How will the Demo Video + Final Project be graded?

DSC 106: Data Visualization

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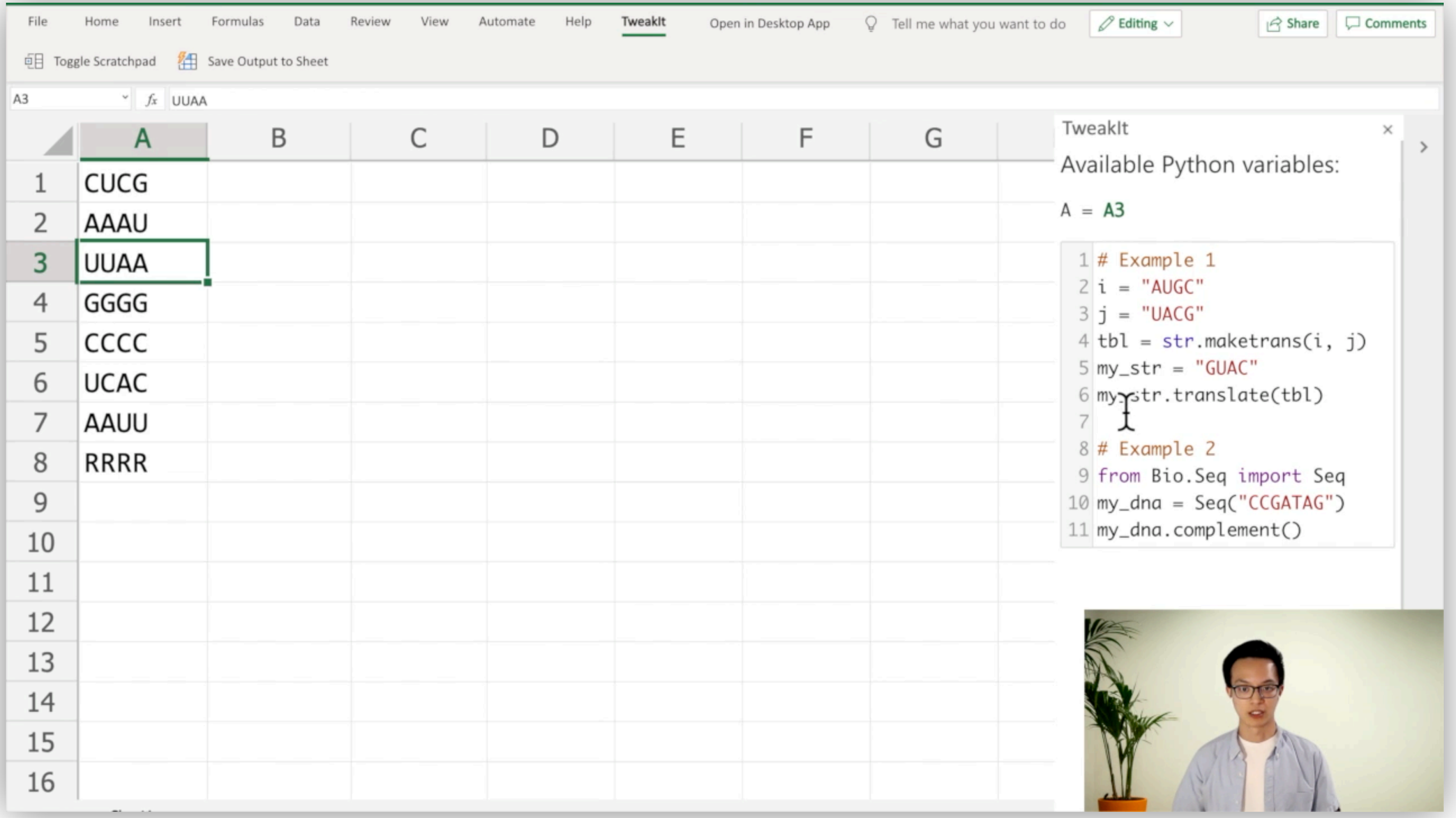
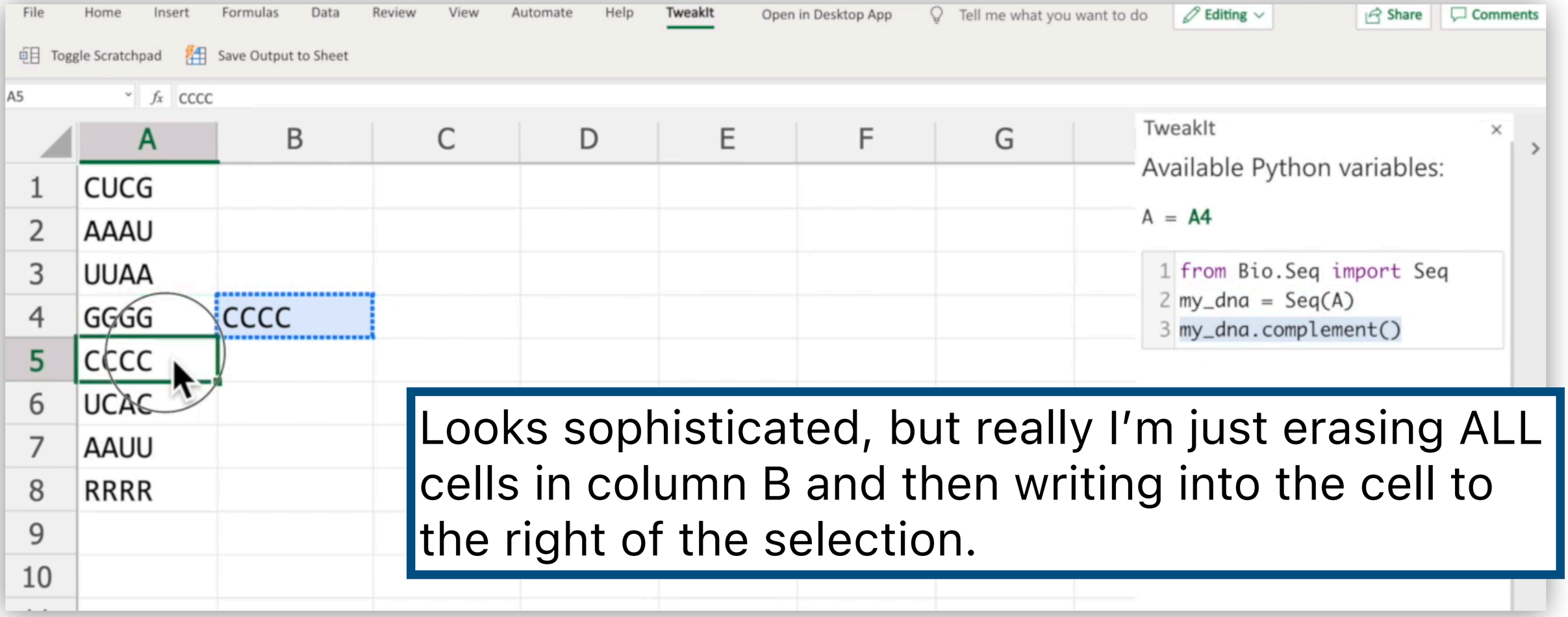
UC San Diego

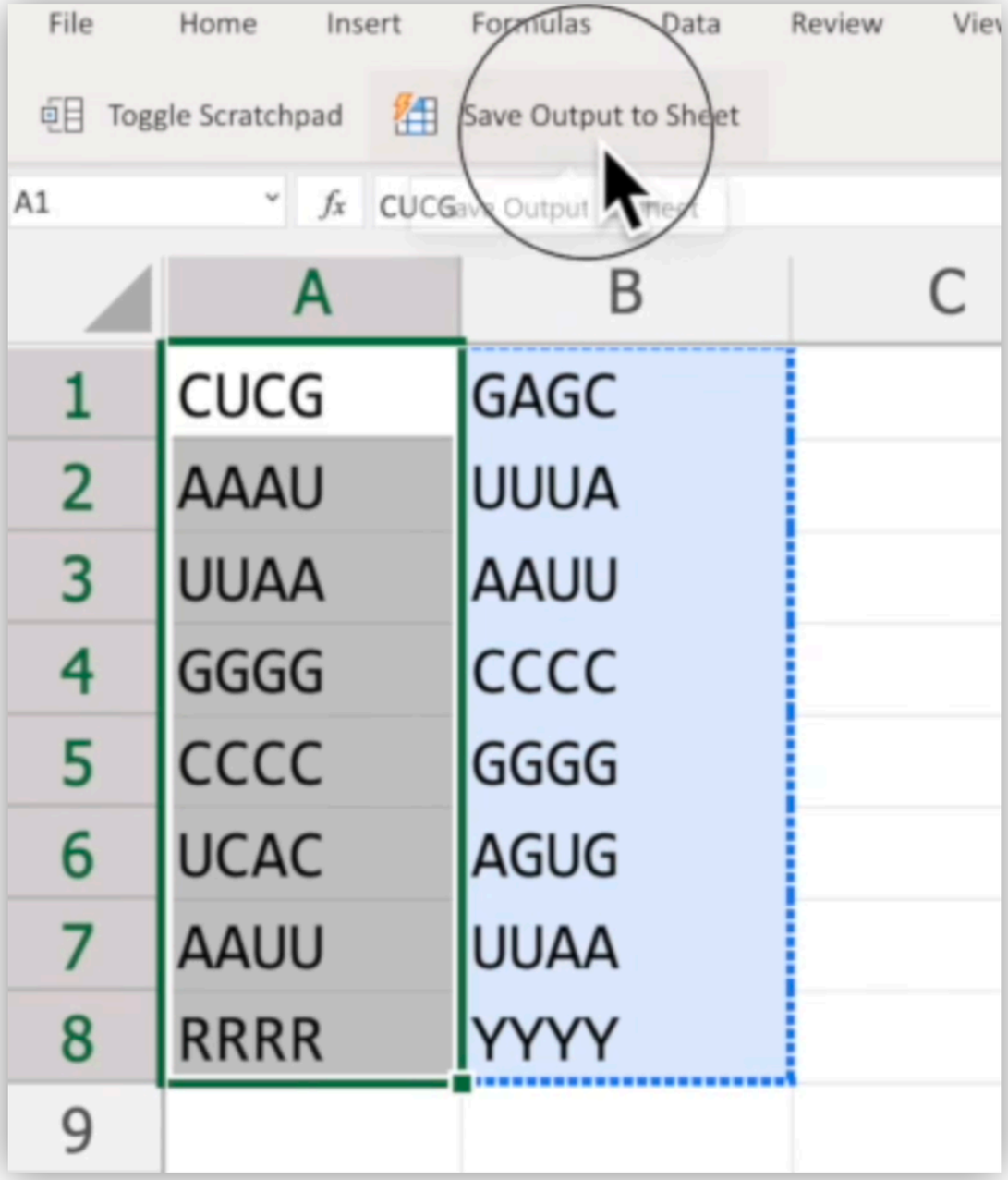
A peek behind the curtain: demo videos


File
Home
Insert
Formulas
Data
Review
View
Automate
Help
TweakIt
Open in Desktop App
Tell me what you want to do
Editing
Share
Comments
Toggle Scratchpad
Save Output to Sheet
A3
UUAA
A
B
C
D
E
F
G
1 CUCG
2 AAAU
3 UUAA
4 GGGG
5 CCCC
6 UCAC
7 AAUU
8 RRRR
9
10
11
12
13
14
15
16
TweakIt
Available Python variables:
A = A3
1 # Example 1
2 i = "AUGC"
3 j = "UACG"
4 tbl = str.maketrans(i, j)
5 my_str = "GUAC"
6 my_str.translate(tbl)
7
8 # Example 2
9 from Bio.Seq import Seq
10 my_dna = Seq("CCGATAG")
11 my_dna.complement()



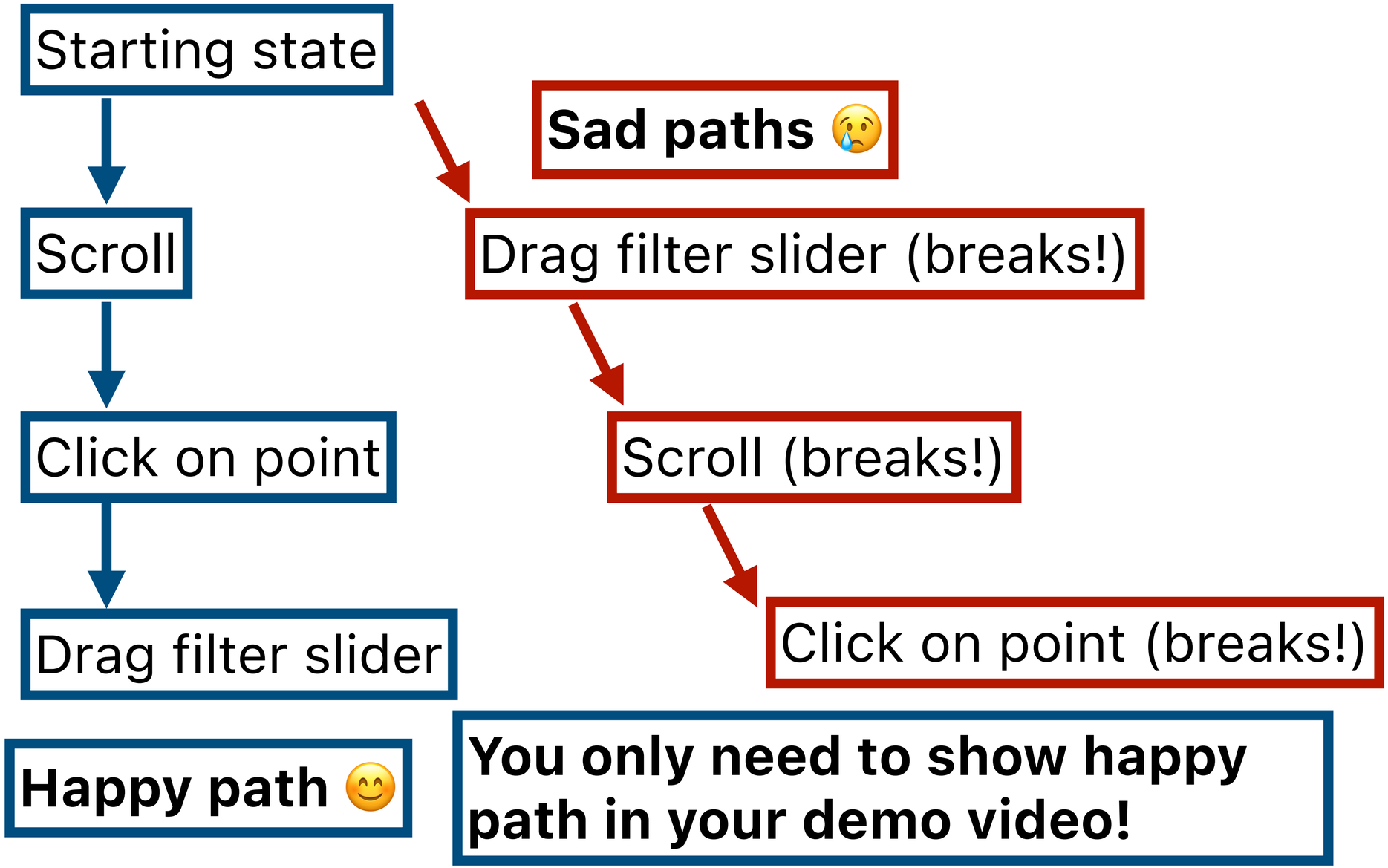
Looks sophisticated, but really I'm just erasing ALL cells in column B and then writing into the cell to the right of the selection.

If there was other data in the spreadsheet, it would be wiped out!



Clicking “Save Output” just removes the blue background from column B. (It doesn’t actually work!)

Making a cool demo video

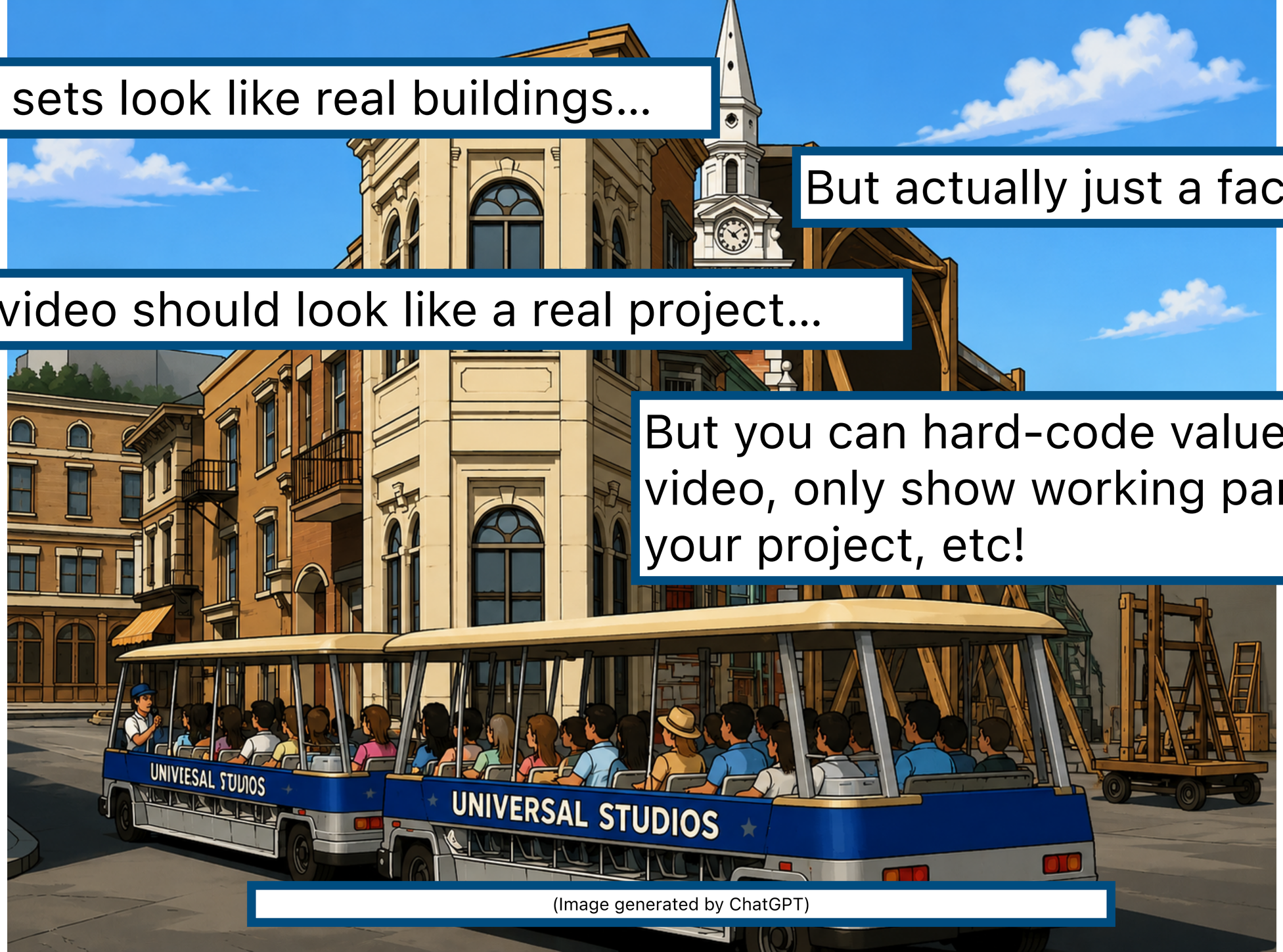


Movie sets look like real buildings...

But actually just a facade!

Your video should look like a real project...

But you can hard-code values, edit video, only show working parts of your project, etc!



(Image generated by ChatGPT)

Component	Excellent	Satisfactory	Not Satisfactory
Video URL and Length		The video is uploaded as a public video on YouTube, and its length is 2 minutes or less. (+1 point)	The submitted video URL is broken, or it goes substantially over 2 minutes. (+0.5 points)
Hook		The video opens with a hook – an interesting research question or attention-grabbing statement. (+1 point)	The video doesn't open with a hook (e.g. it immediately starts describing the visualization). (+0.5 points)
Motivation	The video explains the motivation for your project – why do you think your visualization is better than other explanations? E.g. what does your visualization allow that other explorables don't? (+2 points)	The video explains the motivation for your project but doesn't explain what your project does better than other explanations. (+1 point)	The video does not contain motivation for the project. (+0.5 points)

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Common reasons for Not Satisfactory:

- Marking "Made for Kids" when uploading to YT (don't do this, because then we can't put your video in a YT playlist).
- Speeding up your video to get it under the 2 min time limit.

Component	Excellent	Satisfactory	Not Satisfactory
Video URL and Length		The video is uploaded as a public video on YouTube, and its length is 2 minutes or less. (+1 point)	The submitted video URL is broken, or it goes substantially over 2 minutes. (+0.5 points)
Hook		The video opens with a hook – an interesting research question or attention-grabbing statement. (+1 point)	The video doesn't open with a hook (e.g. it immediately starts describing the visualization). (+0.5 points)
			don't? (+2 points)

Common reasons for Not Satisfactory:

- Going straight into the project rather than giving context: why should someone care about your project?

Component	Excellent	Satisfactory	Not Satisfactory
Video URL and		The video is uploaded as a public	The submitted video URL is broken, or it goes
Motivation	The video explains the motivation for your project – why do you think your visualization is better than other explanations? E.g. what does your visualization allow that other explorables don't? (+2 points)	The video explains the motivation for your project but doesn't explain what your project does better than other explanations. (+1 point)	The video does not contain motivation for the project. (+0.5 points)

Excellent grades reserved for compelling reasons that your visualization is better than others.

- "Our visualization is interactive" is not sufficient, there are lots of interactive visualizations that already exist.
- What exists? And why is yours different?

Explanation of the visualization	The video clearly demonstrates all relevant features of the visualization, including its interactions and design choices. The video explains the most interesting features, surprising features, or most challenging features to implement. (+2.5 points)	The video clearly demonstrates all relevant features of the visualization, including its interactions and design choices, but doesn't mention its most interesting or surprising features. (+1.5 points)	The explanation of the visualization does not sufficiently demonstrate its features. (+0.5 points)
experience		images are clearly visible and all text is legible. (+1 point)	and text are too small to see clearly). (+0.5 points)

Excellent grades are reserved for specific explanations that reference research studies from the course.

- "It was hard to build D3 charts because our dataset was big." is not sufficient.
- "To build an effective animation, we animated the axis rescaling separately from the mark transitions, using the guidelines from Jeffrey Heer's 2007 paper."

Excellent grades are reserved for takeaways that:

- Are relevant for everyday people (not just data scientists).
- Clearly follow from your project
- Are not common knowledge (e.g. “there are lots of forest fires, so we should support firefighters” 🥱).

Takeaways	The video ends with an interesting takeaway and explains why your visualization demonstrates this takeaway effectively. What is the one thing that everyone should learn from your visualization? And why does your visualization succeed at explaining it? (+2.5 points)	The video ends with a takeaway message but the presentation could be improved (e.g. the takeaway isn’t surprising, or focuses too much on the implementation of the visualization). (+1.5 points)	The video does not end with a takeaway message. (+0.5 points)
Viewing experience		The video is easy to view: all images are clearly visible and all text is legible. (+1 point)	The video is difficult to view (e.g. some images and text are too small to see clearly). (+0.5 points)

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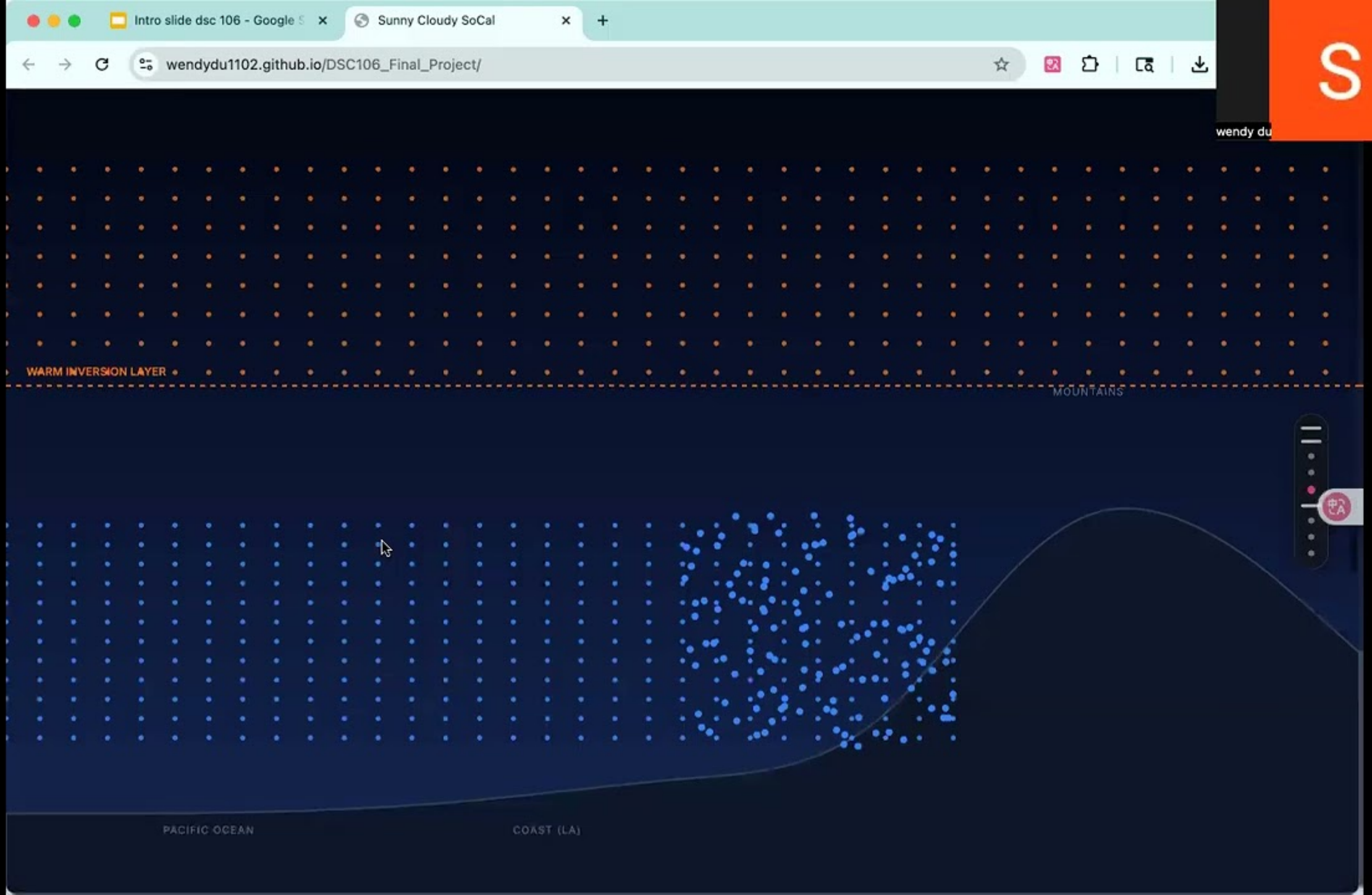
Viewing experience		The video is easy to view: all images are clearly visible and all text is legible. (+1 point)	The video is difficult to view (e.g. some images and text are too small to see clearly). (+0.5 points)

Common mistakes:

- Text / Visualization is too small. Zoom in for your video if needed.

Nifty Demo Videos from Past Quarters

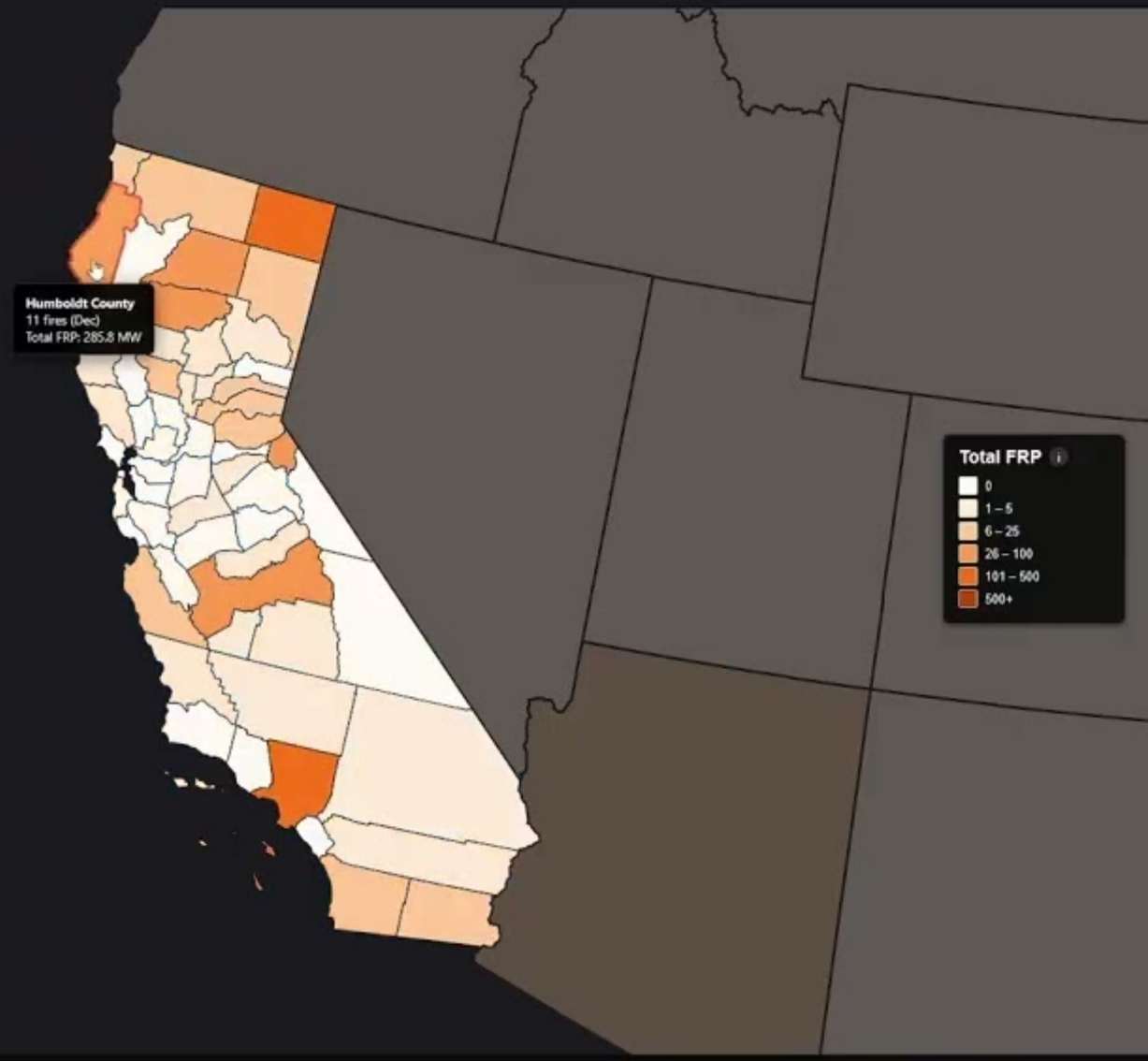

Intro slide dsc 106 - Google S
Sunny Cloudy SoCal
wendydu1102.github.io/DSC106_Final_Project/
WARM INVERSION LAYER
MOUNTAINS
PACIFIC OCEAN
COAST (LA)

America on Fire: Mapping US Fire Distribution (2024)

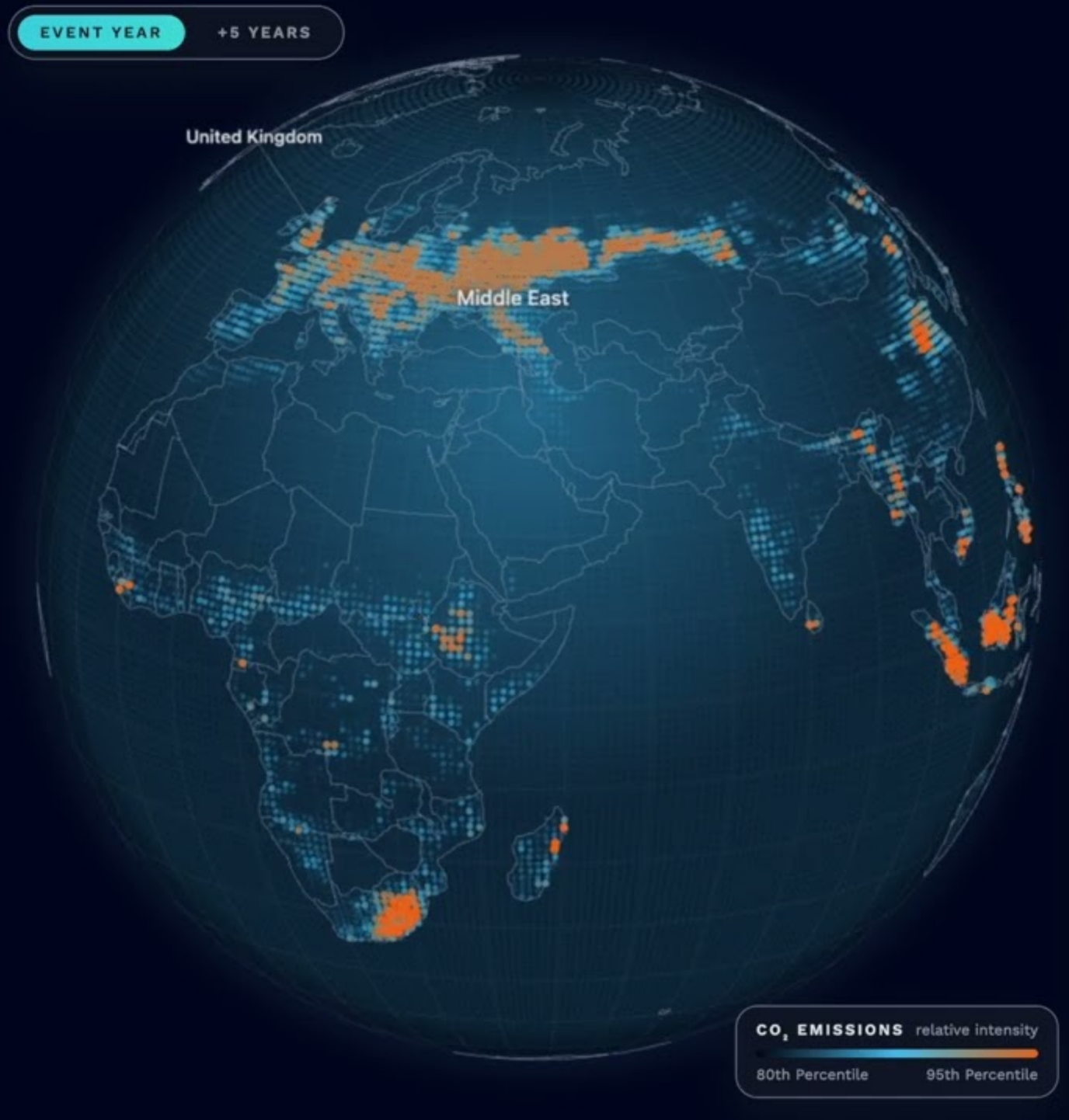
California: The Fire State

Year after year, California's landscapes are transformed by fire. From the Santa Ana winds to parched forests, when people think of wildfires, they typically think of California.

Continue →



Month: Dec



THE CARBON CHRONICLE

MIDDLE EAST · 1908 OIL, EMPIRE, AND RESENTMENT

Oil beneath Iranian soil, power above it.

As Iran fought to reclaim its oil, global emissions climbed — a reminder that power flowed as much from carbon as from politics.

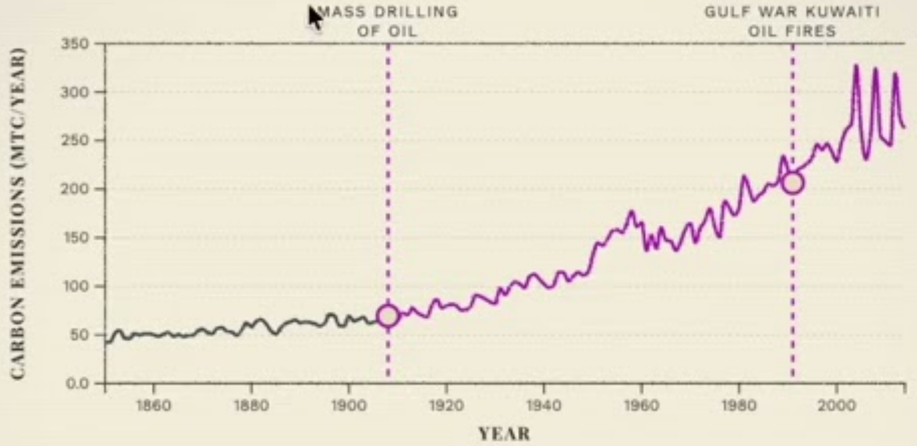


Fig. 2 — Oil became the Middle East's biggest economic revenue, efforts to monopolize lead to the Gulf War, and the U.S involvement for fear of a hostile power, Iraq, gaining too much control of the Persian Gulf. The fires set to Kuwaiti by the Hussein regime burned for 11 months.

How to ace your final project

Component	Excellent	Satisfactory	Poor
Web page URL, video URL, and Repo		The web page is publicly viewable on GitHub pages, the project video is linked (or embedded) within the web page, and the repository is publicly available. (+1 point)	The submitted web page URL, project video, or repository URL is broken. (+0 points)
Hook		The project opens with a hook – an interesting research question or attention-grabbing statement. (+1 point)	The project doesn't open with a hook (e.g. it immediately shows a visualization without explanation). (+0 points)
Storytelling	The project tells a compelling story. It follows the and-but-therefore structure and also incorporates elements of surprise, personalization, or emotion. (+3 points)	The project tells a story – it follows the and-but-therefore structure. (+2 points)	The project does not tell a story (e.g. it doesn't follow the and-but-therefore structure or something similar). (+1 point)
Visual Encodings	The project visualizations do not violate the expressiveness criteria and the design choices (marks and encoding channels) are clear, evocative, and effective. (+3 points)	The project visualizations do not violate the expressiveness criteria, but another set of design choices (marks and encoding channels) could have been more effective (e.g. using the area visual channel instead of position when possible). (+2 points)	The project visualizations violate the expressiveness criteria (e.g. heavy overplotting, encodings that imply incorrect readings, etc.), and these violations are not addressed using the available interactions (e.g. overplotting that cannot be filtered or zoomed into). (+1 point)

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Web page URL, video URL, and Repo		The web page is publicly viewable on GitHub pages, the project video is linked (or embedded) within the web page, and the repository is publicly available. (+1 point)	
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Most common mistake: no video linked in webpage

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Web page URL, video URL, and Repo		The web page is publicly viewable on GitHub pages, the project video is linked (or embedded) within the web page, and the repository is publicly available. (+1 point)	The submitted web page URL, project video, or repository URL is broken. (+0 points)
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Most common mistake: straight into visualization without hook

Excellent reserved for compelling stories that incorporate surprise, personalization, or emotion.

No and-but-therefore? Score capped at Not Satisfactory!

Component			
Web page URL, video URL, and Repo			
Hook		attention-grabbing statement. (+1 point)	visualization without explanation). (+0 points)
Storytelling	The project tells a compelling story. It follows the and-but-therefore structure and also incorporates elements of surprise, personalization, or emotion. (+3 points)	The project tells a story – it follows the and-but-therefore structure. (+2 points)	The project does not tell a story (e.g. it doesn't follow the and-but-therefore structure or something similar). (+1 point)
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Hoo			
Stor			
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As always, will grade on visual encodings. Any of these issues will cap your grade at Satisfactory:

- Overplotting
- Heavy reliance on less effective visual channels (e.g. pie charts, color hue)
- Perception issues (not binning colors for continuous scales)

Interaction	The interactive elements of the project are polished, bug-free, and enable the reader to discover interesting patterns in the data or the concept being explored. (+3 points)	The interactive elements of the project are functional and enable the reader to discover interesting patterns, but a static plot (perhaps with a different encoding) could have conveyed the same information just as effectively. (+2 points)	The plot would have been substantially more effective as a static plot without the interaction; or, the interaction has major bugs that preclude use. (+1 point)
Annotations		The visualizations contain helpful	
Takeaways		takeaway and explains why your visualization demonstrates this	ends with a takeaway message but
Viewing experience		The project is easy to view: all images are clearly visible and all text is legible on a typical laptop screen size. (+1 point)	The project is difficult to view (e.g. some images and text are too small to see clearly). (+0 points)

Similar to Project 3; do we learn something new from your interactions that isn't possible without the interactions?

First question to answer is: What is interesting about your **data**? (Not: what is interesting about your interactions?)

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Annotations		The visualizations contain helpful annotations (e.g. text, coloring, shading) that draw attention to interesting findings. (+1 point)	The visualizations contain no annotations. (+0 points)
Takeaways		one thing that everyone should learn from your project? And why does your project succeed at explaining it? (+2 points)	focuses too much on the implementation of the visualization). (+1 point)
Viewing experience		The project is easy to view: all images are clearly visible and all text is legible on a typical laptop screen size. (+1 point)	The project is difficult to view (e.g. some images and text are too small to see clearly). (+0 points)

Common mistake: lots of plots, no annotations on plots themselves.

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Annotations		interesting findings. (+1 point)	
Takeaways		The project ends with an interesting takeaway and explains why your visualization demonstrates this takeaway effectively. What is the one thing that everyone should learn from your project? And why does your project succeed at explaining it? (+2 points)	The project is missing a takeaway, or ends with a takeaway message but the presentation could be improved (e.g. the takeaway isn't surprising, or focuses too much on the implementation of the visualization). (+1 point)
Viewing experience		The project is easy to view: all images are clearly visible and all text is legible on a typical laptop screen size. (+1 point)	The project is difficult to view (e.g. some images and text are too small to see clearly). (+0 points)

Common mistake: takeaway that is common knowledge (e.g. "there are lots of forest fires, so we should support firefighters")

Interaction	The interactive elements of the project are polished, bug-free, and enable the reader to discover interesting patterns in the data or the concept being explored. (+3 points)	The interactive elements of the project are functional and enable the reader to discover interesting patterns, but a static plot (perhaps with a different encoding) could have conveyed the same information just as effectively. (+2 points)	The plot would have been substantially more effective as a static plot without the interaction; or, the interaction has major bugs that preclude use. (+1 point)
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Viewing experience		The project is easy to view: all images are clearly visible and all text is legible on a typical laptop screen size. (+1 point)	The project is difficult to view (e.g. some images and text are too small to see clearly). (+0 points)

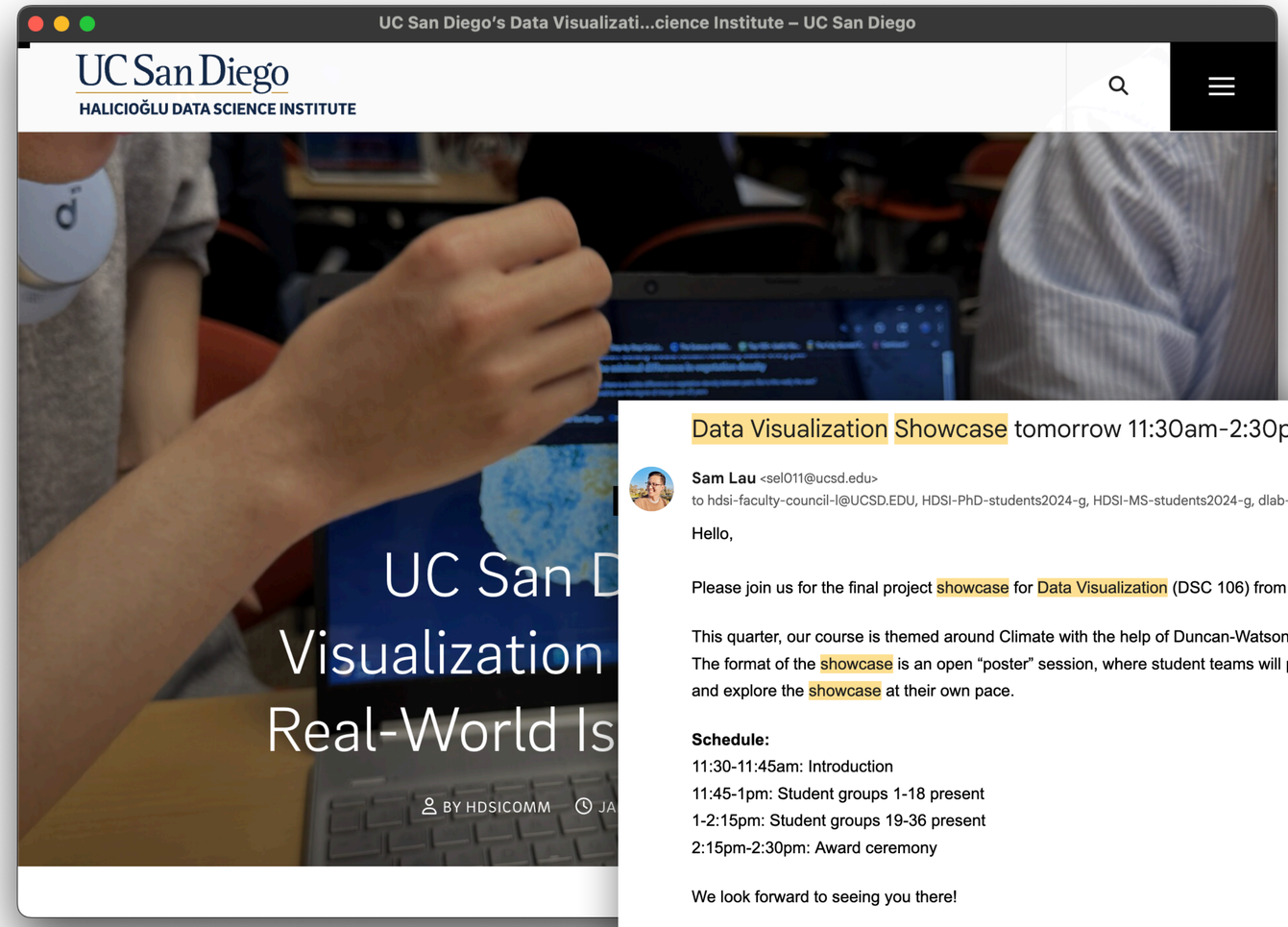
Common mistake: fonts too small, images blurry

See past quarters' award winners for inspiration:

https://dsc-courses.github.io/dsc106-2025-fa/showcase/

https://dsc-courses.github.io/dsc106-2025-sp/showcase/

And yes, we will make a showcase page for your projects too.



Data Visualization Showcase tomorrow 11:30am-2:30pm External

Sam Lau <sel011@ucsd.edu> Dec 8, 2025, 8:00 AM
to hdsi-faculty-council-l@UCSD.EDU, HDSI-PhD-students2024-g, HDSI-MS-students2024-g, dlab-members, sdsc-people-g

Hello,

Please join us for the final project showcase for Data Visualization (DSC 106) from **11:30am-2:30pm this Tuesday, December 9 (tomorrow)** in SDSC Rooms B210-212.

This quarter, our course is themed around Climate with the help of Duncan-Watson Parris. Over 35 student teams created visual explanations ranging from wildfire spread to climate modeling. The format of the showcase is an open “poster” session, where student teams will present and explain their interactive visualizations. Attendees are welcome to join at any time during the event and explore the showcase at their own pace.

Schedule:
11:30-11:45am: Introduction
11:45-1pm: Student groups 1-18 present
1-2:15pm: Student groups 19-36 present
2:15pm-2:30pm: Award ceremony

We look forward to seeing you there!

Students often show exceptional creativity through these projects. Here are a few award winners from last year:

I will share our showcase with all of HDSI, the Design Lab, and SDSC. Show us your best work!