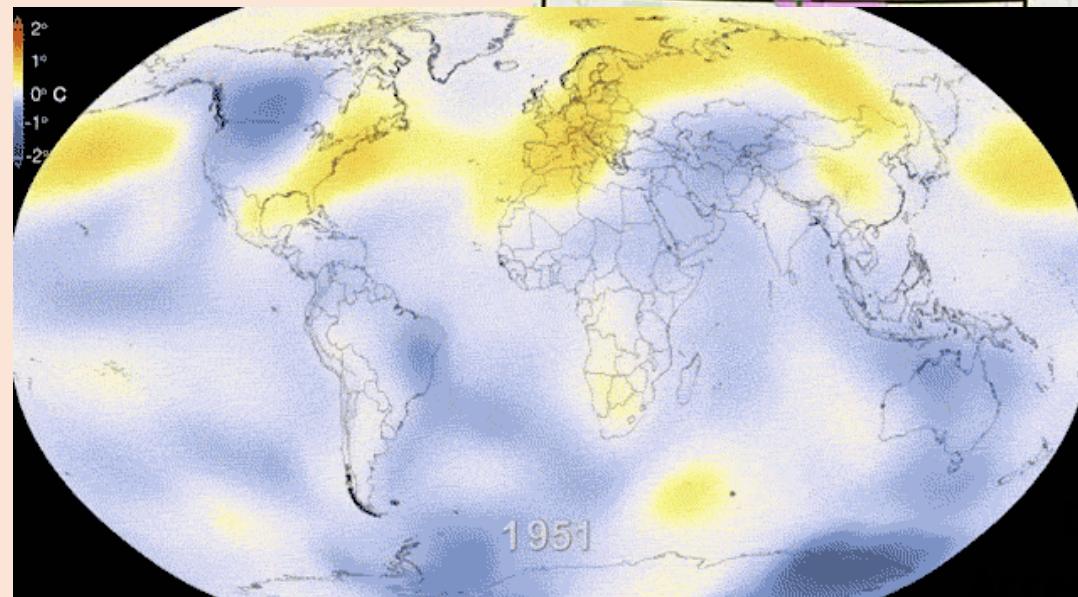
Map of the Los Angeles-Pacific R.R.



HyperCities Map Library, <http://www.hypercities.com/maplibrary/index.html>

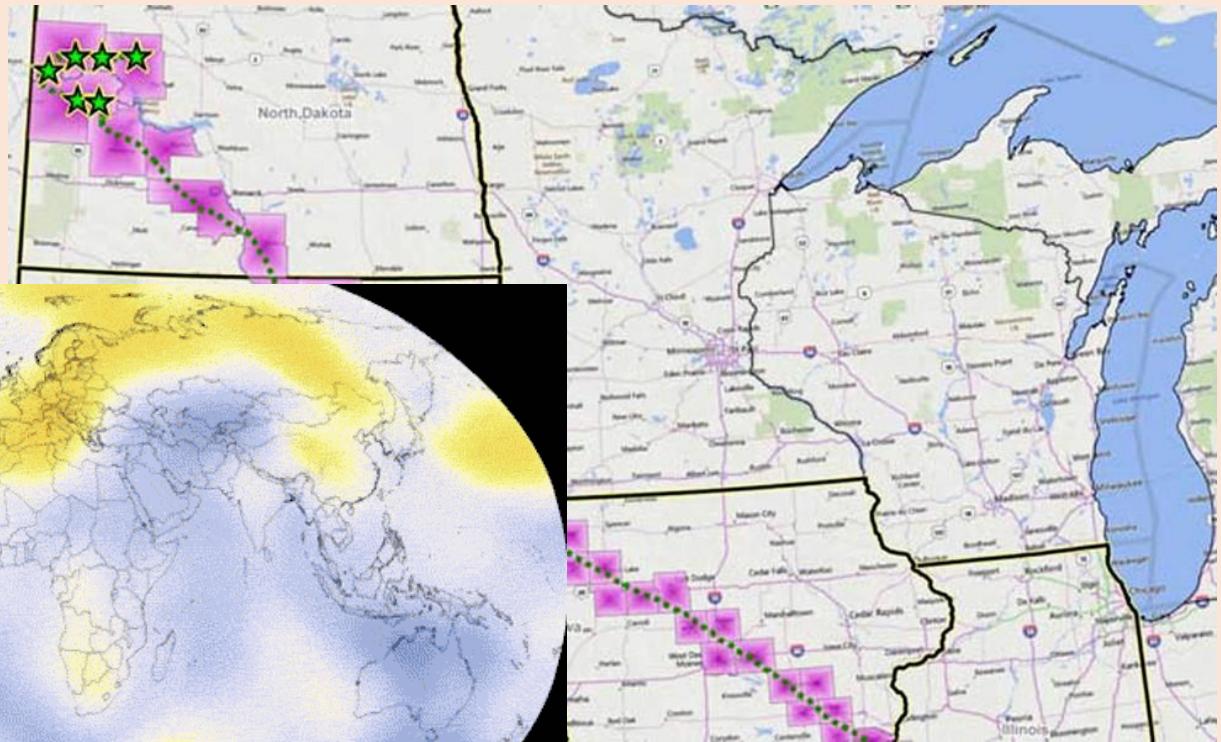
GIS exists in various forms

It can empower



Global Temperature Increase

It can disempower



**Dakota
Access Pipeline**

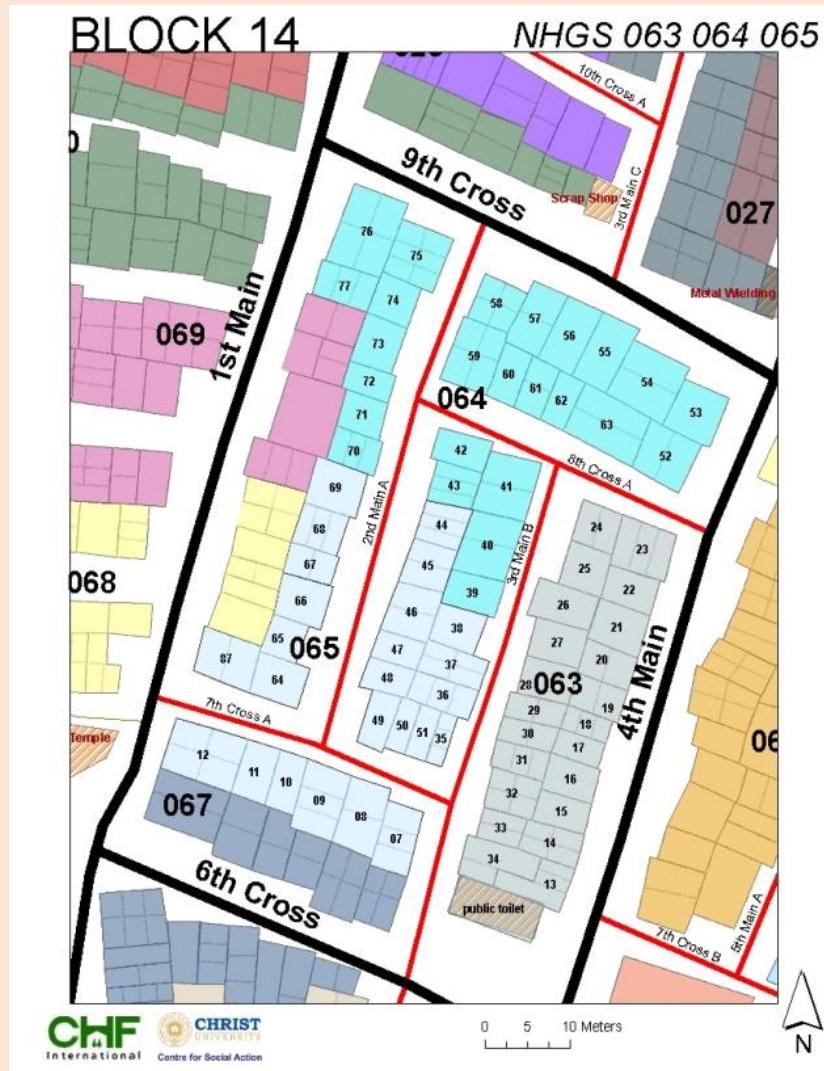
Participatory GIS/Community-Based GIS

**Our
Focus**



	Outsiders' objectives include	Roles/Relationships		Actions		Ownership
		Outsider'	Local people's	Outsider'	Local People's	
TOTALITARIAN	State political control	Dictator	Slave	Command	Comply	Outsiders'
NOMINAL	Cosmetic legitimisation	Manipulator	Puppet			
EXTRACTIVE	Obtain local knowledge for better planning	Researcher /planner	Informant			
INDUCED	Gain action Through material incentives	Employer	Worker			
CONSULTATIVE/INSTRUMENTAL	Improve effectiveness and efficiency	Rational economiser	Collaborator			
PARTNERSHIP	Share responsibility and power	Co-equal partner	Co-equal partner			
TRANSFORMATIV E	Facilitate sustainable development by local people	Facilitator /catalyst	Analyst /Actor /Agent			
SELF-MOBILIZING	Support spontaneous action	Supporter	Owner /controller	Support	Initiate	Local people's

Participatory GIS/Community-Based GIS



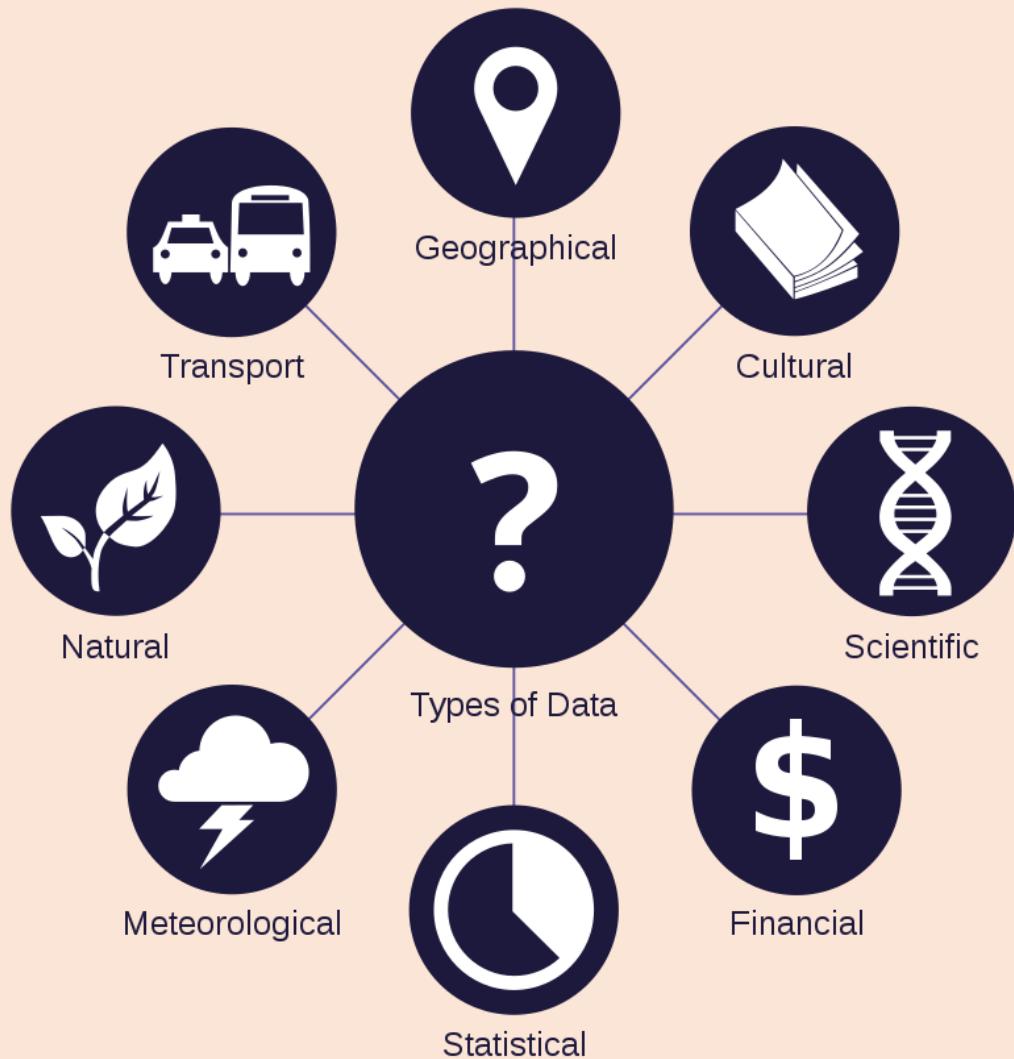
GIS, Data, and Ethics

Data

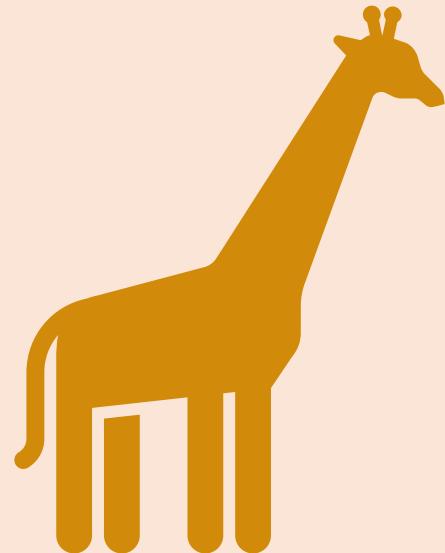


GIS
Data
Ethics
Discussion
Assignments

Types of Data



Types of Data



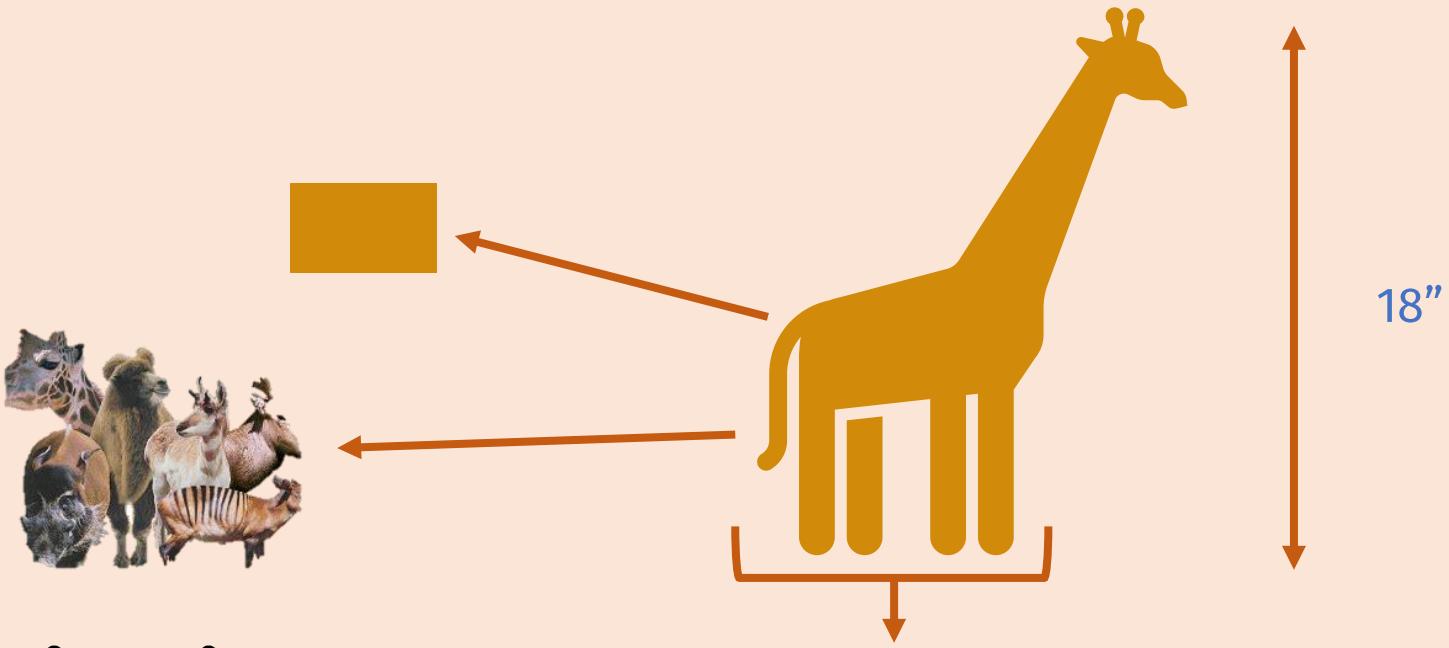
Qualitative

- Data that describes the **qualities** of something

Quantitative

- Data that can be summarized into **quantities**.

A giraffERENCE point for data types



Qualitative

- Color (**Yellow**)
- Species order (**Artiodactyla**)
- Species odor (**pleasant**)

Quantitative

- Height (**5.5 meters**)
- # of legs (**4 legs**)
- Taller than Data? (**Yes**)

Applying our knowledge!

Pre-Course Survey for AsianAm-191A!

Please fill out this survey for "AA-191A: Web Development and GIS for Social Change" at your earliest convenience but **no later than the first day of class (4/4/2023). No programming experience is necessary** for this course and this survey will be used to partner you up with other students based on your skills and subject of interest. Additionally, some of your answers will be summarized to help us learn about each other in the first week.

Remember to check the syllabus to learn more about the course before responding:
<https://albertkun.github.io/23S-ASIAAM-191A/syllabus/>

Responses are anonymous. An asterisk (*) indicates mandatory questions.

Full Name *

How would you like to be referred to? 

Enter your answer

Was the data collected in the Student Survey qualitative or quantitative?

Applying our knowledge!

What department, major, or field of concentration are you? *

 You can also share if you have a minor or double major  

Enter your answer

Please share something about your background and/or interests. *

This can be hobbies or things you enjoy!    

Enter your answer

What are your goals after graduating UCLA? *

Can be as brief or long as you'd like!  

Enter your answer

Qualitative

What is your experience with civil society? *

- None, isn't society already civil?
- Some, I have done things like volunteering at a non-profit before
- Lots, I put the PRO in protests.

What is your familiarity with GIS? *

- None, the course title was the first time I heard about GIS
- Some, I got the GIST of it and I can make some maps
- Lots, I'm a spatial GeniuS!

Quantitative

Both qualitative and quantitative!

Critical Data Studies



Is Data perfect for solving social problems?



No!

In doing so, you assume social problems are:

Knowable

Controllable

Rational

Neutral

Technocratic

Objective

Non-ideological

Effects of a data only approach



Neglects those directly impacted by social problems.

Alternative data forms:

The screenshot shows a web page with a header featuring the Mayor of Los Angeles logo and navigation links for Data Catalog, Geohub, Blog, Developer Resources, and About. It also includes social media icons for Facebook, Twitter, and a search bar.

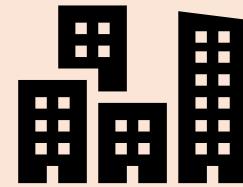
The main content area features the Humanitarian OpenStreetMap logo and navigation links for WHAT WE DO, OUR WORK, TOOLS & DATA, NEWS, COMMUNITY & ORGANIZATION, PARTNER WITH US, and GET INVOLVED. A search bar is also present.

A blue banner at the bottom of the page reads "Mapping Hate Crimes in the US #OneHateCrimeIsTooMany" and includes links to "SEE COVID HATE CRIMES" and "REPORT INCIDENT".

The central part of the page displays a reporting form for hate incidents. It includes a note: "If this is a COVID-related incident, consider navigating to the COVID page through the menu and reporting there." The form has two steps: 1. Harassment Location (with a "Enter location" input field, "BACK" button, and "NEXT" button) and 2. Date of Harassment (with a "2" icon).

Alternative data forms:

More Community based



Open Data



Humanitarian



Crowdsource



Participatory



Our
Focus

GIS, Data, and Ethics

Ethics



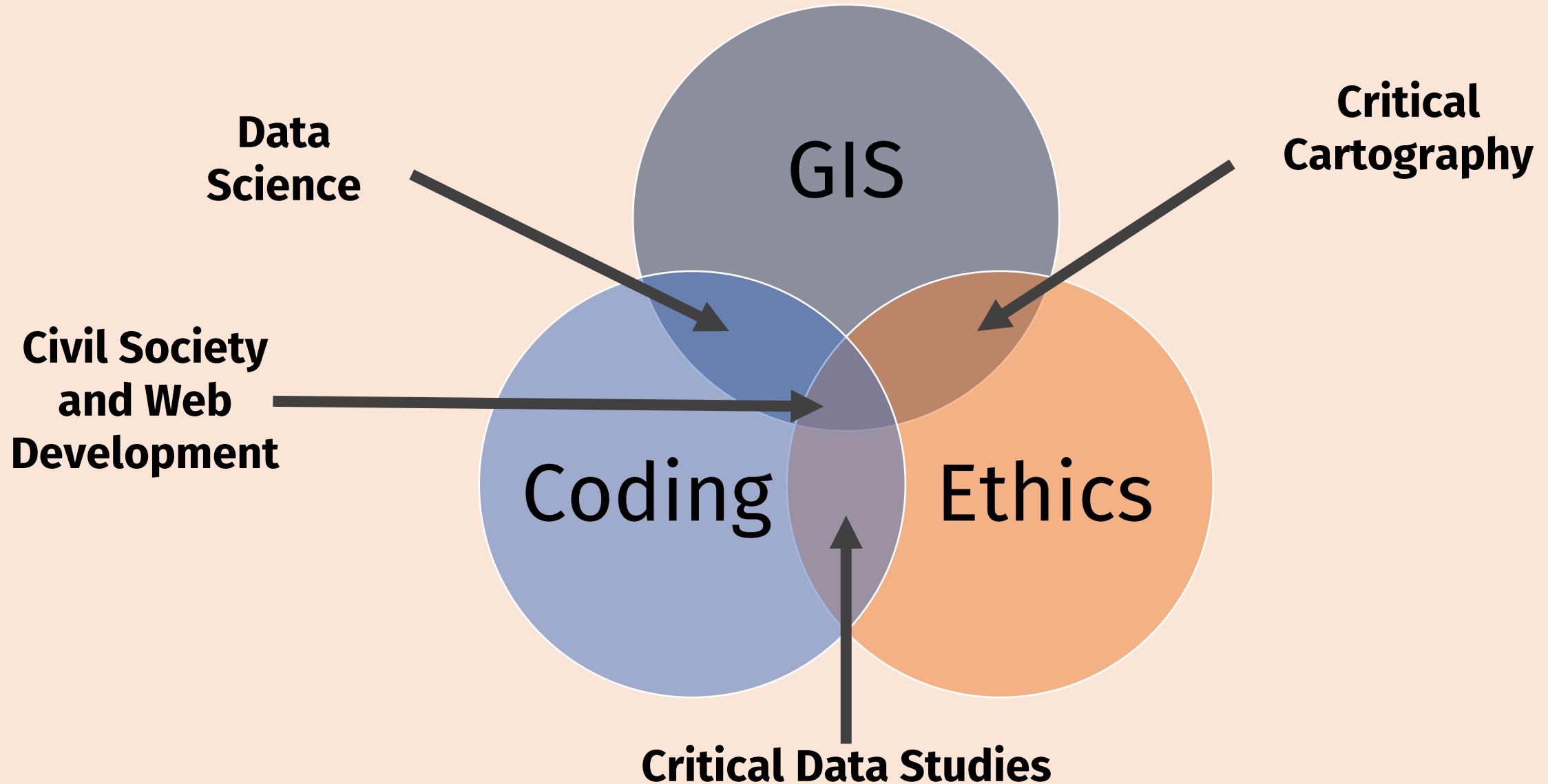
GIS
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Ethics

- Concerned about **how** and **why** we code/make maps
- There are no “right” answers
 - **But** we should be able to defend why we chose a particular action



Fitting Ethics in



Ethics



learn to
code without
facing
social problems



learn to
code for
communities facing
social problems

My Ethics



"We are privileged to be able to have access to education, our responsibility should be to empower others."



"Technology should be used to fight back and amplify community voices against institutions."

Ethics is rooted in the “service” to the university mission



UCLA'S CORE MISSION CAN BE EXPRESSED IN JUST THREE WORDS:

Education, Research, Service.

GIS, Data, and Ethics

Discussion



GIS
Data
Ethics
Discussion
Assignments

What are your ethics when it comes to using technology?

- In what ways should the internet and maps be used for good? For bad?
- Does this apply to other technology too?
 - Ex. Video games or smartphones

Thinking cap for the week:

**What are problems with the way we use
data and GIS?**

<https://github.com/albertkun/23S-ASIAAM-191A/discussions/1>

GIS, Data, and Ethics

Assignments

GIS

Data

Ethics

Discussion

Assignments



Assignments

Complete the following:

Due Thursday 4/6:

1. [Pre-Lab](#)

Due Tuesday 4/11:

1. [Weekly Reading #1](#) (10 – 20 minutes)
2. [Thinking Cap #1](#)

Note: Unless specified otherwise, all assignments are due at the beginning of class. Late assignments will be given half credit up to 1 week.