Week 7: Process Book & Project Proposal
You will choose a team leader and set up your process book. Make sure all your group members can edit it. You also need to add a project proposal to your process book. In your project proposal, you will let us know what topic you are interested in exploring, including a project title and abstract. The team leader also needs to submit the project proposal as well as the team members' information through the project proposal form.

Project Title: Life Cycle of Poaching in Africa

Abstract:
We wanted to do something socially-minded. We still want to be able to delight our viewers, which is why we felt something animal oriented could inform, inspire, and entertain viewers all at the same time. As we began researching the poaching cycle, we realized that poaching is a much larger-scale problem than we may have expected, and that it would therefore be good to inform our viewers about the issue and inspire them to take whatever actions they can. We thought that this issue was serious enough that we would be addressing a significant real-world problem and spreading awareness about said problem, but not too serious that it would dishearten people to learn about or be considered too politically controversial.

We specifically plan to focus on the poaching of four types of animals in various countries in Africa: lions, leopards, rhinos, and elephants. Some questions we are interested in exploring are the following: Which regions have the highest poaching rates, and which animals are poached the most frequently in these regions? Have poaching rates increased or decreased over the past decades, both on average and in specific countries? How many rangers have been killed by poachers over the years? In what places around the world have the products of poaching been exported to most frequently? These are just a few starting questions we have; we may end up focusing on some questions more heavily than others, getting rid of questions if they seem too distant from our main topics, or adding in new questions if we come up with any crucial follow-up details the reader may want to know.

Week 8: Team Agreement & Detailed Project Plan
In your process book, you will add your team agreement and create a detailed project plan, which should address the following points of your Map step:

- **Basic Info**. The project title, your names, e-mail addresses, and your team name.
- **Background and Motivation.** Discuss your motivations and reasons for choosing this project, especially any background or research interests that may have influenced your decision.
- **Related Work.** Anything that inspired you, such as a paper, website, and visualizations we discussed in class.
- **Audience and Questions**. Describe your audience and the primary questions you are trying to answer with your data story. Do you have any overarching goals and objectives that you want to accomplish?
- **Data**. From where and how are you collecting your data? If appropriate, provide a link to your data sources.
- **Data Cleanup**. Do you expect to do substantial data cleanup? What quantities do you plan to derive from your data? How will data processing be implemented? Try to minimize the amount of cleanup you have to do by finding cleaned and ready-to-go data sources whenever possible.

You will also be contacted by your TF mentor. Make sure your TF mentor can access your process book. They will leave weekly feedback on your progress.

Team: Jeds
Names: Sho Sho (lho@college.harvard.edu), Daniel Sun-Friedman (dsunfriedman@college.harvard.edu),
Elie Salem (eliesalem@college.harvard.edu), Jack Schwab (jackschwab@college.harvard.edu)
Project Title: Life Cycle of Poaching in Africa
Background and Motivation: As a group, we felt a strong pull toward a project centered on environmental sustainability. The topic of "endangered species" resonated with us, sparking excitement and a collective sense of purpose. From this broad theme, we narrowed our focus to the African continent, selecting four iconic yet critically endangered species—lions, leopards, rhinos, and elephants— that are heavily impacted by poaching. Our motivation is to create a narrative that blends education with entertainment, as we believe that highlighting the poaching crisis can inform, inspire, and empower viewers. For additional insight into our decision-making process, refer to our Week 7 abstract, where we outline how our initial interest evolved into this specific focus on poaching and endangered species in Africa.
Related Work: Our initial research revealed a lack of high-quality visualizations related to poaching cycles and animal endangerment. This gap presents a unique opportunity for our project to stand out and bring the issue to life through compelling data visuals. Additionally, we were inspired by a class visualization depicting homelessness in the US, which demonstrated the power of dynamic, location-based storytelling. We aim to incorporate similar techniques,

potentially adapting them to showcase animal migration patterns and poaching hotspots across African regions. This inspiration, combined with lessons on effective visual storytelling from class, will guide us in creating visuals that are informative, impactful, and resonant.

Audience: Our audience includes wildlife conservation advocates, environmental educators, students, policymakers, and anyone interested in sustainable ecosystems and African wildlife. By addressing the issue of poaching in an accessible way, we hope to reach a broad range of viewers who might feel compelled to engage with conservation efforts or support policies aimed at protecting endangered species.

Questions: Key questions we aim to answer include:

- Which African regions experience the highest rates of poaching, and which species are most frequently affected?
- How have poaching rates evolved over the past few decades in different African countries?
- What is the toll on rangers who protect these animals, in terms of casualties caused by poachers?
- Where are poached animal products predominantly exported, and which countries serve as the primary markets?

The overarching objective is to shed light on the "life cycle" of poaching, from initial poaching incidents to the international demand for illegal animal products. By answering these questions, we hope to offer viewers a comprehensive view of the crisis and inspire them to consider actions they can take to combat it.

Data: Our data sources include:

- CITES (Convention on International Trade in Endangered Species): for wildlife trade data, especially illegal trade metrics.
- TRAFFIC: for global trade routes and market data related to poached animal products.
- WWF (World Wildlife Fund): for conservation status and poaching statistics of our selected species.
- IRF (International Ranger Federation): for data on ranger casualties linked to poaching activities.

These sources will allow us to cover both on-the-ground impacts and the broader, international dimensions of poaching.

Data Cleanup: Due to the variety of data sources, we anticipate substantial cleanup efforts to align datasets by geography, species, and time periods. Standardizing these elements will allow us to accurately track poaching rates, locations, and casualty data. We also plan to derive quantities like trends in poaching rates, distribution of poaching incidents, and ranger mortality rates. To optimize this process, we'll prioritize ready-to-use data wherever possible and use robust data-processing tools to transform and clean complex datasets, ensuring the final dataset is consistent and suitable for visualization.

Week 9: Data, Map You will submit your dataset(s) that you are planning to use for your project. In this week, you will examine your data (we encourage you to use Tableau for initial data exploration). Next, you should clean your data, and be able to load it into your D3 project. As a team, you will work on the Map step and decide who the audience of your project will be, and what questions you want to answer in your visualizations.

Audience:

- Wildlife Conservation Advocates: Individuals or organizations directly involved in protecting endangered species, such as conservation NGOs or researchers.
- Environmental Educators and Students: Teachers, students, and educators interested in environmental science, sustainability, and conservation issues.
- Policymakers and Government Agencies: Officials in environmental and trade policy-making who could benefit from understanding the scope of poaching to inform policies and actions.

Chosen Target Audience: Wildlife Conservation Advocates

- Audience Profile:
    - Knowledge Level: They are familiar with environmental issues and have a basic understanding of poaching but may lack specific data-driven insights into poaching patterns and international trade routes.
    - Interests: They are likely interested in solutions, real-world impacts, and specific cases. They also seek actionable data to support conservation efforts.
    - Visualization Literacy: Moderate to high. They are accustomed to viewing data visualizations and can interpret more complex data patterns.
    - Level of Detail: We'll provide a balance between high-level insights (e.g., trends over time and across regions) and granular details (e.g., specific poaching hotspots) to inform their work effectively.

Audience-Focused Questions:

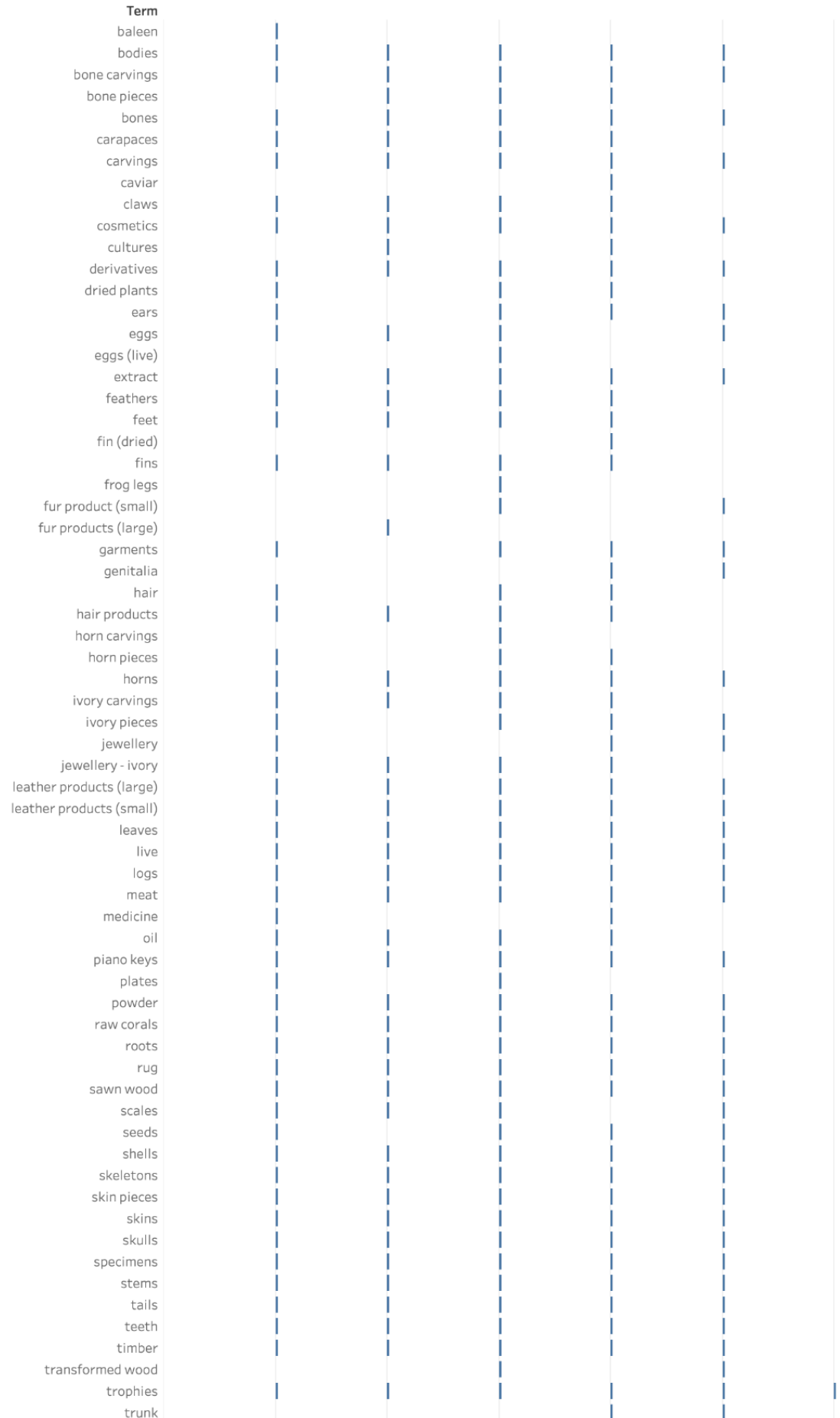
1. Which African regions experience the highest rates of poaching, and which species are most frequently targeted?
2. How have poaching rates changed over time across various African countries?
3. What are the primary destinations for illegally poached animal products outside of Africa?
4. What is the impact on wildlife ranger mortality due to poaching activities?
5. How does poaching vary seasonally across different African regions?
6. Are there noticeable trends in poaching related to economic or political events in specific countries?
7. Which poaching hotspots correlate with areas of low law enforcement presence?
8. What is the average poaching rate in conservation versus non-conservation areas?
9. How does the demand for specific animals (e.g., elephants for ivory) influence poaching rates?

10. What role do international policies or agreements play in reducing poaching rates?

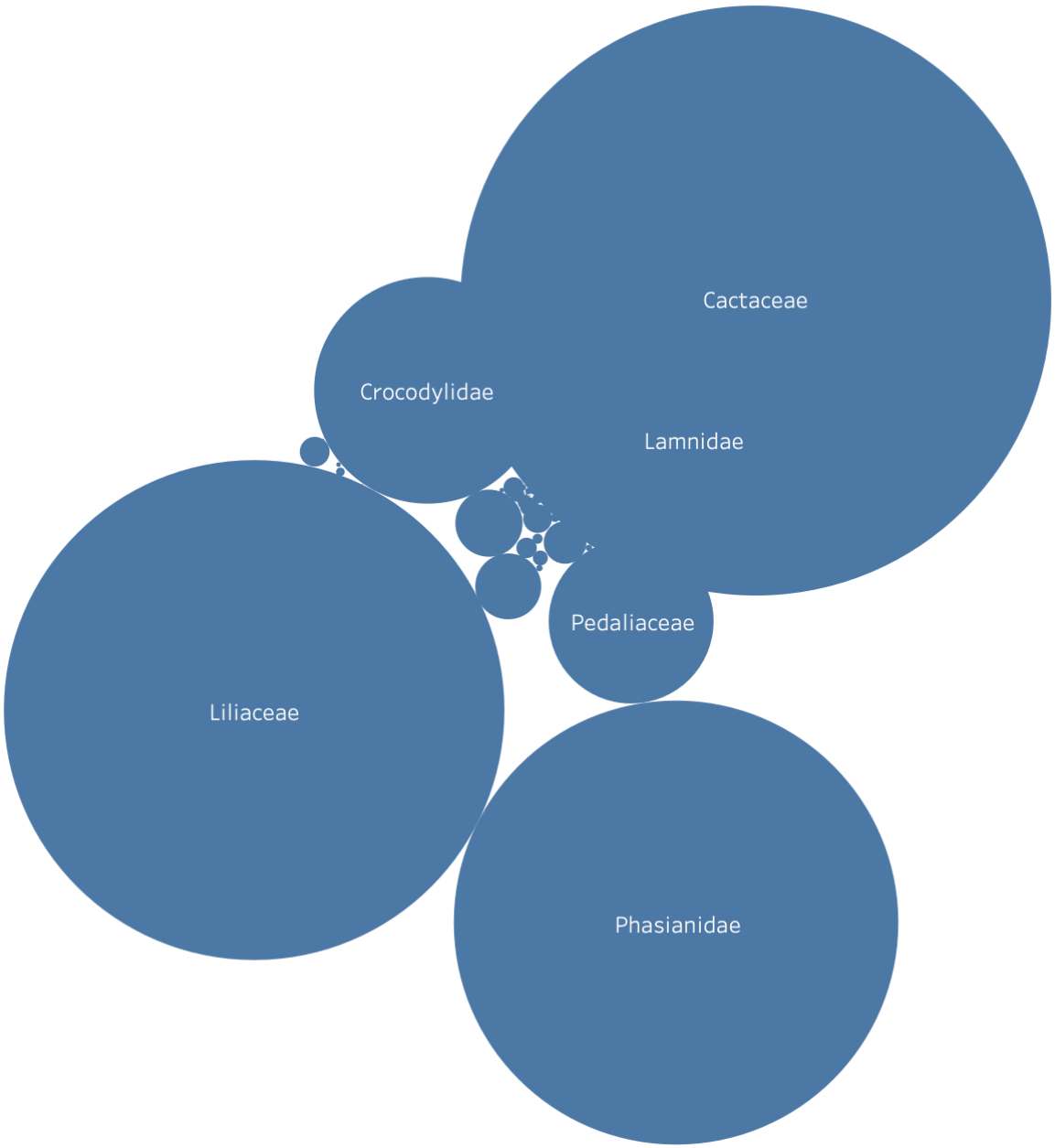
Data Collection:

- Data Sources and Initial Description:
    - CITES: Contains metrics on wildlife trade, especially illegal trades.
    - TRAFFIC: Offers data on trade routes and markets, providing insights into where poached products are exported.
    - WWF: Conservation status and statistics on the selected species.
    - IRF: Information on ranger casualties due to poaching.
- Data Attributes:
    - Region (Categorical): Specific African countries or conservation zones.
    - Species (Categorical): Animal species affected, such as lions, leopards, rhinos, and elephants.
    - Poaching Rates (Quantitative): Number of incidents per year.
    - Ranger Casualties (Quantitative): Count of rangers affected by poachers.
    - Trade Routes (Geographic): Paths or destinations where poached goods are trafficked.
    - Economic Indicators (Quantitative): Potential influencing factors like GDP, which could be linked to poaching rates.

Term per Year



Family by importer reported quantity



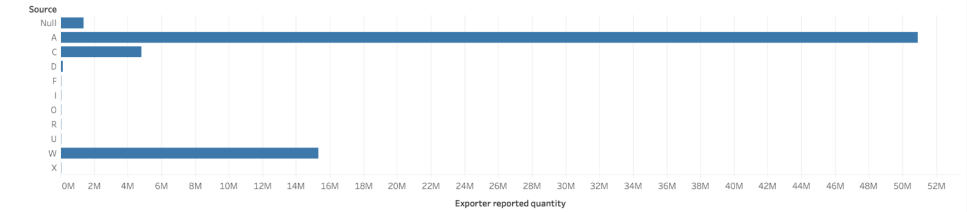
Family. Size shows sum of Importer reported quantity. The marks are labeled by Family.

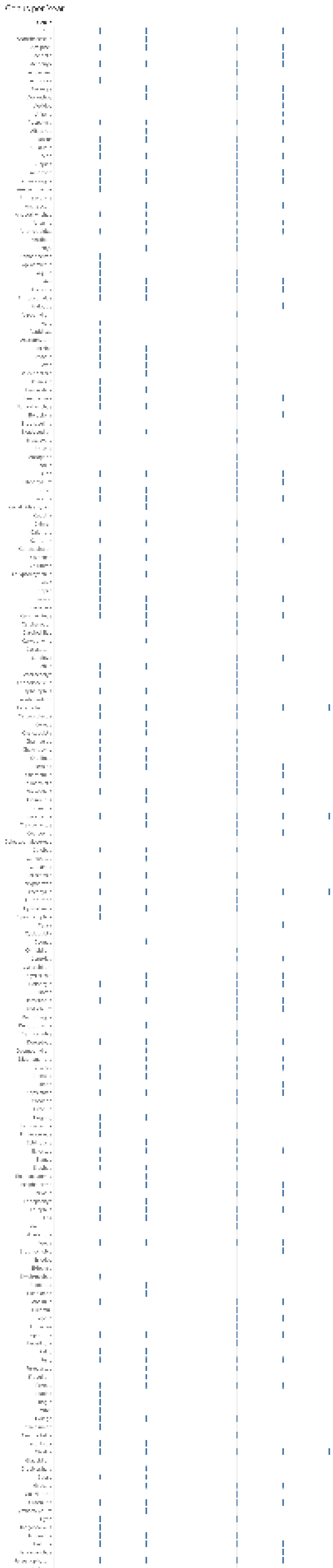
Term by Exporter Reported Quantity

Term	
baleen	
bodies	47,233
bone carvings	6,755
bone pieces	
bones	18,258
carapaces	
carvings	2,031
caviar	
claws	165
cosmetics	
cultures	19,359
derivatives	5,009,723
dried plants	30
ears	223
eggs	406
eggs (live)	260
extract	7,526,696
feathers	3,457,746
feet	343
fin (dried)	1,325
fins	54,667
frog legs	5
fur product (small)	
fur products (large)	
garments	62
genitalia	1
hair	444
hair products	5
horn carvings	
horn pieces	206
horns	94
ivory carvings	661
ivory pieces	14
jewellery	1
jewellery - ivory	33
leather products (large)	326
leather products (small)	38,822
leaves	53,894
live	7,413,120
logs	27,090
meat	844,426
medicine	

SUM(Exporter reported...
1 45,602,293

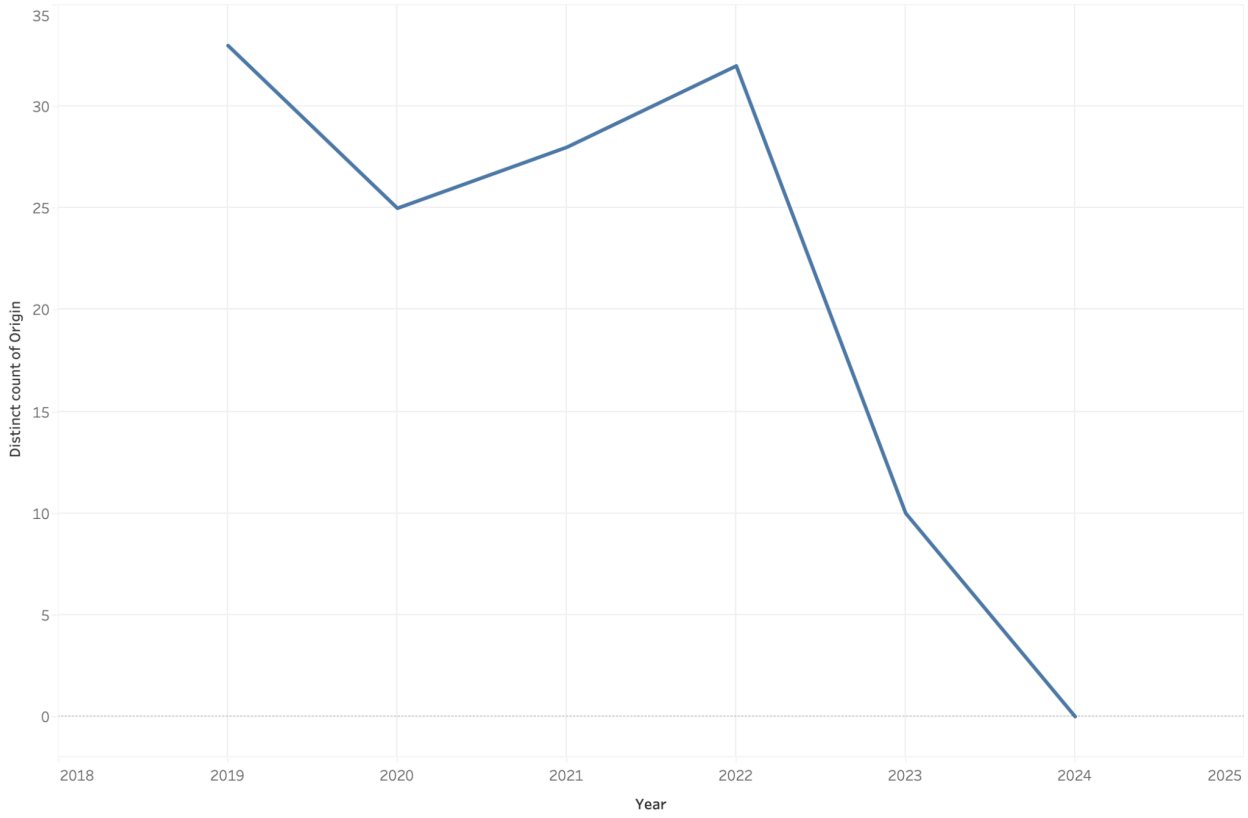
Source by Exporter Reported Quantity





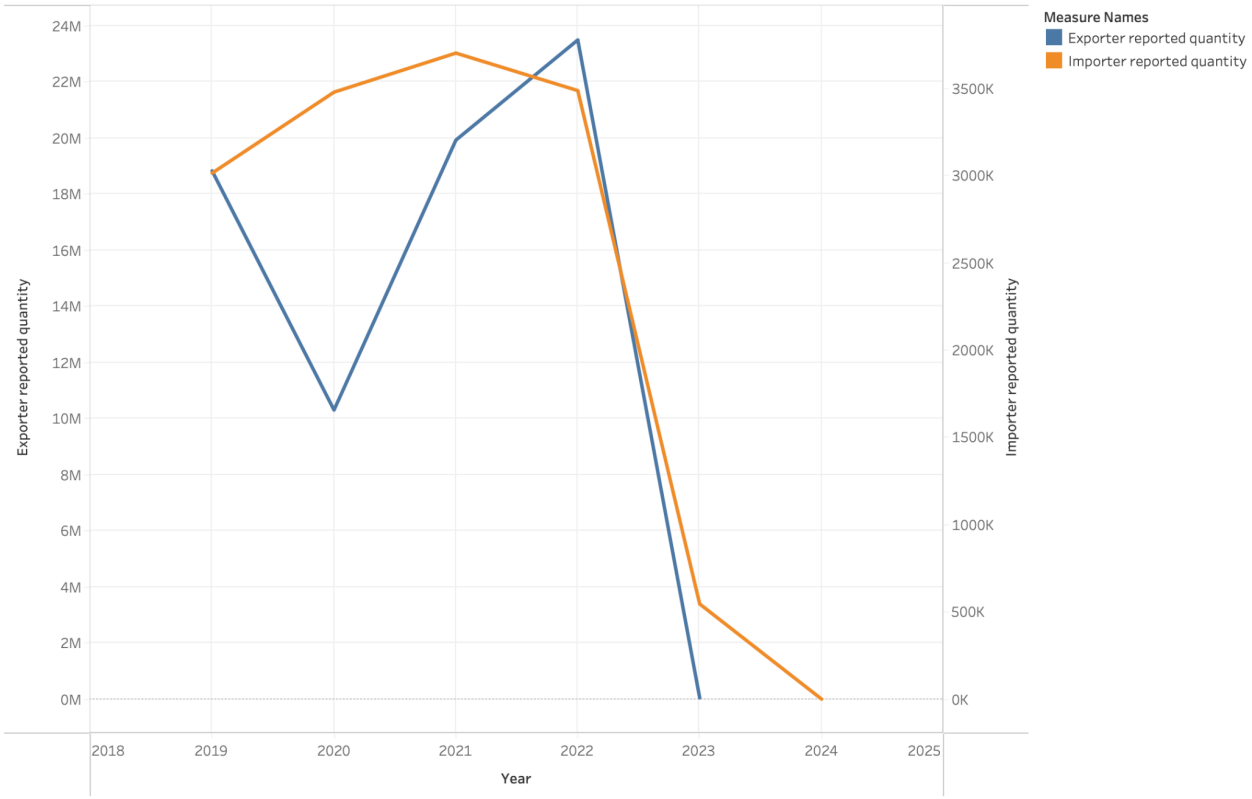
-

Origin Diversity over Time



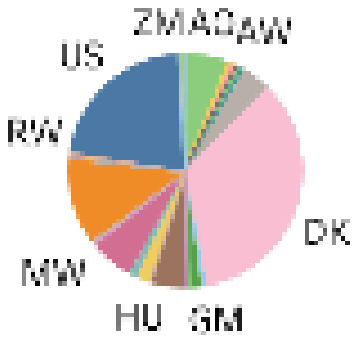
The trend of distinct count of Origin for Year.

Export and Import Quantity over Time



The trends of Exporter reported quantity and Importer reported quantity for Year. Color shows details about Exporter reported quantity and Importer reported quantity.

Import Quantity by Importer

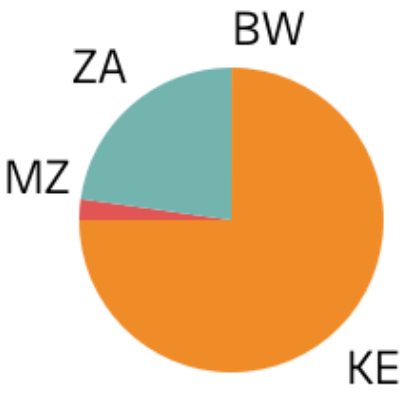


Importer. Color shows details about Importer. Size shows sum of Importer reported quantity. The marks are labeled by Importer.

Importer reported quantity
14,224,139

Importer
- Null
- AE
- AF
- AW
- AQ
- AR
- AT
- AU
- AW
- AZ
- BD
- BE
- BG

Exporter Quantity by Exporter



Exporter reported quantity

72,631,809

Exporter

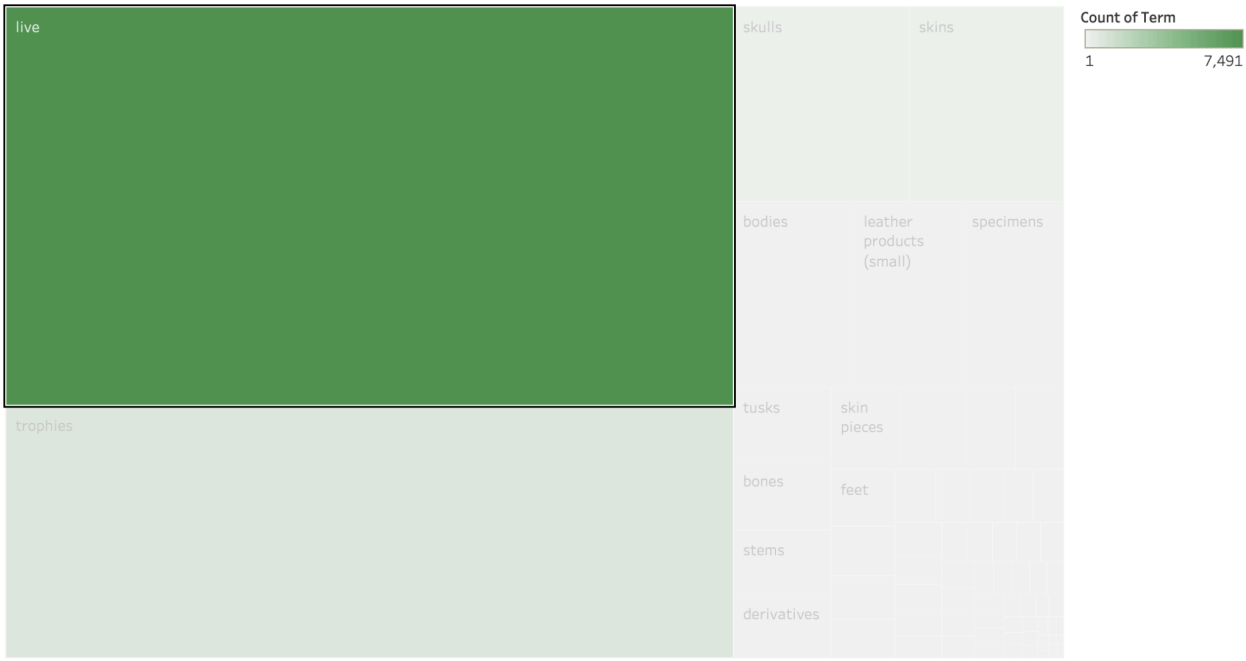
- BW
- KE
- MZ
- ZA

Exporter. Color shows details about Exporter. Size shows sum of Exporter reported quantity. The marks are labeled by Exporter.

Genus by Importer Reported Quantity

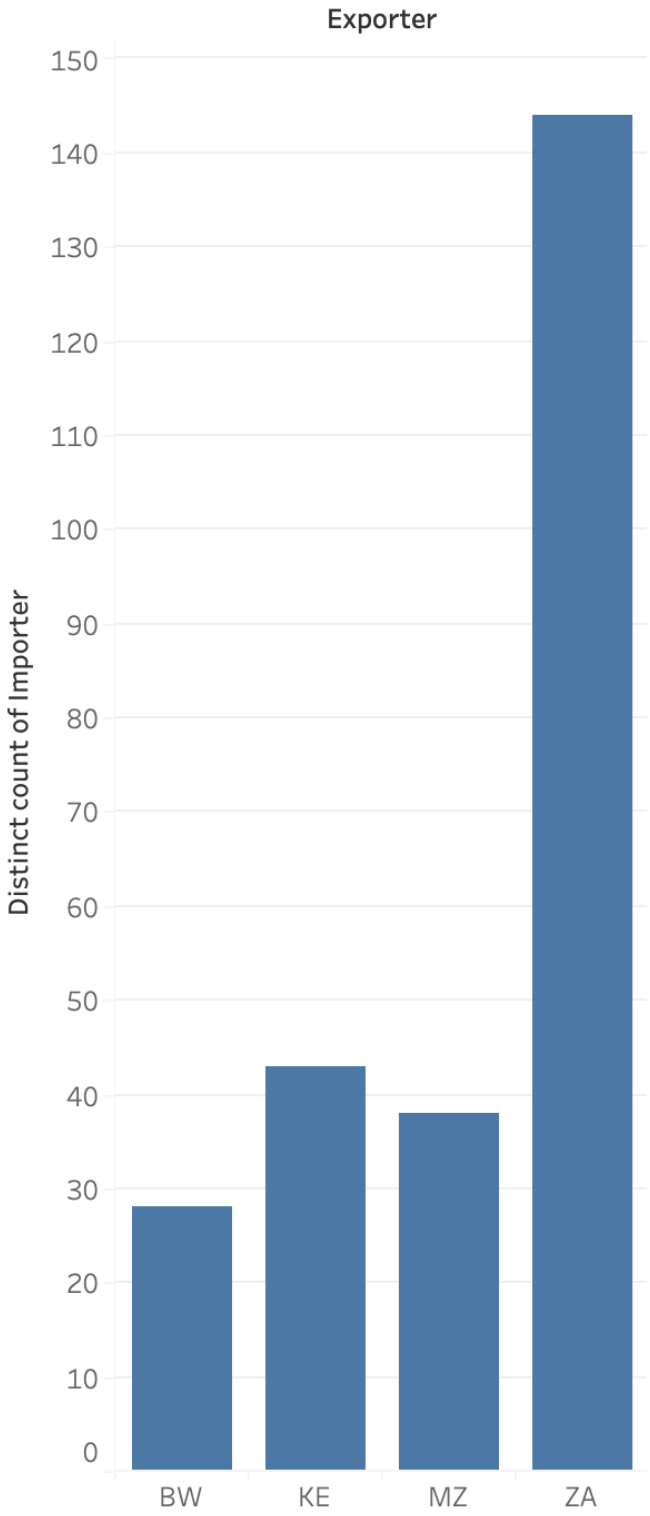
Purpose and Genus. Color shows sum of Importer reported quantity. Size shows sum of Importer reported quantity. The marks are labeled by Purpose and Genus.

Term Types by Frequency



Term. Color shows count of Term. Size shows count of Term. The marks are labeled by Term.

Importer Exporter Relationships



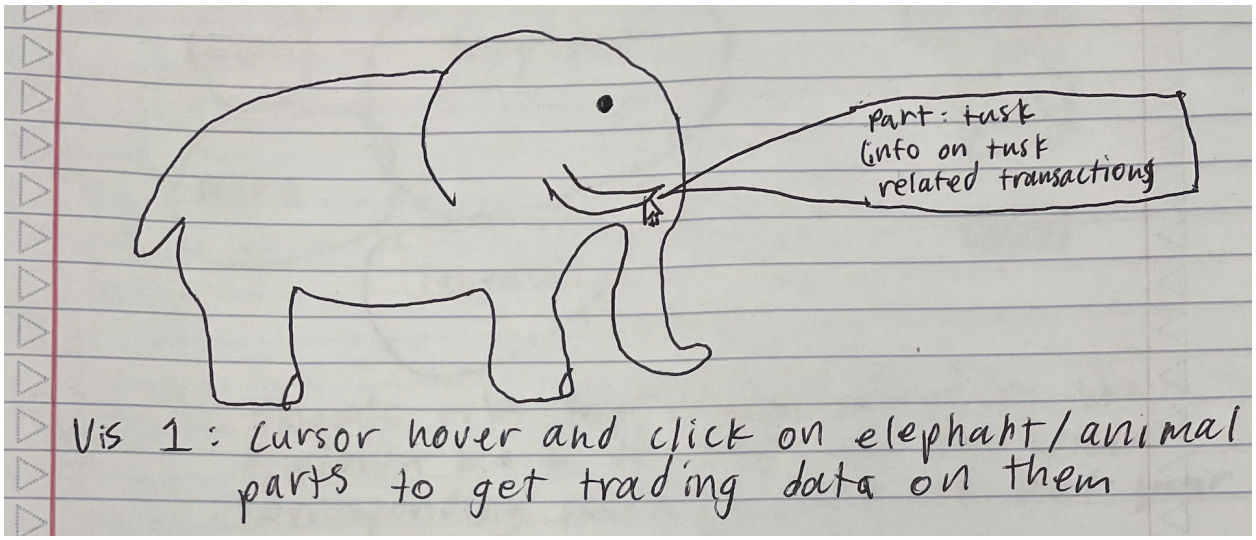
Distinct count of Importer for each Exporter.

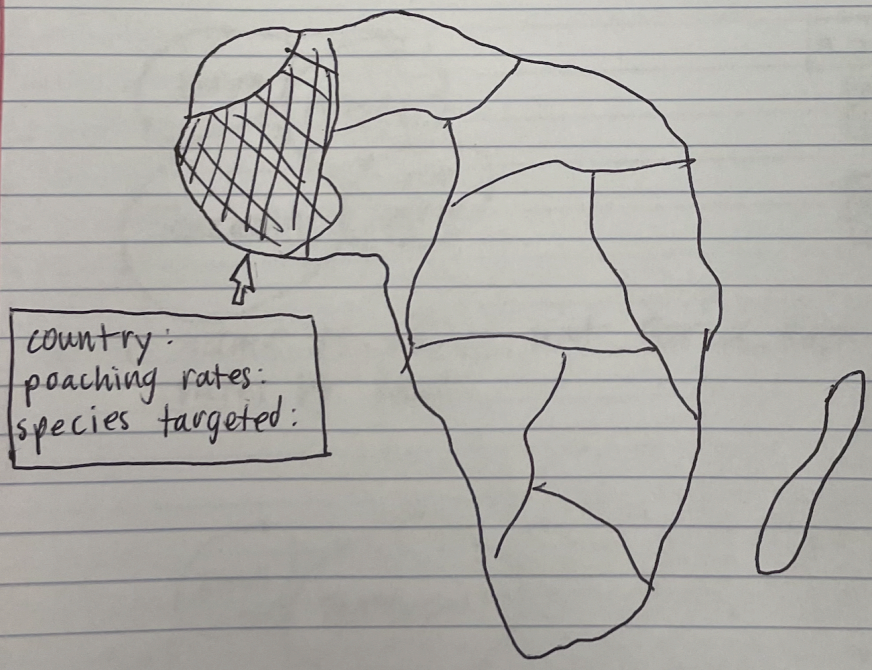
We ended up answering questions like “what are the main importers and exporters of poached goods?” “What kind of poached goods are most common?” etc. The only key question we answered was “which countries are the biggest exporters of poached goods?” The rest we discarded primarily because we decided that studying the dynamics of poaching trade would be a tighter topic that would provide for more interesting and informative visualizations that are not already widely available.

Week 10: Sketches, Decide & Storyboard

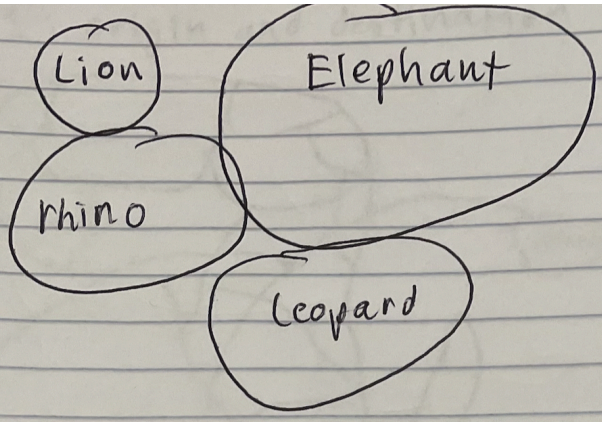
Each team member will create individual sketches of visualizations using a pen and paper that might answer your questions. In addition, you can create a few exploratory visualizations in Tableau. As a team, you will then decide which of these visualizations and insights you plan to pursue in your project. Finally, you will create an initial storyboard of the data story that you plan to tell. Please note, we expect you to have at least one **novel** visualization in your final implementation. Check the "Technical Requirements" in the rubric for details. You should also get started on prototyping in this week.

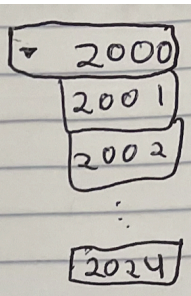
Sketches:



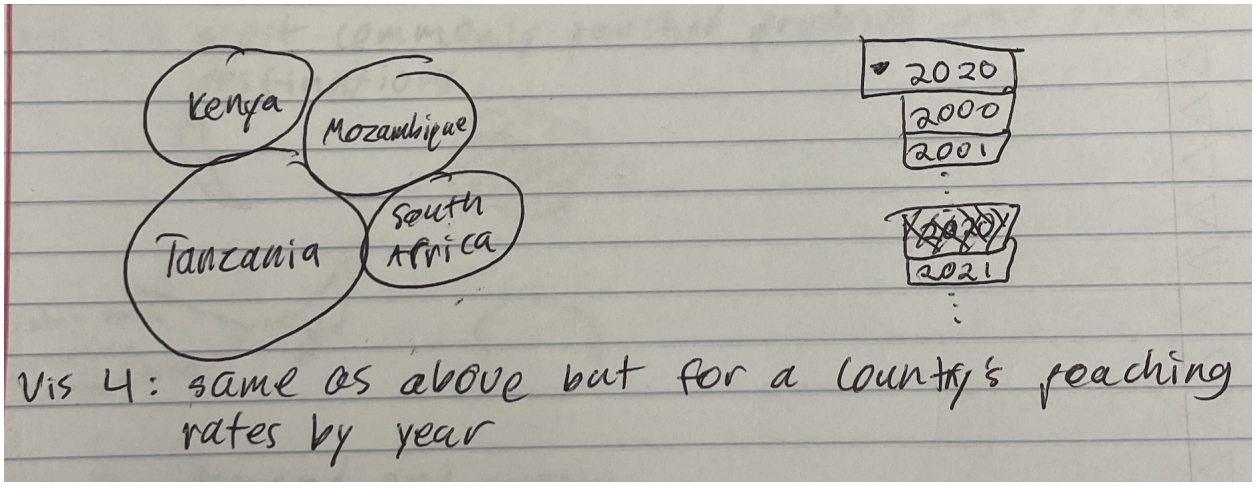


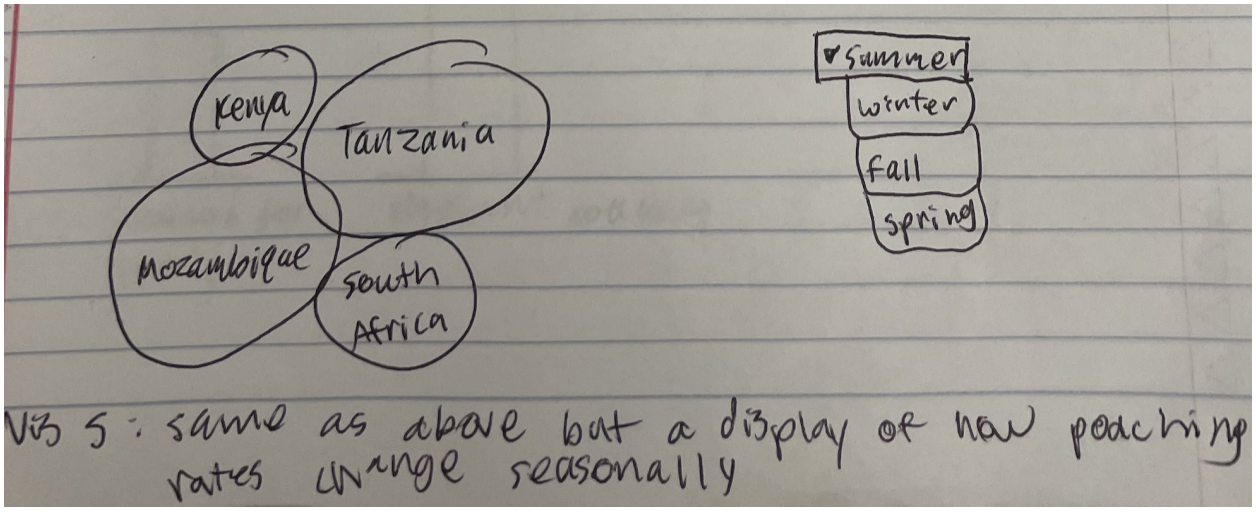
Vis 1: cursor hover and click on Africa's countries/regions to get a poaching synopsis





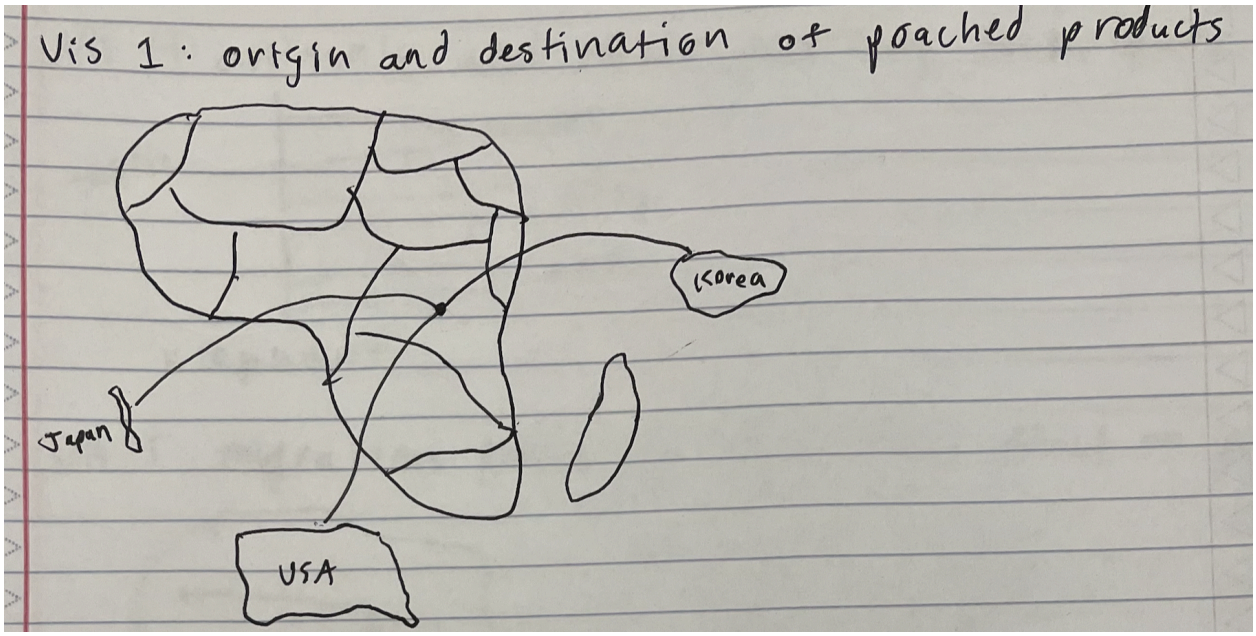
Vis 3: dynamic orbs that change based on the dropdown menu of years and the species' corresponding poaching rates of that year


Kenya
Mozambique
Tanzania
South Africa
2020
2000
2001
2021
Vis 4: same as above but for a country's poaching rates by year

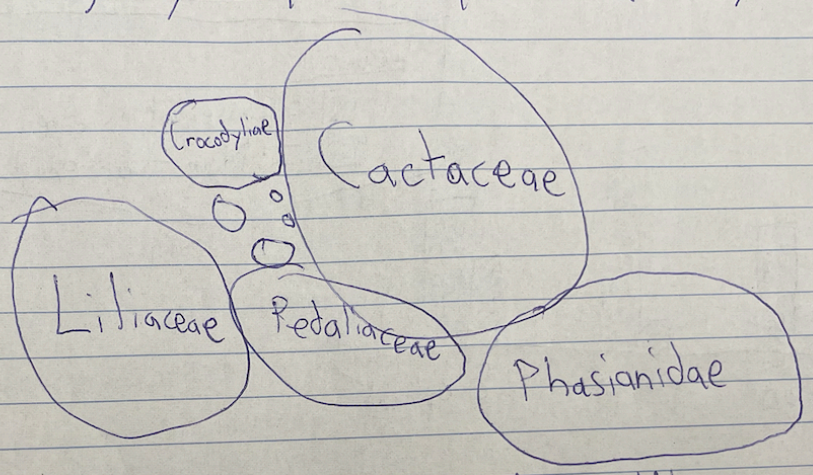

Kenya
Tanzania
Mozambique
South Africa
Summer
Winter
Fall
Spring
Vis 5: same as above but a display of how poaching rates change seasonally

Sho Sho

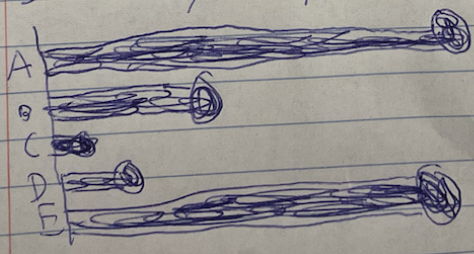
Vis 1: origin and destination of poached products

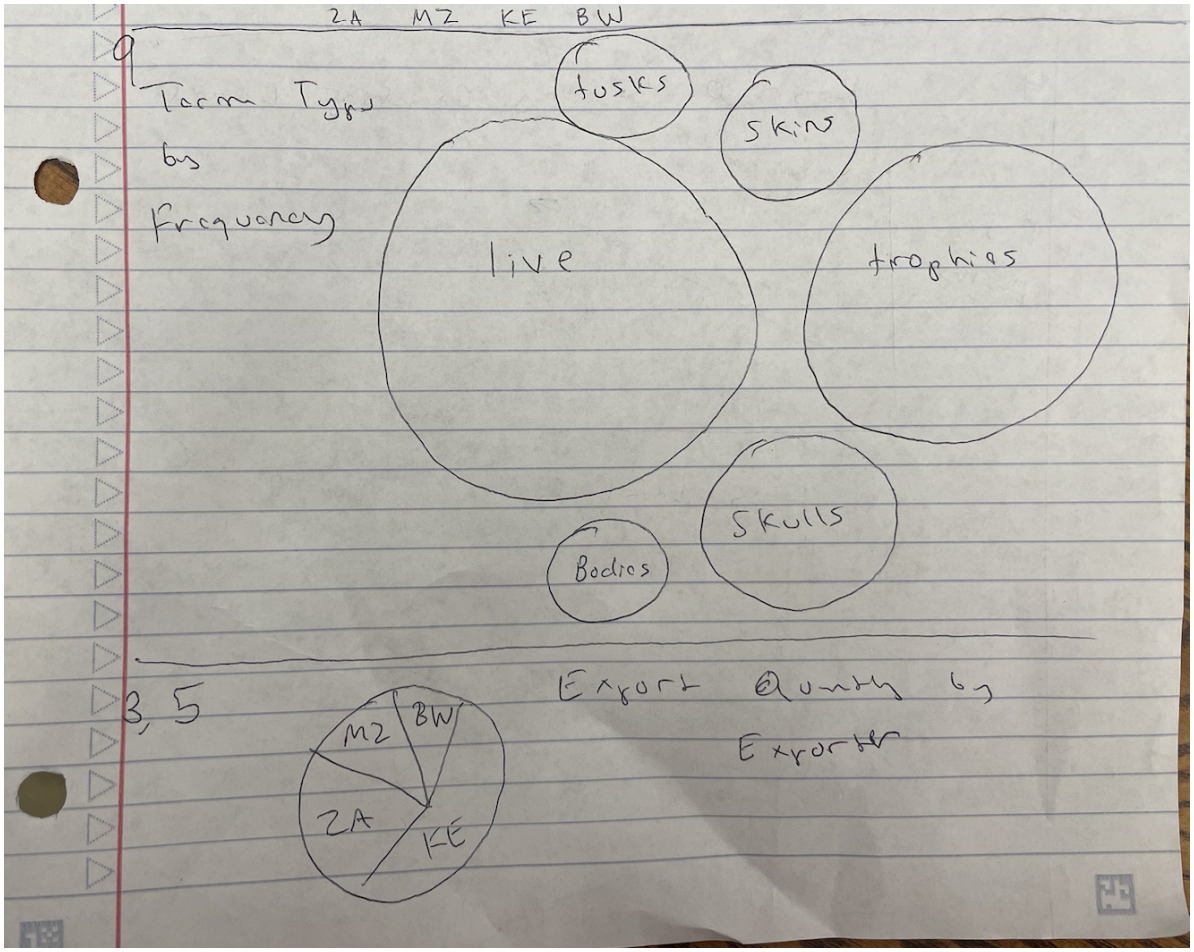


Family by Importer Reported Quantity

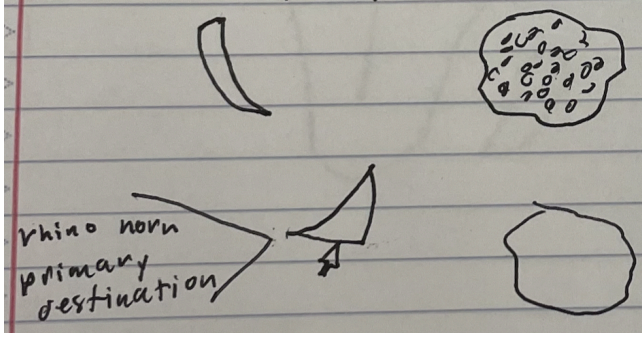


Source by Exporter Reported Quantity

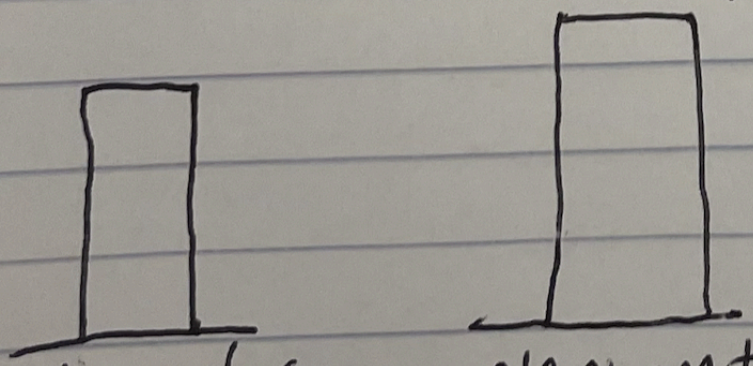



ZA MZ KE BW
Term Type by Frequency
tusks
skin
live
trophies
skulls
Bodies
3, 5
BW
MZ
ZA
KE
Export Quantity by Exporter

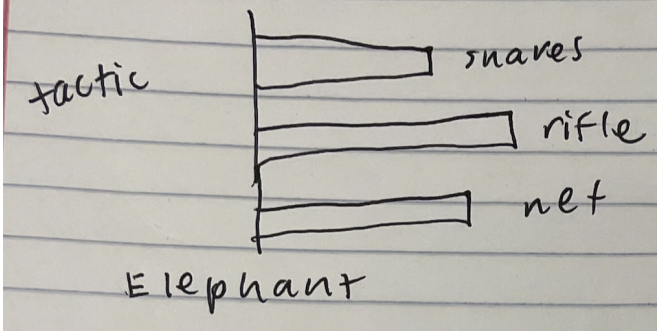
Vis 2: most commonly poached products and their destinations

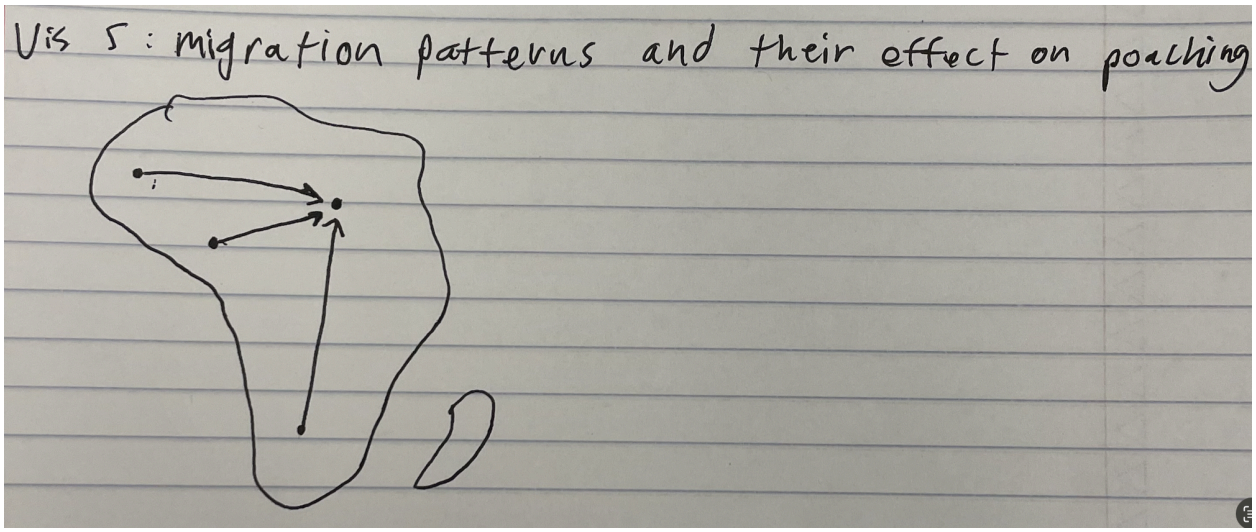


Vis 3: demand and supply



Vis 4: animals and their poaching techniques





Sketch ID	Question ID	Author
1J	9	Jack
2J	1	Jack
3J	2	Jack
3E	3, 5	Elie
1SS	3	Sho Sho
1DSF	Poaching products by year	Daniel

Sho Sho

- It seems that elephants and rhinos are the most poached animals across Africa, likely because their ivory and horns have such high market value. Lions are also in danger, often targeted for their skins, bones, or other body parts.
- From what I've seen, trophy hunting usually targets large, iconic animals like lions and elephants. While it's often regulated and legal, illegal trophy hunting is still an issue and can violate protections for vulnerable species.

DSF

- I've noticed that there are many species poached, including ones that are primates, reptiles, and birds. These animals are also poached to a variety of countries around the globe.
- Poaching methods seem to vary by region. In East Africa, elephants face heavy poaching, while rhinos are targeted more in Southern Africa. In Central Africa, poaching for skin and bones is especially common, affecting a wide range of species.

Jack

- It seems that most of the ivory from poached elephants in Africa is smuggled to Asian countries, where carved ivory products are still in high demand. This international market drives smuggling networks that reach across continents.
- From what I understand, rhino horns are primarily trafficked to Asia, where they are believed to have medicinal value. This belief has led to steep declines in rhino populations and the rise of organized, heavily armed poaching syndicates.

Elie

- It looks like Zambia and Kenya are responsible for the bulk of poaching exports, while other countries contribute relatively little.
- It seems that trophy poaching exports tend to go to countries with legal trophy markets, while illegal live animal exports mostly end up in regions with a high demand for exotic pets.

Storyboard

Hook

Visualization of the continent of Africa, with a hover and click feature to give a brief synopsis of that country's poaching data

Rising Insights

Find a trend between time, demand, or seasonality and poaching

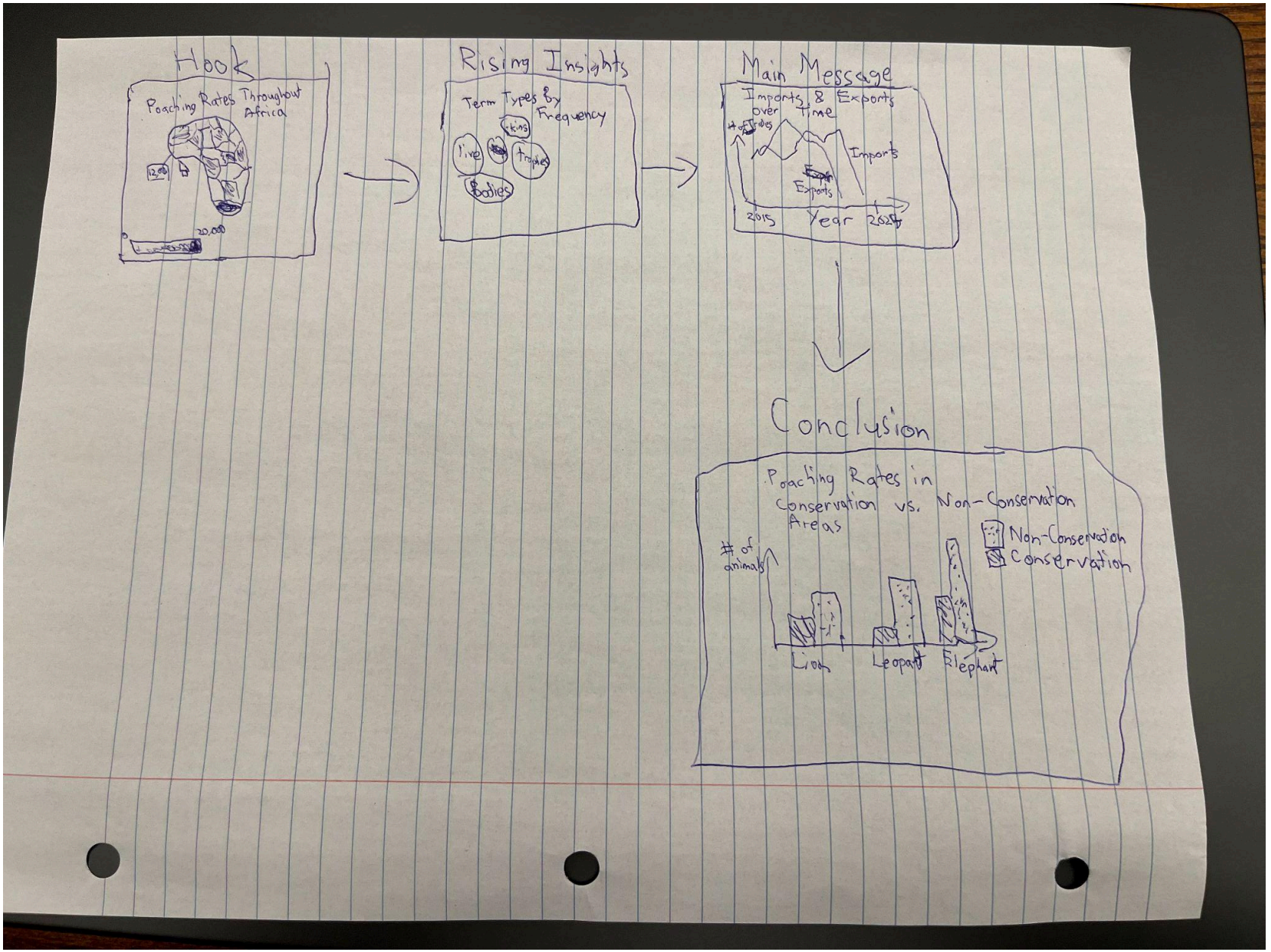
Main Message

Poaching is bad!

Solution

Conservation efforts and how they affect poaching rates

Jack


Hook
Poaching Rates Throughout Africa
20,000
Rising Insights
Term Types & Frequency
Live
Trophies
Bodies
Main Message
Imports & Exports over time
Imports
Exports
2015
Year
Conclusion
Poaching Rates in Conservation vs. Non-Conservation Areas
# of animals
Non-Conservation
Conservation
Lion
Leopard
Elephant

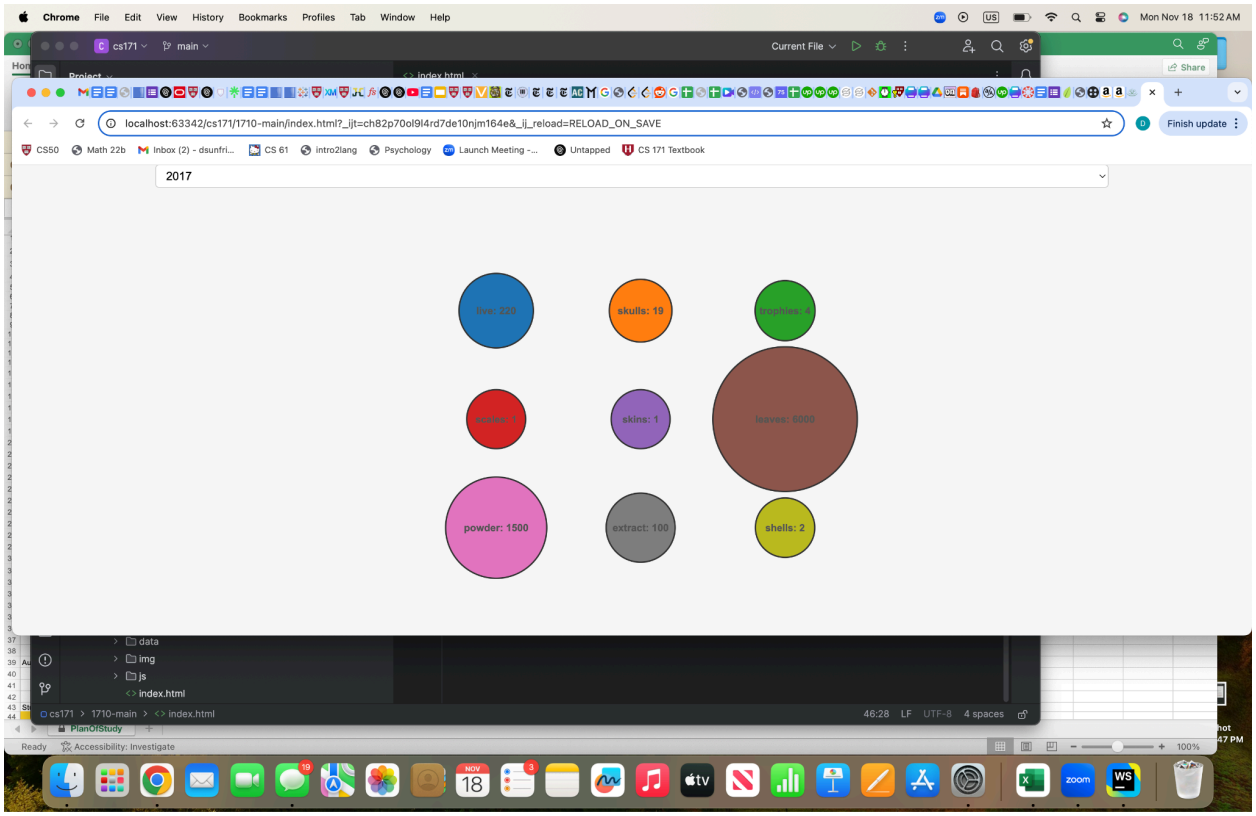
Week 11: Prototype V1

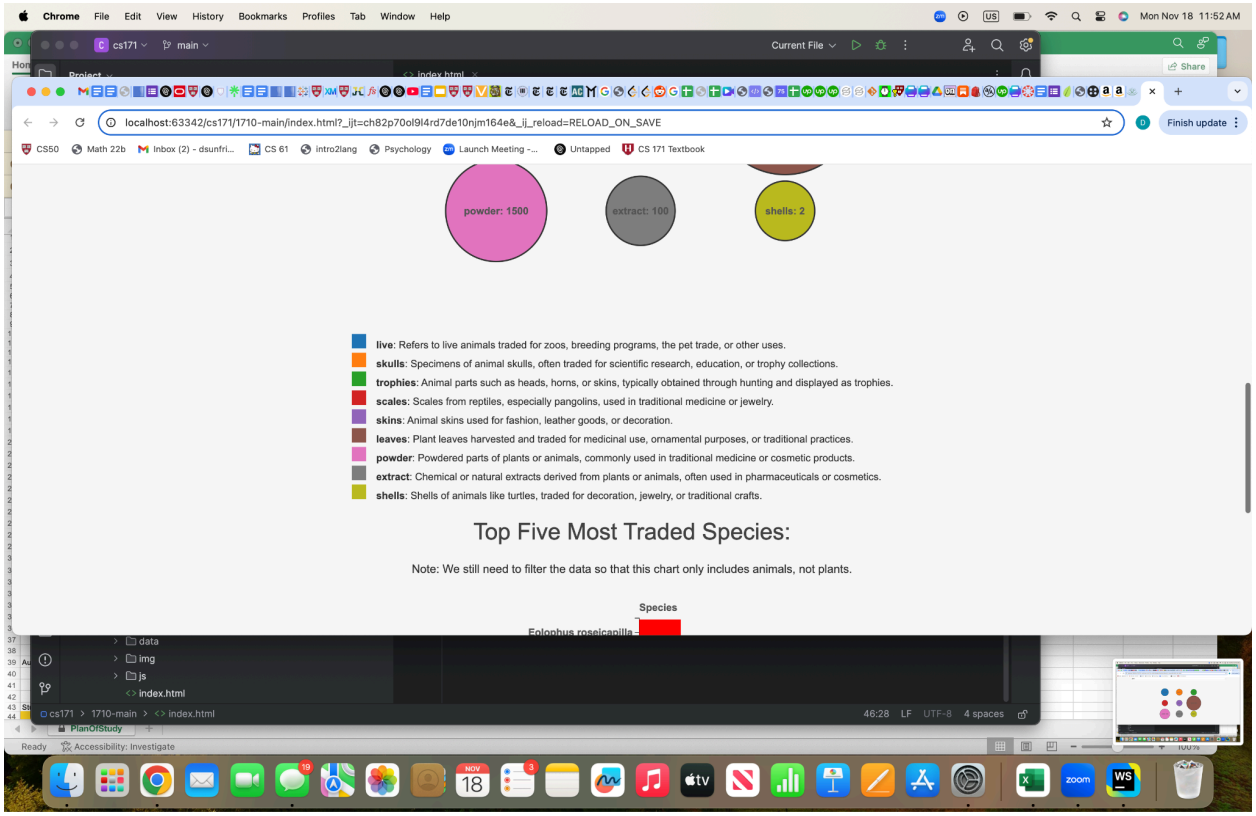
You will create a first working visualization prototype. You do not have to have all your visualizations up and running, and it does not need to be completely interactive, but the overall structure and the content should be clear. We will ask you to hand in your code in its current state.

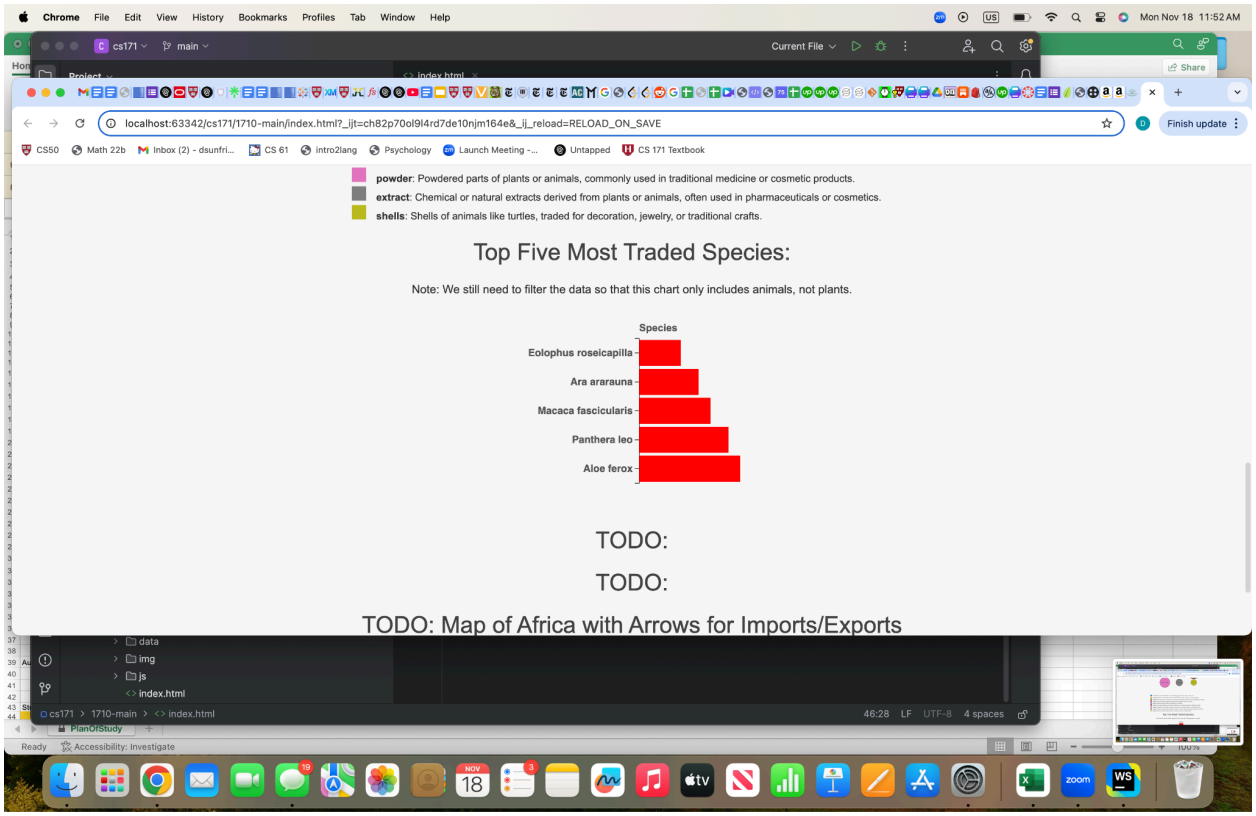
More info here:
https://docs.google.com/document/d/1sN20puCTSWFpeEfCJd8e1Z1AbIEIfvprHXEwQtFiqrI/edit?tab=t.0

- Do not just map data to text
- Bubble clusters to show change in distribution over time
- 2 visualizations/person
    - 12 is too much
- Quality over quantity
- 1st prototype: some visualizations with placeholders
    - “Rough story”
    -
-

https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.rawpixel.com%2Fsearch%2Fanimals&psig=AOvVaw29ryiTpp06xOUZWShCsNsZ&ust=1731979900693000&source=images&cd=vfe&opi=89978449&ved=0CBEQjRxqFwoTCLifi4je5IkDFQAAAAAdAAAAABAE (link for image used in prototype)


2017
live: 220
skulls: 19
trophies: 4
scales: 1
skins: 1
leaves: 6000
powder: 1500
extract: 100
shells: 2


powder: 1500
extract: 100
shells: 2
live: Refers to live animals traded for zoos, breeding programs, the pet trade, or other uses.
skulls: Specimens of animal skulls, often traded for scientific research, education, or trophy collections.
trophies: Animal parts such as heads, horns, or skins, typically obtained through hunting and displayed as trophies.
scales: Scales from reptiles, especially pangolins, used in traditional medicine or jewelry.
skins: Animal skins used for fashion, leather goods, or decoration.
leaves: Plant leaves harvested and traded for medicinal use, ornamental purposes, or traditional practices.
powder: Powdered parts of plants or animals, commonly used in traditional medicine or cosmetic products.
extract: Chemical or natural extracts derived from plants or animals, often used in pharmaceuticals or cosmetics.
shells: Shells of animals like turtles, traded for decoration, jewelry, or traditional crafts.
Top Five Most Traded Species:
Note: We still need to filter the data so that this chart only includes animals, not plants.
Species


Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Nov 18 11:52 AM
localhost:63342/cs171/1710-main/index.html?_ijt=ch82p70ol9l4rd7de10njm164e&_ij_reload=RELOAD_ON_SAVE
powder: Powdered parts of plants or animals, commonly used in traditional medicine or cosmetic products.
extract: Chemical or natural extracts derived from plants or animals, often used in pharmaceuticals or cosmetics.
shells: Shells of animals like turtles, traded for decoration, jewelry, or traditional crafts.
Top Five Most Traded Species:
Note: We still need to filter the data so that this chart only includes animals, not plants.
Species
Eolophus roseicapilla
Ara ararauna
Macaca fascicularis
Panthera leo
Aloe ferox
TODO:
TODO:
TODO: Map of Africa with Arrows for Imports/Exports
data
img
js
index.html
cs171 › 1710-main › index.html
46:28 LF UTF-8 4 spaces
Ready
Accessibility: Investigate

Week 12: Prototype V2

We expect you to be 95% done with the implementation of your data story. It should be ready to be tested by a random person the following week.

Week 13: Test

You will conduct a think-aloud study with a random person from another team that we will assign to you. You will document the results of the study and use them to make changes to your prototype.

For each think-aloud session, create a new copy of the feedback table below in your process book. During the session, one team member should carefully listen to the tester and document their observations and feedback in the "Notes" column. Ensure that all sections of the table are completed for each tester. If your group has 3 or more members, you must conduct at least two independent think-aloud sessions and document feedback for both.

	Notes (To be filled by project leads)
Tester Name	Aissatou
Describe any usability issues or confusion the tester encountered while using the prototype.	
Was the tester able to understand the main message of the data story? (e.g., Yes/No + why/why not?)	
What parts of the interface or visualization did the tester find most engaging or effective?	Introduction and video is engaging, liked the trade products based on year valuation, liked that multiple visualizations changed by year, liked the tooltip on global trade, liked that animals get bigger on pan
What parts did the tester find confusing or less effective?	Doesn’t love arrows scroll function,
Did the tester encounter any inconsistencies in design, data, or narrative?	
Were there any unexpected interactions or insights that emerged during the session?	
What specific improvements or changes did the tester suggest for the prototype?	Needs tooltip on top five most traded moments, make it clear you can swivel the globe, disappear info on reset
Did the tester suggest any additional insights or visualizations to include?	
General observations or comments from the tester.	

	Notes (To be filled by project leads)
Tester Name	Liam Norman
Describe any usability issues or confusion the tester encountered while using the prototype.	Thought that export/import was change over time, didn't notice the year selector immediately
Was the tester able to understand the main message of the data story? (e.g., Yes/No + why/why not?)	
What parts of the interface or visualization did the tester find most engaging or effective?	The bubble chart
What parts did the tester find confusing or less effective?	Lots of text
Did the tester encounter any inconsistencies in design, data, or narrative?	
Were there any unexpected interactions or insights that emerged during the session?	
What specific improvements or changes did the tester suggest for the prototype?	Images of animals in bar chart, change dropdown year menu for pie chart to slider
Did the tester suggest any additional insights or visualizations to include?	
General observations or comments from the tester.	

	Notes (To be filled by project leads)
Tester Name	Mariam
Describe any usability issues or confusion the tester encountered while using the prototype.	
Was the tester able to understand the main message of the data story? (e.g., Yes/No + why/why not?)	
What parts of the interface or visualization did the tester find most engaging or effective?	Bubble chart

What parts did the tester find confusing or less effective?	
Did the tester encounter any inconsistencies in design, data, or narrative?	
Were there any unexpected interactions or insights that emerged during the session?	
What specific improvements or changes did the tester suggest for the prototype?	Standardize the text, selective bolding, arrow too distracting, smaller header for bubble chart and make it a question, standardize labels for bubble charts, use color gradient for it and standardize color gradient pattern, labels on bar chart should be bigger, add functionality to bar chart, add explanation for how to click on pie charts and significance behind this
Did the tester suggest any additional insights or visualizations to include?	
General observations or comments from the tester.	

Our think aloud study gave us a lot of useful information on how we can improve our data story. Among our three testers, there were common themes as to which visualizations were more effective (such as the bubble chart), which ones were less effective (such as the bar chart), and how we could improve various visualizations (such as making labels clearer, making most of the visualizations more interactive, etc.). Our three testers all chose to focus more on commenting on the individual visualizations and less on the overall story; however, clearly the effectiveness of each visualization alone contributes to the clarity of the overall narrative, so their feedback will certainly be helpful in improving our overall narrative. There were specific places where testers suggested we make a visualization's message clearer. For instance, at least one tester suggested that we add some text describing and analyzing the trends in the pie chart. The pie chart is very interactive since the user can click on any one of twenty years to get the data from that year, but the drawback of this interactivity is that it currently makes it less clear what insights the pie chart visualization reveals. Therefore, a description of what the user should look for in the pie chart would make the message much clearer.

Below is a list of the main changes we wish to incorporate into our project:

1. Fix Africa map (currently very glitchy)
2. Improve bar chart (more labels and interactiveness)
3. Labels/description for globe
4. Labels/description for pie charts
    a. Description of trends in pie charts
    b. Clearer indication of year selector
    c. Change year selector to a slider instead of a dropdown menu?
5. Make style consistent/standardized throughout paragraphs

6. Use standardized color gradient throughout data story
7. Fix the arrows

We have recently fixed the first and most important item on this to-do list: the Africa map. At the start of our study, this map was very glitchy; it would sometimes fail to appear, and at other times appear very distortedly. We were able to fix the bugs with this map. As for the other issues, we plan to address them shortly.

Week 14-15: Wrap Up & Submission & Peer Assessment
You will finalize your web-based data story and submit your final project on **Wednesday, Dec 11**. You will host your final project as a public website using GitHub pages or any other web hosting service of your choice (we strongly encourage you to use GitHub). You need to make sure your public website is up and running and include the link of your website in your process book. Finally, you will fill in the self and group peer assessment form.

In addition to the process book, data, and code of your project you will also create a **two-minute screen-cast with narration** showing a walkthrough of your data story. You can use any screencast tool of your choice. Please make sure that the sound quality of your video is good - it may be worthwhile to invest in an external USB microphone. Please use a standard video file format with a standard video codec.

Week 16: Watch Party, Best Project Prizes

On Monday, Dec 16, we will host a final project video watch party during regular class times. At the end of it, we will announce the winners of the coveted CS171 Best Final Project prizes that will be determined by a vote among the TFs. Winners will be immortalized (sort of) on our external course website at cs171.org.

What to Submit

At the end of the final project, your team will submit the following items in a single .zip file:

- **Process book**: a PDF file, generated from your Google doc, that documents every step and design decision of your final project.
- **Tableau Packaged Workbook (.twbx) file (optional)**: A package of files that includes your data source file, the Tableau workbook (.twb), and any other files used to produce the workbook (including images). Make sure you select ***.twbx*** when you save your file since we will not be able to grade .twb files.
- **Data:** Submit all the cleaned data that you used in your project. If the data is too large to upload, store it on a cloud storage provider such as Dropbox.
- **Code**: All web site files and libraries assuming they are not too big to include.
- **Final Project Video**: A max. 2-minute screencast with narration that shows how your audience would go through your data story.
- **README** - The README file must give an overview of what you are handing in: which parts are your code, which parts are libraries, and so on. The README must contain URLs to your project websites and screencast videos. The README must also explain any non-obvious features of your interface.