Teaching StoryMaps in Introductory Courses

Charlotte Smith, PhD
University of California, Berkeley
School of Public Health

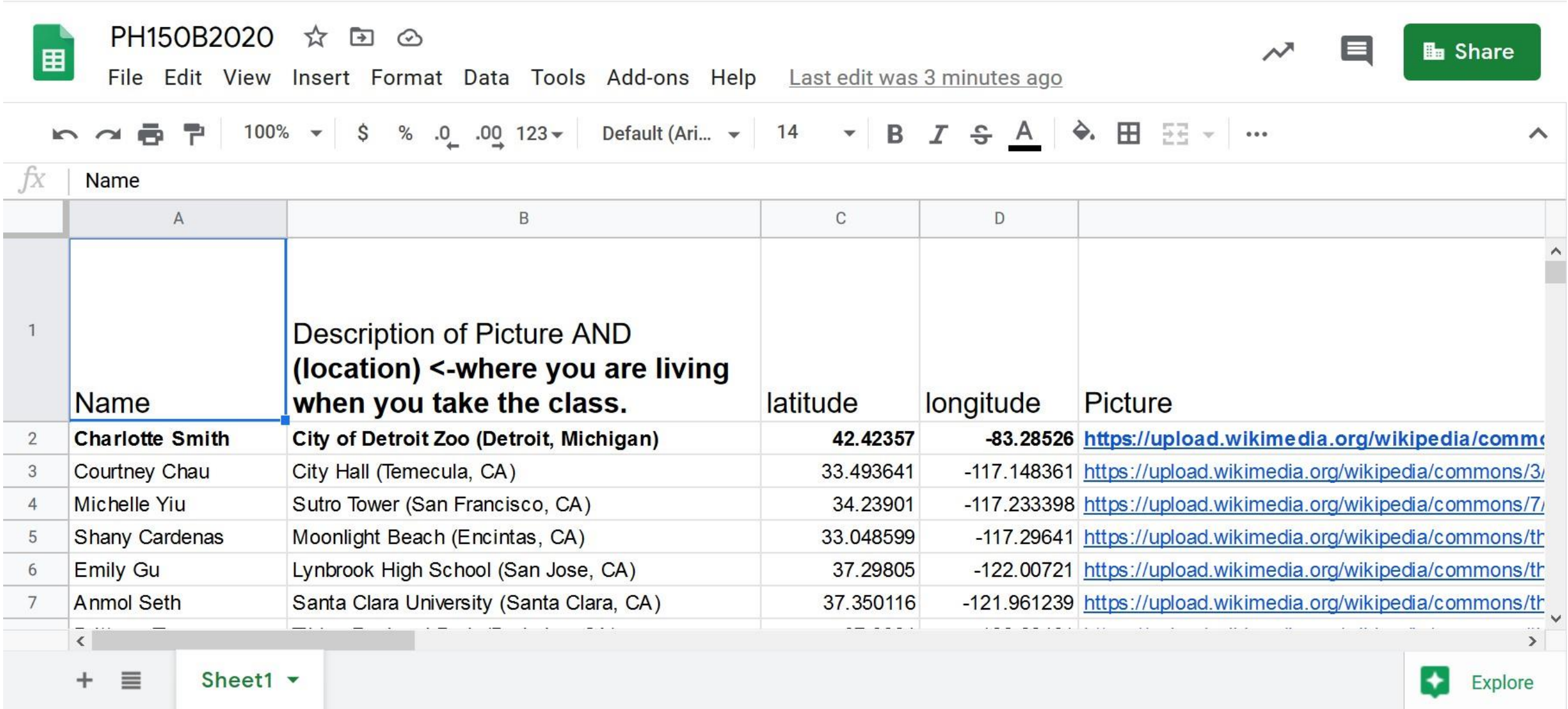
Human Health and the Environment in a Changing World

- Spatial analysis woven throughout:
  1 introductory exercise, 1, homework
- Undergraduates ~200 students

Applied GIS for Public Health

- Full course in Online MPH program
- Graduate Students (mostly mid-career professionals) ~50 students

For Introductory Classes: Start with Google Sheet – adjust the field names



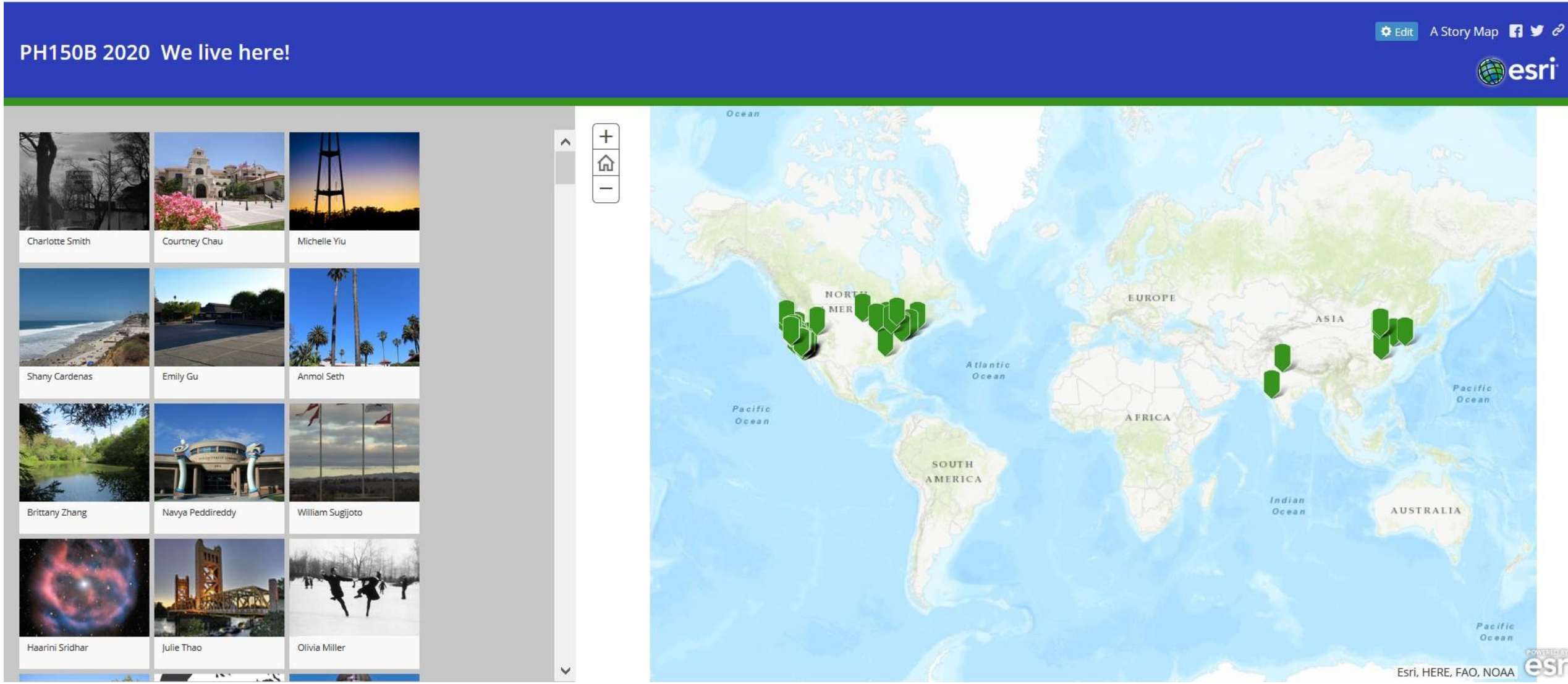
	A	B	C	D	
1	Name	Description of Picture AND **(location) <-where you are living when you take the class.**	latitude	longitude	Picture
2	**Charlotte Smith**	**City of Detroit Zoo (Detroit, Michigan)**	**42.42357**	**-83.28526**	**https://upload.wikimedia.org/wikipedia/comm**
3	Courtney Chau	City Hall (Temecula, CA)	33.493641	-117.148361	https://upload.wikimedia.org/wikipedia/commons/3/
4	Michelle Yiu	Sutro Tower (San Francisco, CA)	34.23901	-117.233398	https://upload.wikimedia.org/wikipedia/commons/7/
5	Shany Cardenas	Moonlight Beach (Encintas, CA)	33.048599	-117.29641	https://upload.wikimedia.org/wikipedia/commons/th
6	Emily Gu	Lynbrook High School (San Jose, CA)	37.29805	-122.00721	https://upload.wikimedia.org/wikipedia/commons/th
7	Anmol Seth	Santa Clara University (Santa Clara, CA)	37.350116	-121.961239	https://upload.wikimedia.org/wikipedia/commons/th

For Introductory Classes: Adjust field names back, to match template

	A	B	C	D	E	F	G	H	I	J	K	L
1	Name	TAB_NAME	SHORT_DESC		latitude	longitude	PIC_URL	THUMB_URL				
2	Colette Cosyn	Gallery	Crystal Cove State Park		33.58136	-117.84932	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
3	Annie Yu	Gallery	Banner Islands Ballpark		48.70621	-116.30756	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
4	Chloe Chu	Gallery	Mount Diablo State Par		36.087898	-115.232582	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
5	Amy Tran	Gallery	Trader Joes (Berkeley, C		37.86175	-122.27403	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
6	Elize Portnoy	Gallery	Disney Concert Hall DTI		34.14803	-118.62052	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
7	Lily Cho	Gallery	Jangja lake park (Guri, S		37.584826	127.139706	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
8	Qianqian Lin	Gallery	Berkeley Marina (Berke		37.866428	-122.305099	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
9	Trinity Durborow	Gallery	Channel Islands Nation		34.01389	-119.74577	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
10	Mohammad Ayma	Gallery	Dougherty Valley High S		37.76627	-121.91831	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
11	Ryan Poe	Gallery	California Memorial Sta		37.87217	-122.25115	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
12	Manisha Sahoo	Gallery	Peet's Cafe (Berkeley, C		37.86721	-122.256554	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				
13	Felicia Liu	Gallery	Copley Square (Boston,		42.360081	-71.058884	https://uplc	https://upload.wikimedia.org/wikipedia/commons/				

For Introductory Classes:

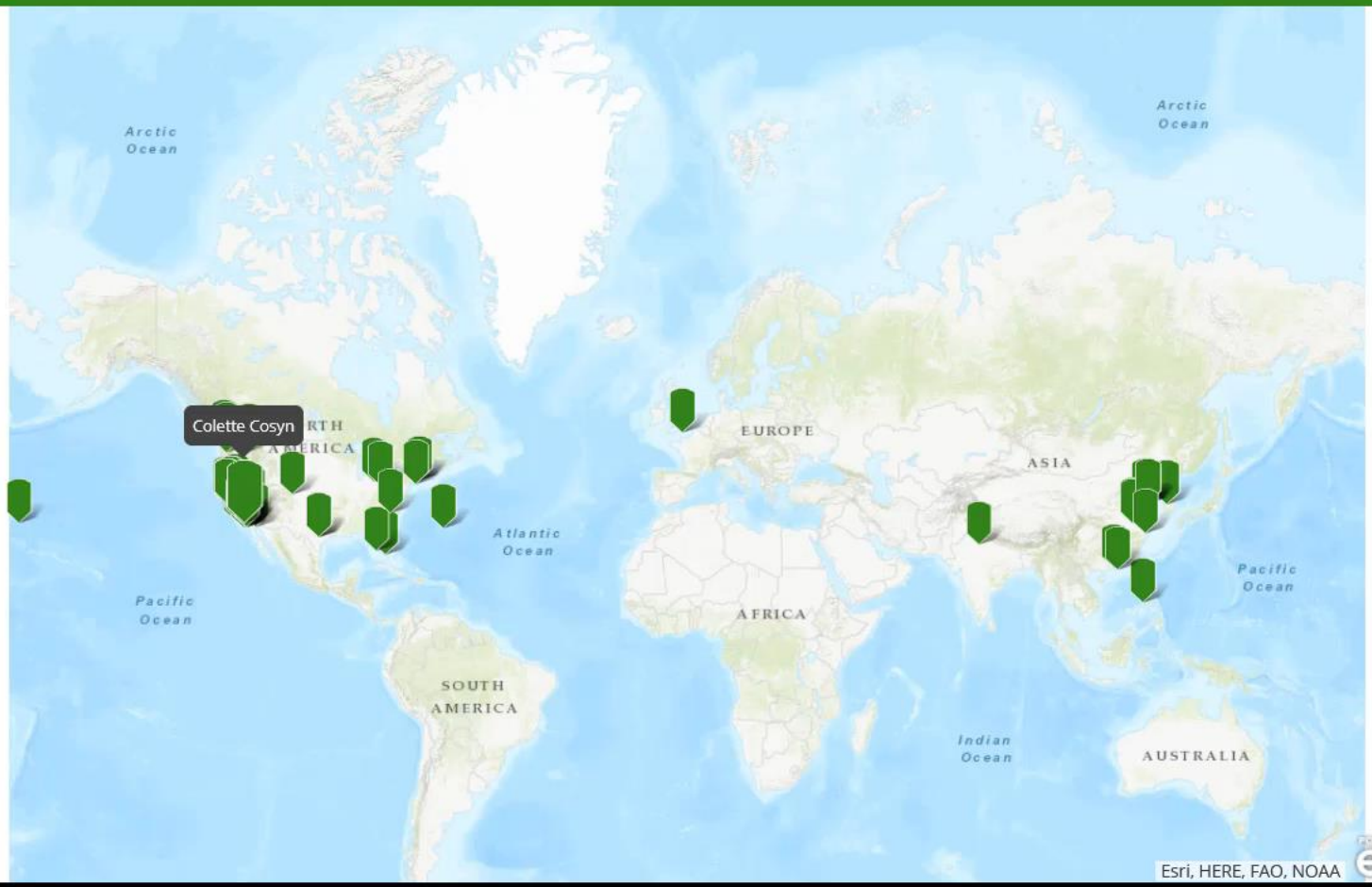
Before class begins – start thinking spatially: StoryMap Shortlist



We are here (Draft 8-31-2020)

Colette Cosyn

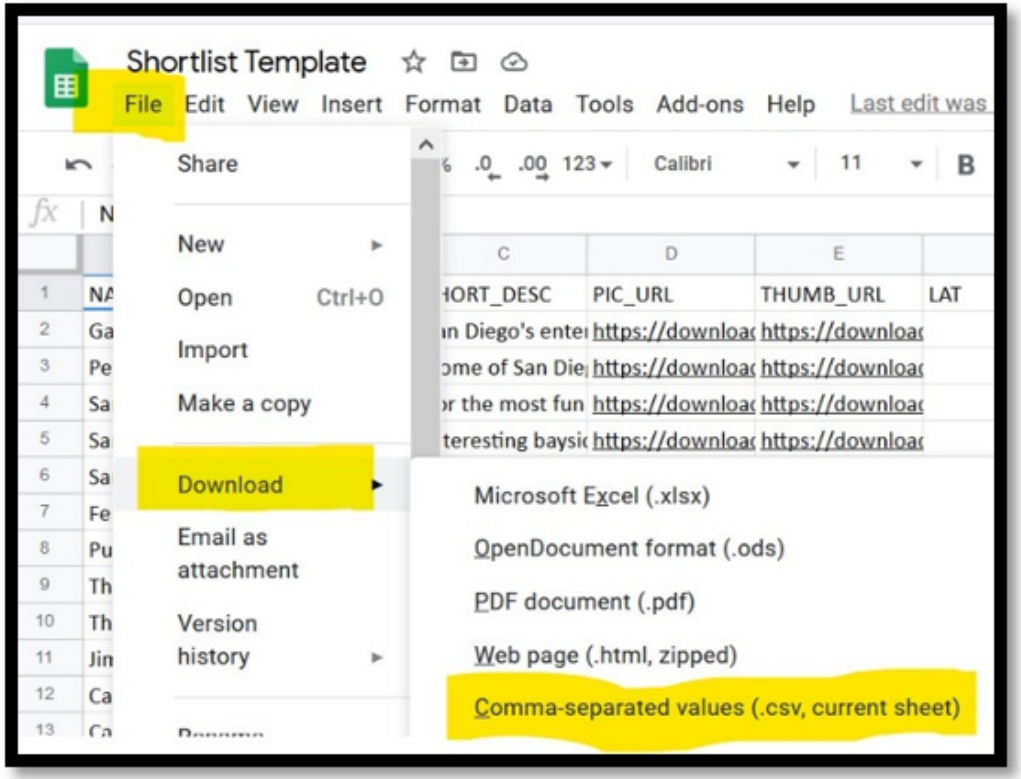
Top of the World (Laguna Beach, CA)



PART 2

Go to https://docs.google.com/spreadsheets/d/1lUB_epgkVJhdJt9AgL-o82nVqAb6QEbLohKQ_l9jdH0/edit?usp=sharing

Download the spreadsheet as a .csv file (SEE FIGURE ON THE RIGHT). Delete the cells but DO NOT CHANGE THE COLUMN NAMES. After you have downloaded the sheet to a .csv fill in at least 6 rows maintaining a certain theme such as “Places I’ve lived”, “Places I’ve been”, “My top choices for Graduate School”, “My Favorite Restaurants”, “Best Soccer Stadiums in the World”. Anything with a location is fine!

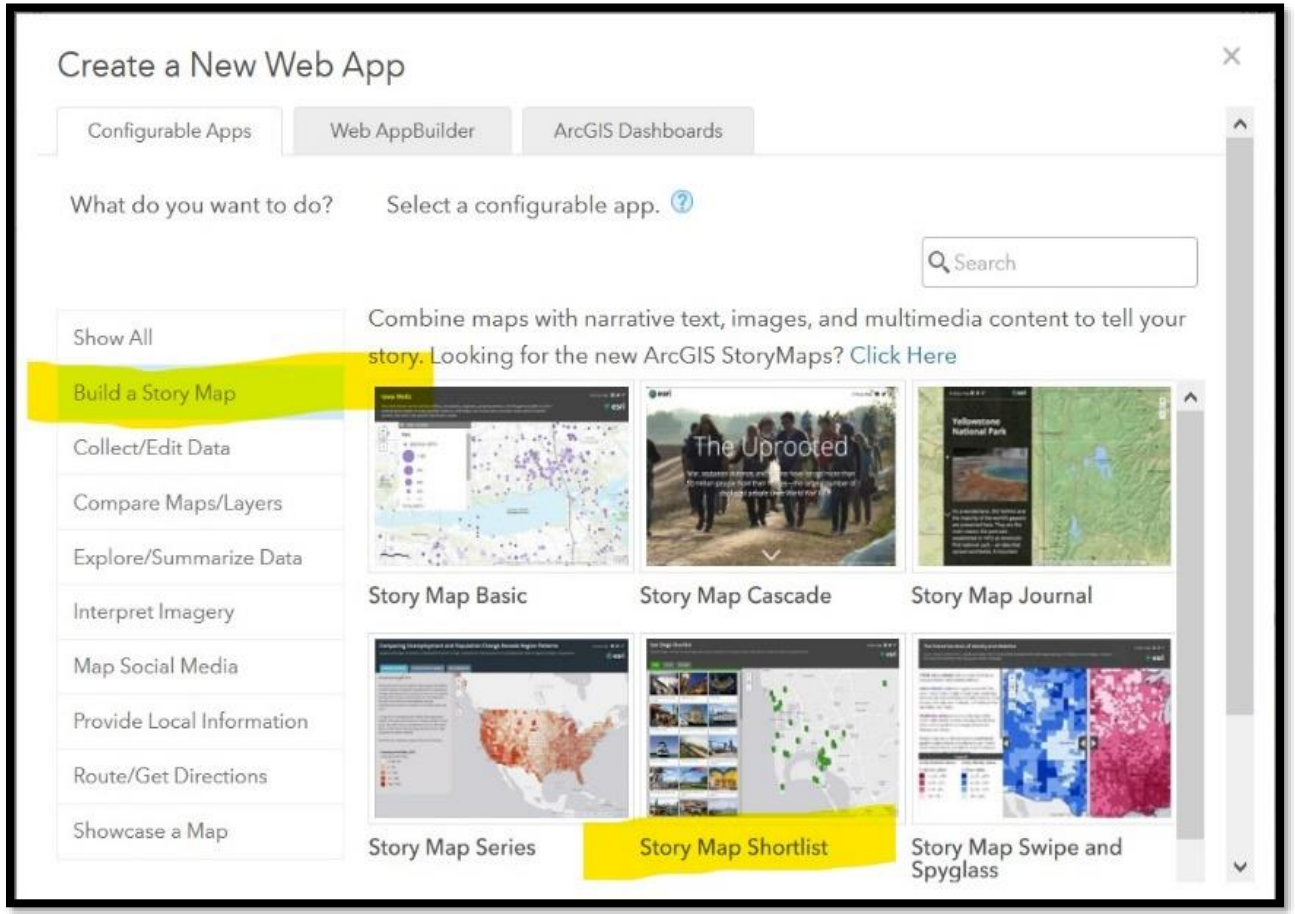


Notes:

1) The images for PIC_URL and THUMB_URL can be the same of different, but you must have a publicly available (open source) image in each cell. I suggest Wikimedia

https://commons.wikimedia.org/wiki/Main_Page

(IMPORTANT: right click and chose “copy location image” to insert your image into your spreasheet).



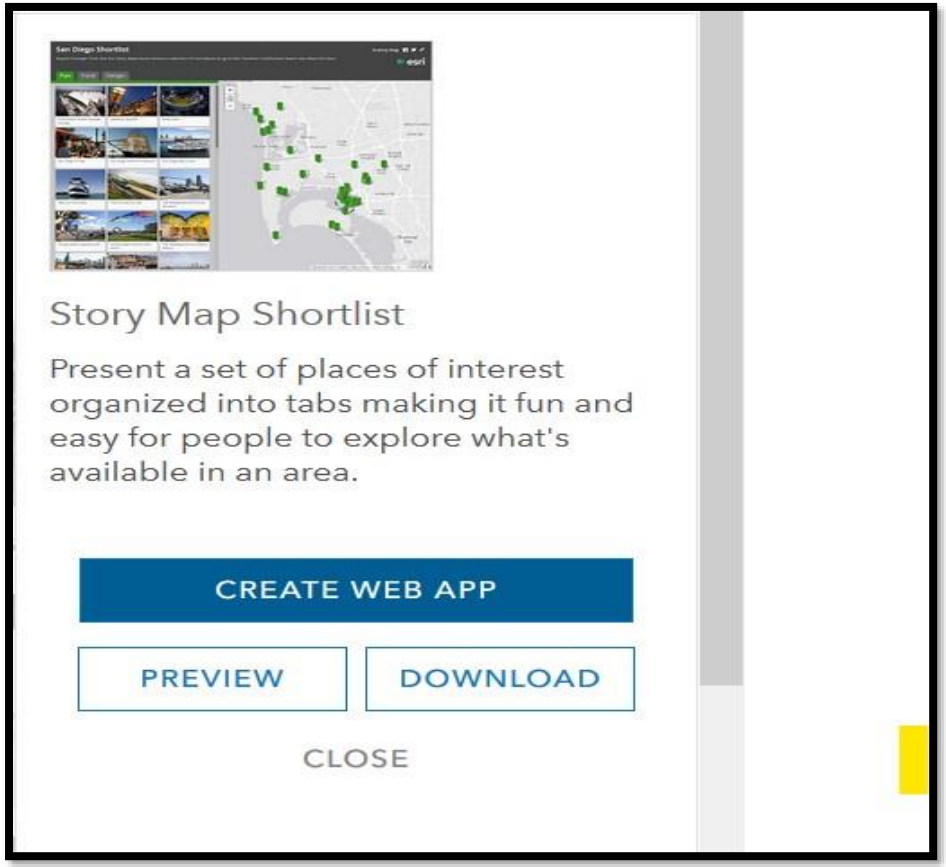
11. Select:

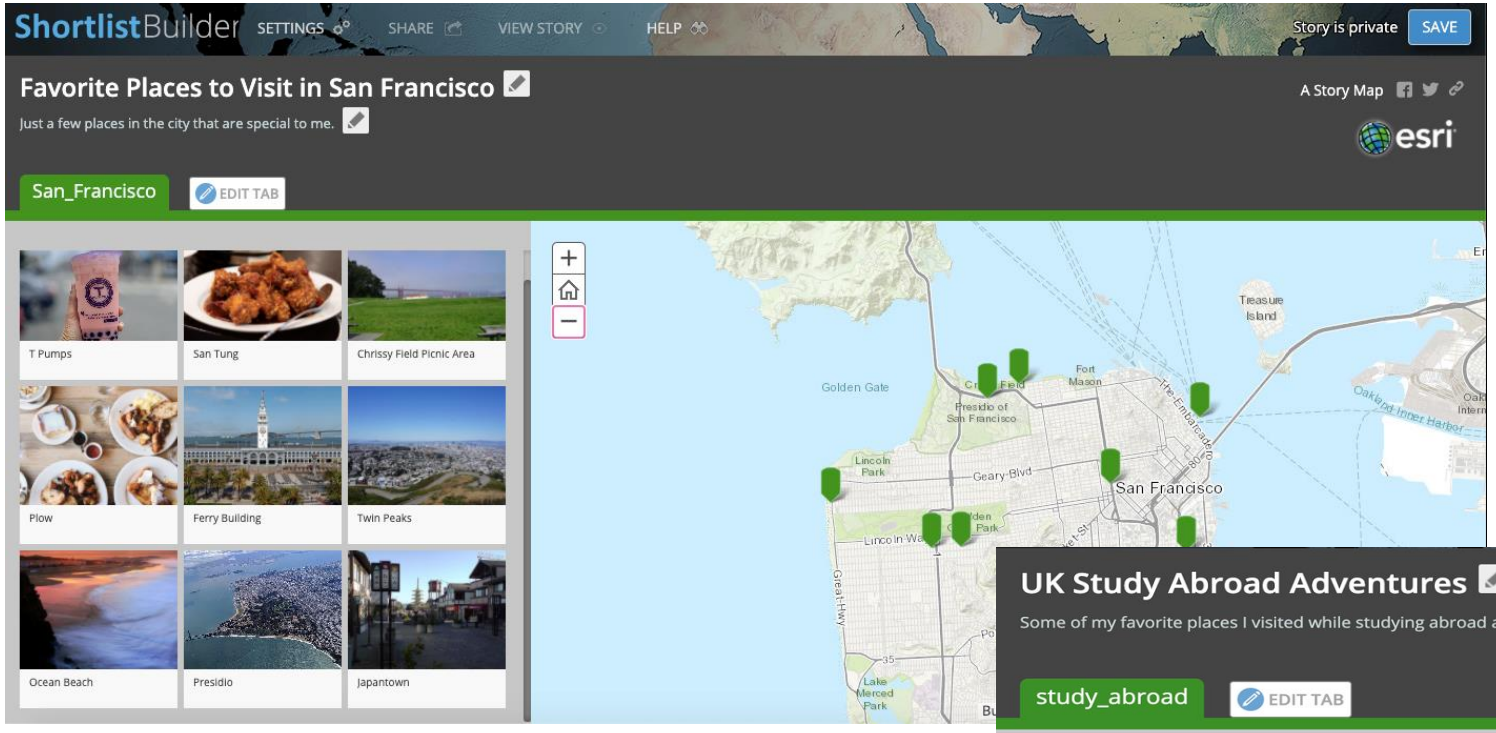
Build a Story map

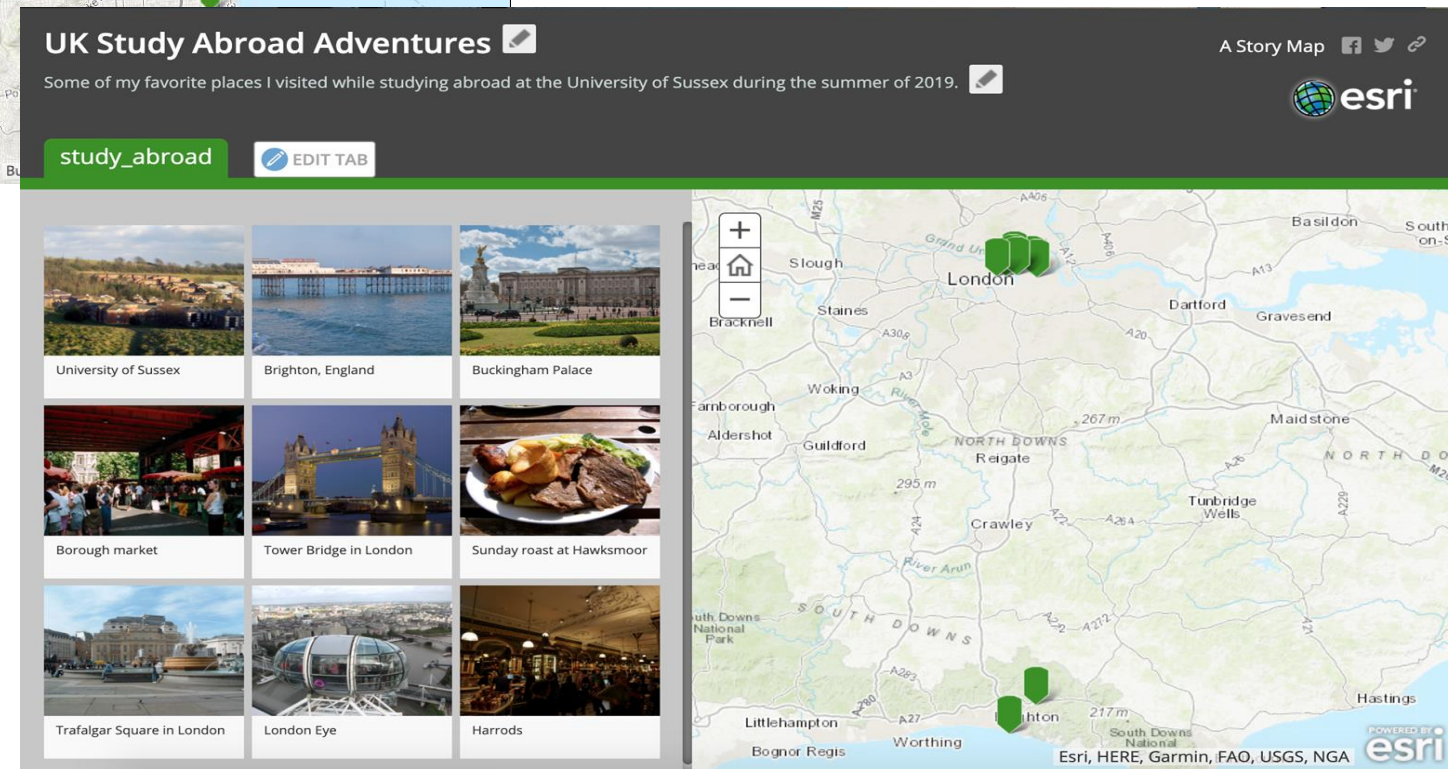
Select:

Story Map Shortlist

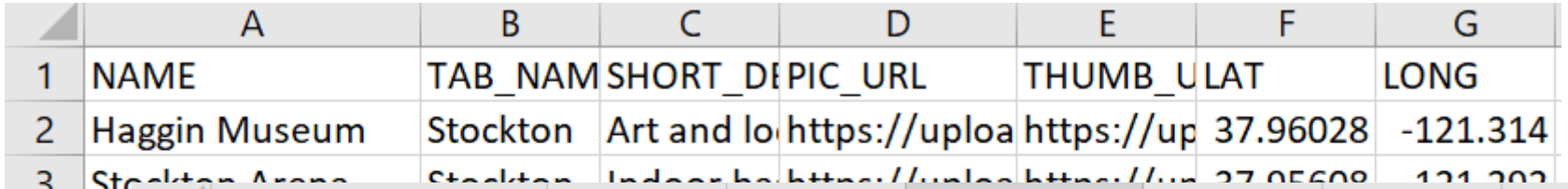
12: Select: Create Web App





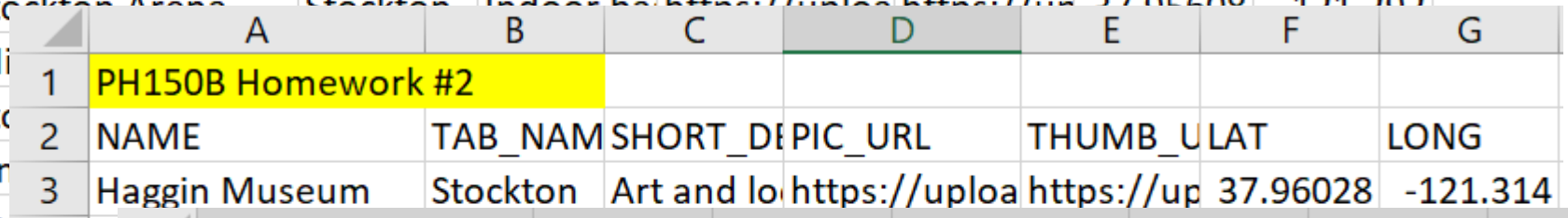


Within a few hours, students are motivated and ready to learn GIS and create StoryMaps



	A	B	C	D	E	F	G
1	NAME	TAB_NAM	SHORT_DE	PIC_URL	THUMB_U	LAT	LONG
2	Haggin Museum	Stockton	Art and lo	https://uploa	https://up	37.96028	-121.314
3	Stockton Arena	Stockton	Indoor ba	https://uploa	https://up	37.95608	-121.292
4	Micke Grove Zoo	Stockton	Petting zo	https://uploa	https://up	38.0445	-121.269
5	Stockton Field Aviat	Stockton	Aircraft m	https://www.	https://s3	37.89133	-121.242
6	University of the Pa	Stockton	Private Un	https://uploa	https://up	37.97995	-121.313
7	San Joaquin Delta C	Stockton	Local com	https://www.	https://up	37.99541	-121.319

Correct



	A	B	C	D	E	F	G
1	PH150B Homework #2						
2	NAME	TAB_NAM	SHORT_DE	PIC_URL	THUMB_U	LAT	LONG
3	Haggin Museum	Stockton	Art and lo	https://uploa	https://up	37.96028	-121.314
4	Stockton Arena	Stockton	Indoor ba	https://uploa	https://up	37.95608	-121.292
5	Micke Grove Zoo	Stockton	Petting zo	https://uploa	https://up	38.0445	-121.269
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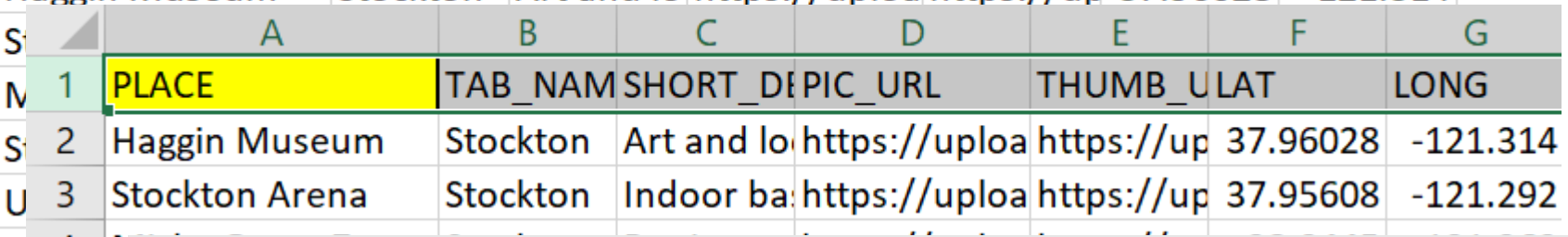
8	San Joaquin Delta C	Stockton	Local com	https://www.	https://up	37.99541	-121.319

Insert Title Line



	A	B	C	D	E	F	G
1	PLACE	TAB_NAM	SHORT_DE	PIC_URL	THUMB_U	LAT	LONG
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3	Stockton Arena	Stockton	Indoor ba	https://uploa	https://up	37.95608	-121.292
4	Micke Grove Zoo	Stockton	Petting zo	https://uploa	https://up	38.0445	-121.269
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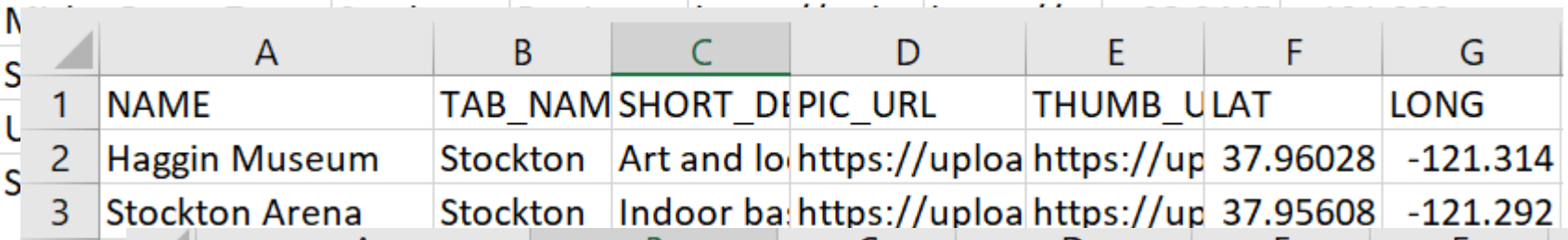
Change Field Name



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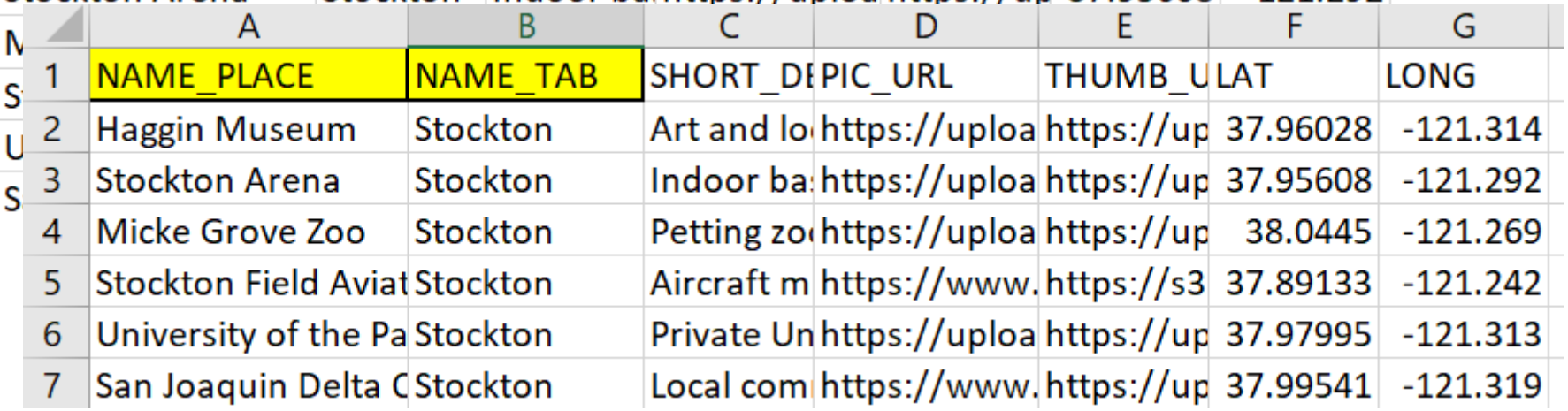
Mix String & Integers



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Similar Field Names

PHW277: Applied GIS for Public Health Practice

Course Syllabus (Spring II - 2020)

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Course Description 2

Course Goals & Competencies 2

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Preparing for the Next Pandemic

Influenza is an ongoing threat each year, but are we prepared for the impact of a novel influenza strain?

Anh-Phuong Pham | PHW 272B - Dr. Charlotte Smith

March 30, 2020

What students need:

Data Sources:

- University Sources: Library Guides / Repositories
- Web Sources: Living Atlas / Wikipedia

Data Cleaning Instruction:

- YouTube Spreadsheet & Data cleaning Skills / YouTube - Leila Gharani
- 2 Hour Data cleaning Bootcamp: R, Python/Jupyter Notebook, Excel

Sources for Spatial Data

https://guides.lib.berkeley.edu/publichealth/phw272

Living atlas of the world (ESRI)

American Community Survey (US Census)

World Development Indicators (World Bank)

Global Health Data Exchange, 500 Cities, (IHME, CDC)

World Clim, Environ Atlas, EJScreen (WC.org, USEPA)

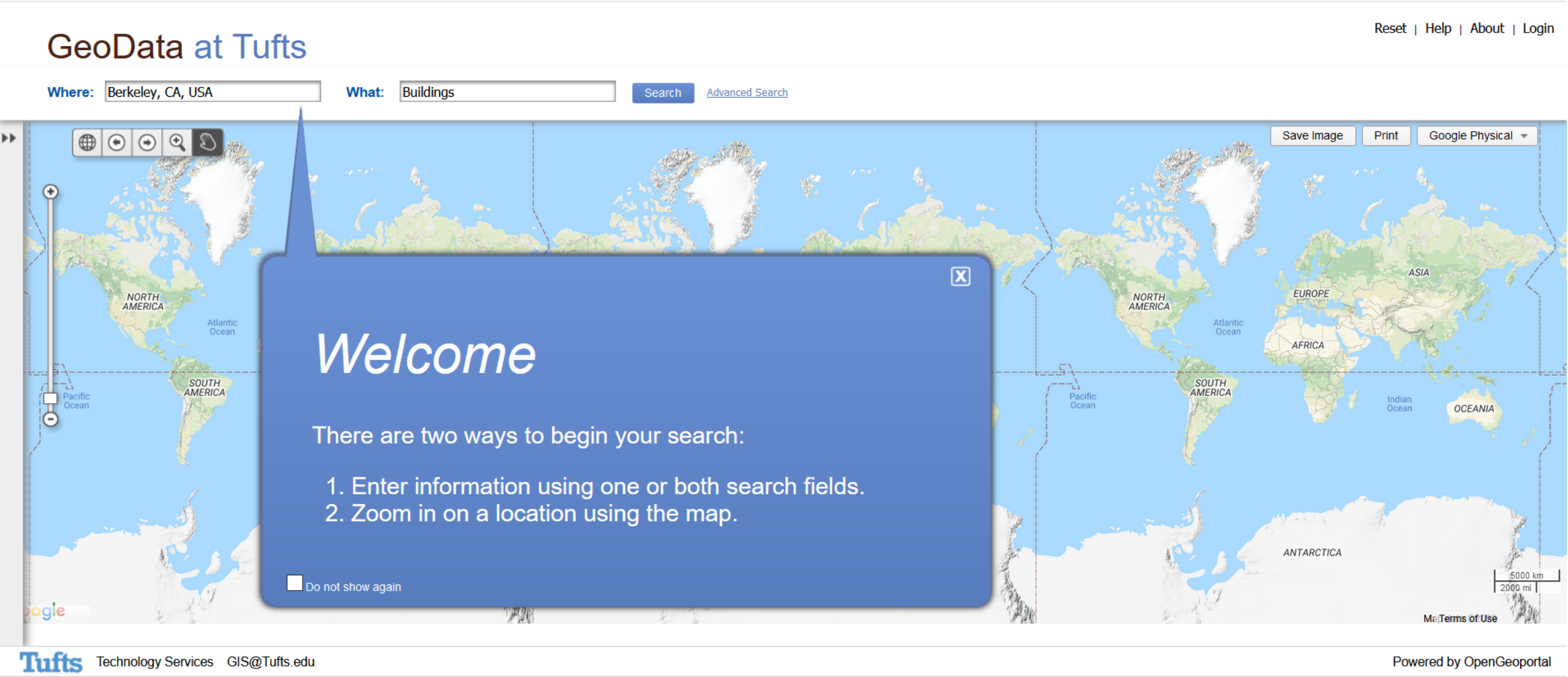
Data Planet (SAGE – behind paywall)

Community Commons (CC.org – open source)

Public Health Librarian

Michael Sholinbeck

https://geodata.tufts.edu/



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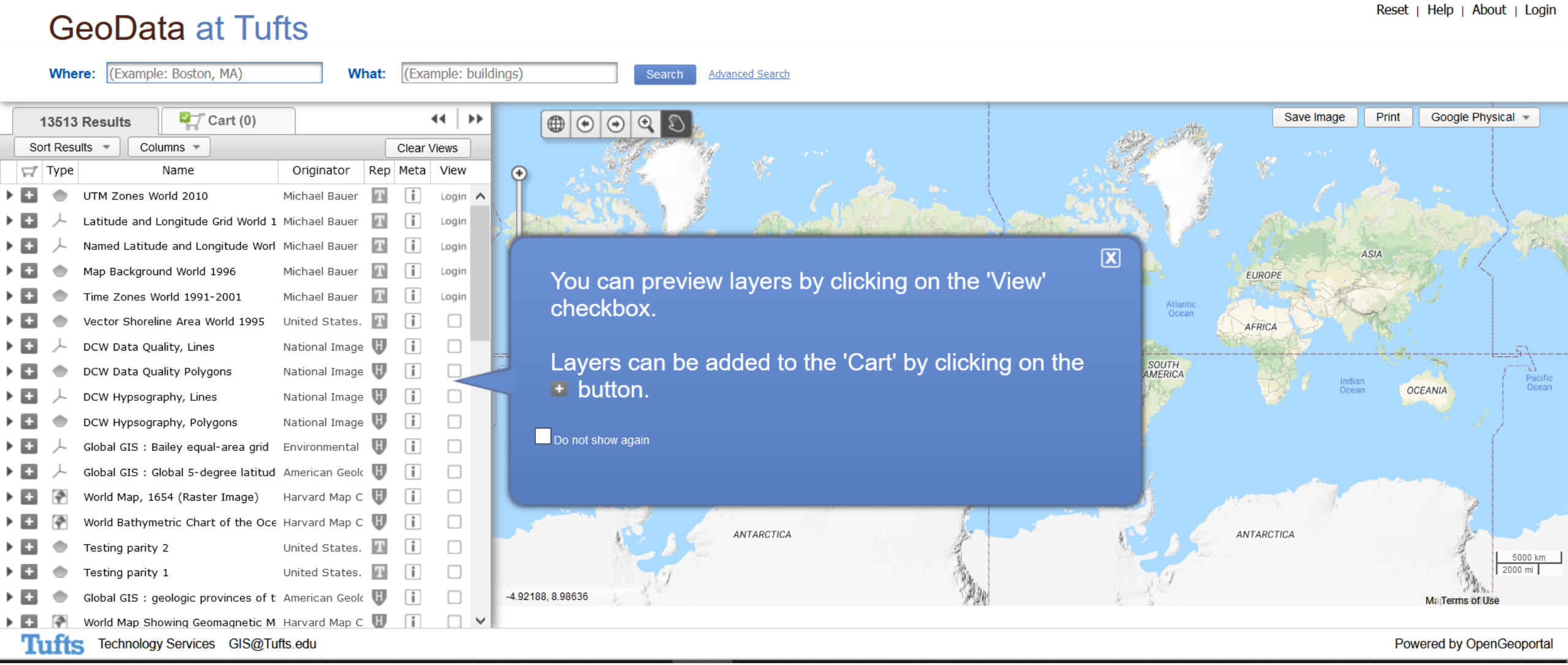
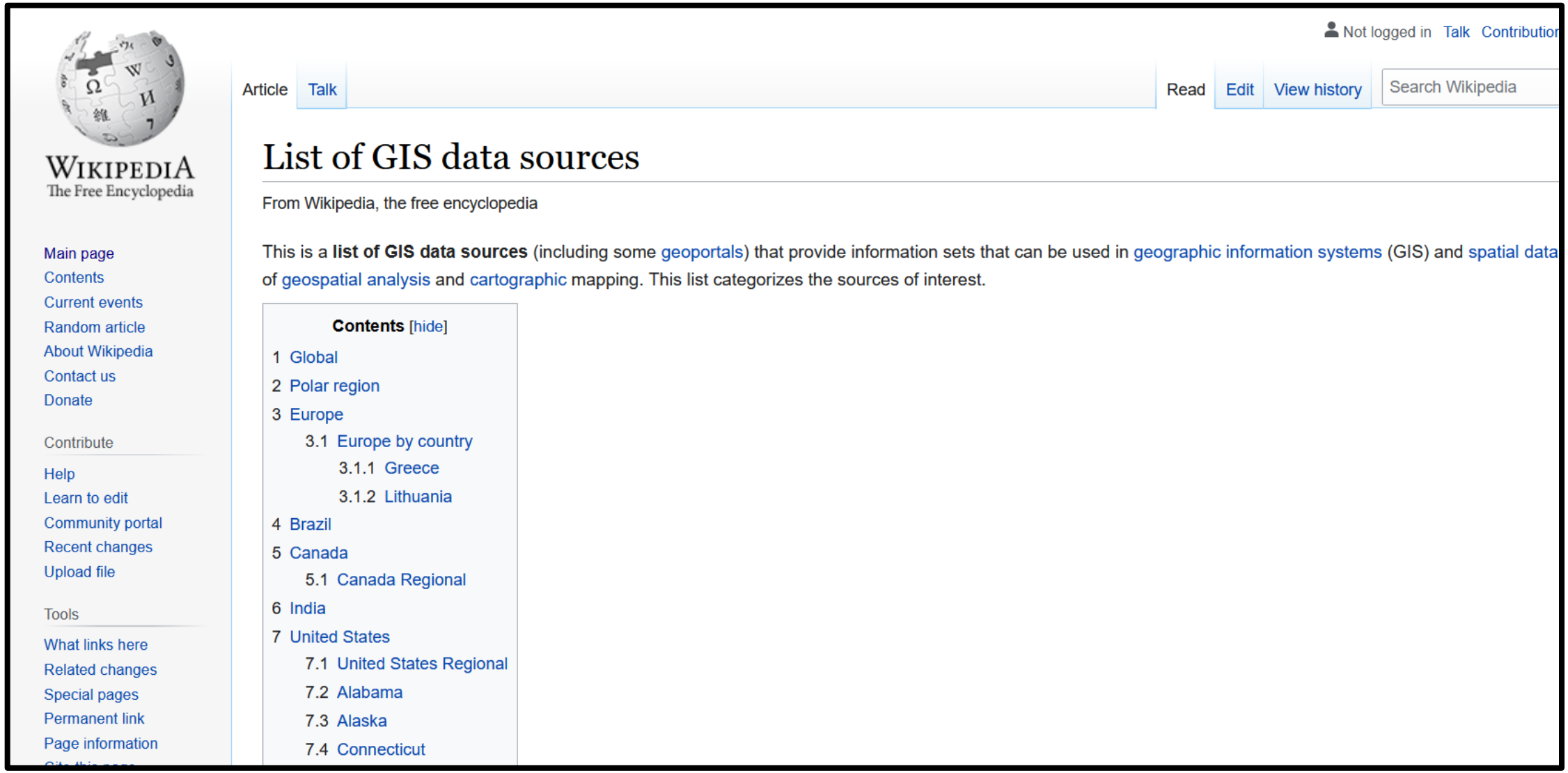


https://en.wikipedia.org/wiki/List_of_GIS_data_sources



WIKIPEDIA
The Free Encyclopedia

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List of GIS data sources

From Wikipedia, the free encyclopedia

This is a **list of GIS data sources** (including some geoportals) that provide information sets that can be used in geographic information systems (GIS) and spatial data of geospatial analysis and cartographic mapping. This list categorizes the sources of interest.

Contents [hide]

1 Global
2 Polar region
3 Europe
  3.1 Europe by country
    3.1.1 Greece
    3.1.2 Lithuania
4 Brazil
5 Canada
  5.1 Canada Regional
6 India
7 United States
  7.1 United States Regional
  7.2 Alabama
  7.3 Alaska
  7.4 Connecticut

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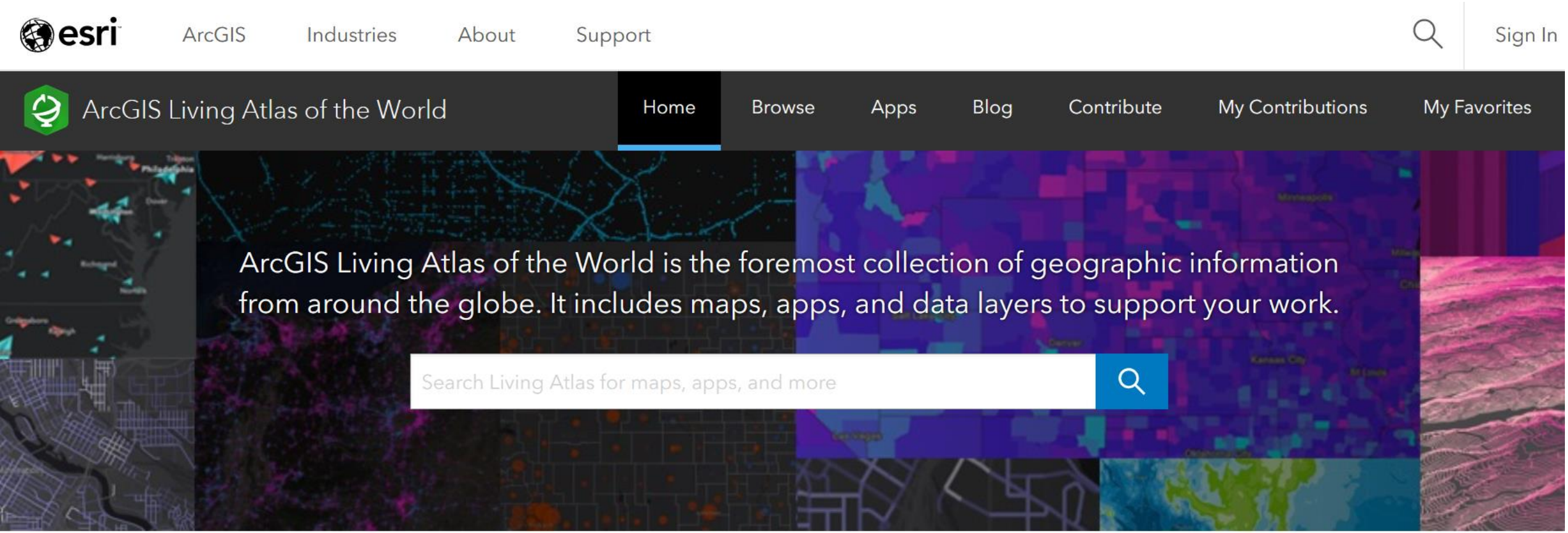
Contact us
Donate

Contribute
Help
Learn to edit
Community portal
Recent changes
Upload file

Tools
What links here
Related changes
Special pages
Permanent link
Page information

https://livingatlas.arcgis.com/en/home/



Cartography: David Medieros, Stanford

https://library.stanford.edu/research/stanford-geospatial-center

STANFORD GEOSPATIAL CENTER GIS Cartography

Link List Data Resources Workshops Downloads

Stanford Geospatial Center

Reading

General Texts

Making Maps: A Visual Guide to

Cartography: An Introduction, 2

Cartography Guide - Axis Maps

Advanced Texts

Cartography - Ken Fields

Cartographic Relief Presentatio

Envisioning Information - Edwar

Essays & Articles

Map Making Advice for Student

Assessment: Rubric

Criteria	Points
The theme of the StoryMap is clear (as represented by the title)	2
The theme is consistent throughout the StoryMap	2
The intended audience can be inferred easily (it's clear whether the StoryMap is for the general public or a specific audience or stakeholder with subject area knowledge	2
The narratives are clear and concise	8
Data sources are appropriately attributed, images have permissions if needed or are creative commons open source	6
The StoryMap includes an original density measure such as kernel density or heatmap, or a measure of clustering or hotspot analysis	20
The StoryMap includes an original map with buffer or distance measure related to at least one feature	20
The Story Map includes a map with a raster image or 3D image	20
Overall effectiveness of the map – did it achieve an intended purpose / good use of images/videos and/or graphics?	20
	100

Assessment: University of Minnesota

Rubric Templates

These rubric templates outline some of the grading criteria to consider when designing your assignment.

Assignment Type			
Story Map	Basic Rubric	Detailed Rubric	Group Work Rubric

Thank you for your attention (in yet another Zoom meeting)

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