a dessau approach data visualization a workbook by thi nguyen and stephanie long

digitally engaged learning conference teaching futures 2019

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Be curious. There are no wrong answers or dumb questions

Be encouraging. We all have a unique perspective to share

Be creative.

Whether you are a beginner or an expert, today is about having fun trying something new 1

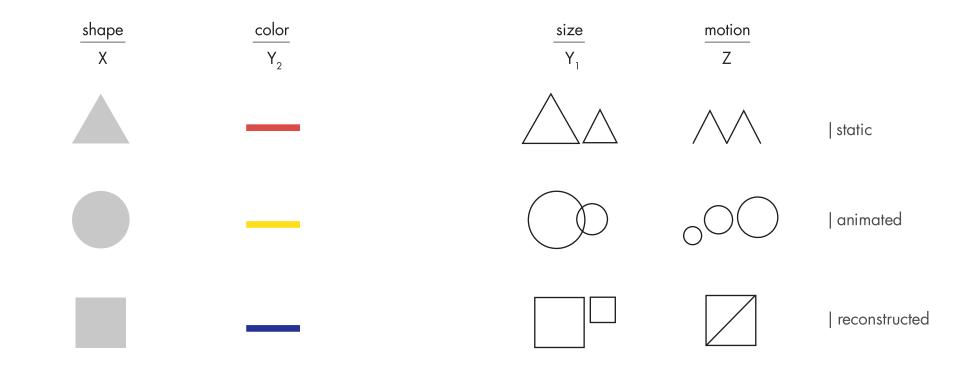
process

product

Data Visualization Is it process or product? Definitions to get you started: Data visualization is the practice of converting data from raw figures into a graphical representation. - Hackernoon website It involves the creation and study of the visual representation of data. – Wikipedia Data visualization is the presentation of data in a pictorial or graphical format. - SAS With interactive visualization, you can take the concept a step further by using technology, interactively changing what data you see and how it's processed. - SAS The representation of information in the form of a chart, diagram, picture, etc. Data visualization can also be used as a reporting tool. - Dictionary.com Data visualization is the graphical representation of information and data. — Tableau _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

form

function







represent the following data with primary shapes $\bullet \blacktriangle \blacksquare$, and sizes

The following numbers represent affordable housing units in Austin by status 625

- projects completed
- building permit issued 883
- building plan approved 60

*do not draw an axis or graph for this exercise



using the same shapes, visualize these numbers using size and reconstruction

- 884 affordable housing developments
- 28 district 1
- 409 district 2
- 1 district 7
- 445 other

625 project completed

- 212 in council district 1
- 60 in District 2
- 21 in district 7
- 332 other
- 60 building permit issued
- 15 district 1
- 10 district 2
- 2 district 7
- 33 other



pick one shape, visualize these numbers using two techniques (color, size, motion or reconstruction)

884 affordable housing developments

- 28 district 1
- 409 district 2
- 1 district 7
- 445 other

625 project completed

- 212 in council district 1
- 60 in District 2
- 21 in district 7
- 332 other

60 building permit issued

- 15 district 1
- 10 district 2
- 2 district 7
- 33 other

Here are some prompts to get you started:

what happens if you use Shape + Color + Size? what happens if you use Shape + Size + Motion? what happens if you use Shape + Motion + Color?

4

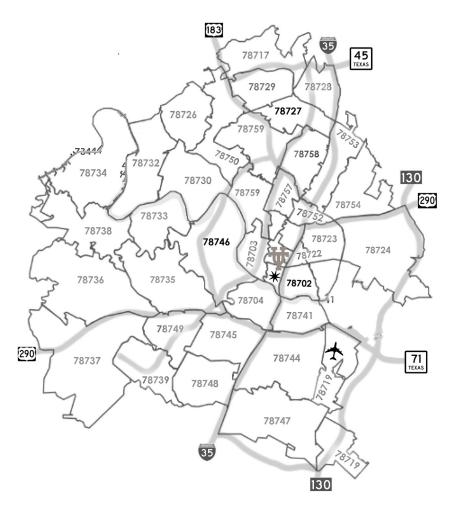
5 represent the following data using one shape $\bullet \blacktriangle \blacksquare$, size, and motion

data categories: year, type of unit, number of affordable units, and location (by zip code)

1993

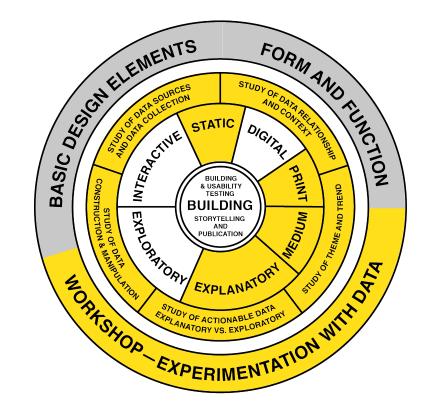
25 10 15	multifamily unit total in zip code 78746 in zip code 78702	0	single family total	1 1	duplex total in zip code 78746	
2003						
195 95 100	multifamily unit total in zip code 78746 in zip code 78702	7 3 1 3	single family total in zip code 78746 in zip code 78702 in zip code 78727	4 4	duplex total in zip code 78702	
2007						
708 100 508 100	multifamily unit total in zip code 78746 in zip code 78702 in zip code 78727	114 100 7 7	single family total in zip code 78746 in zip code 78702 in zip code 78727	2 2	duplex total in zip code 78702	
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data visualization process

personal data collection on social life: in person and digital platforms

if you don't use social media, collect data from any message app or email or all three

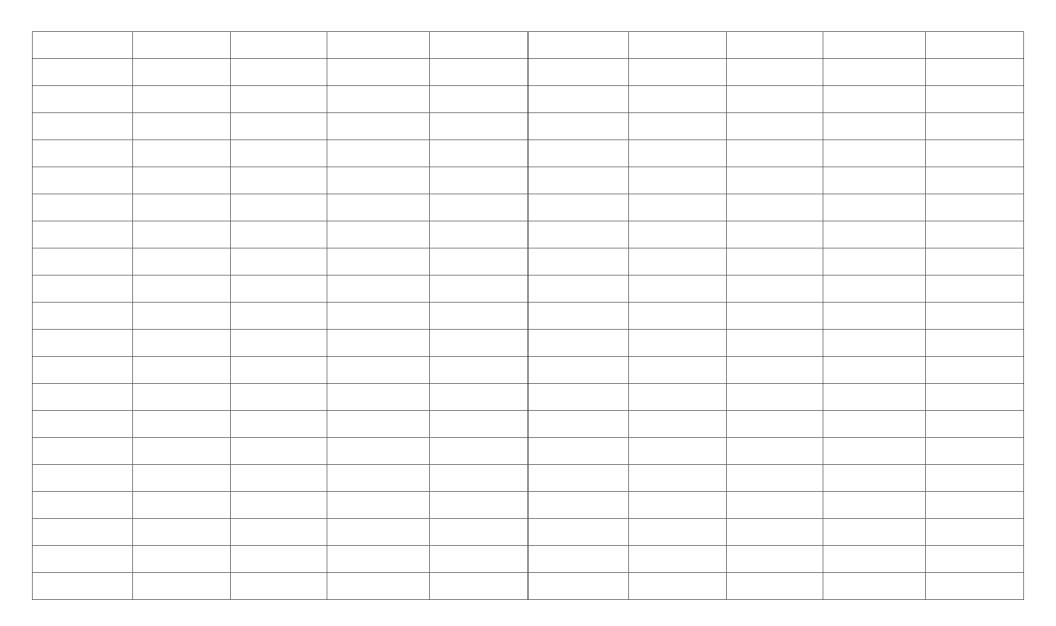
1a. let's get started with your phone

day+time	start with last Saturday		
person of interaction	friends, coworkers, family members, acquaintances, community members, (add more as you see fit)		
digital platform	facebook, instagram, message app, email		
type of interaction	like, share, text, emoji, gif, audio, video		
evaluate your interaction	rank from 1 to 5 with 1 is the least positive and 5 is the most positive		

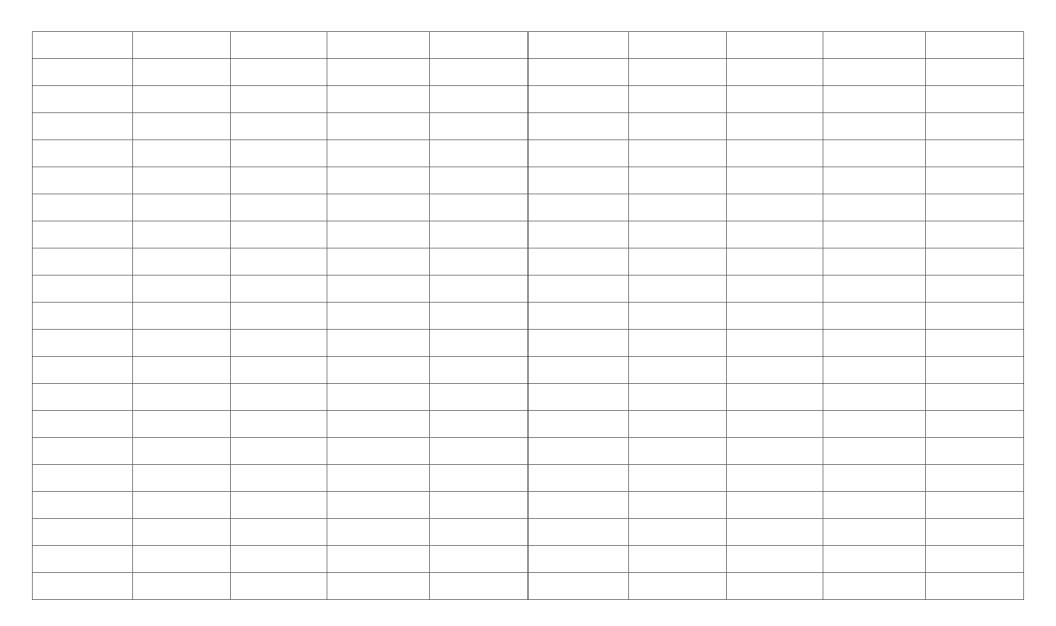
1b. in-person contact

day+time	start with last Saturday		
person of interaction	friends, coworkers, family members acquaintances, community members (add more as you see fit)		
location	home and out-of-home (grocery store, public place, work, etc.)		
type of interaction	verbal and non-verbal (smile, eye contact, physical touch, etc.)		
evaluate your interaction	rank from 1 to 5 with 1 is the least positive and 5 is the most positive		







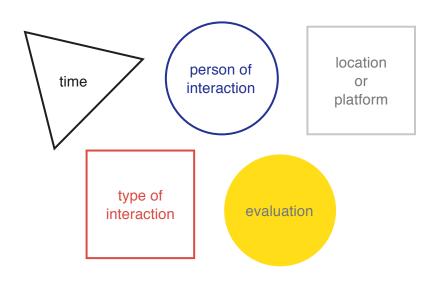




3

let's practice

Explore interesting relationships, themes, or trends in a static image(s). Sketch quickly! Generate ideas.

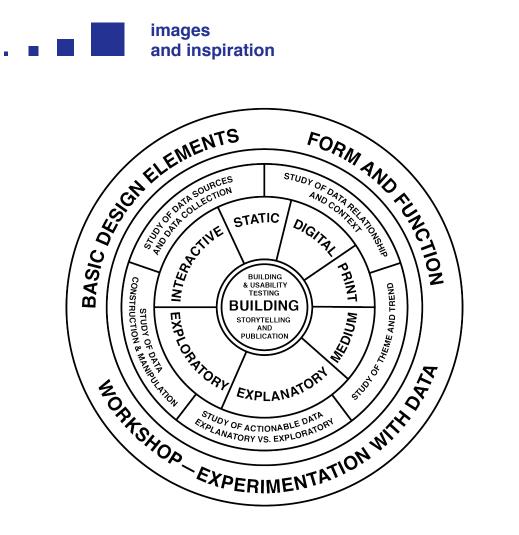


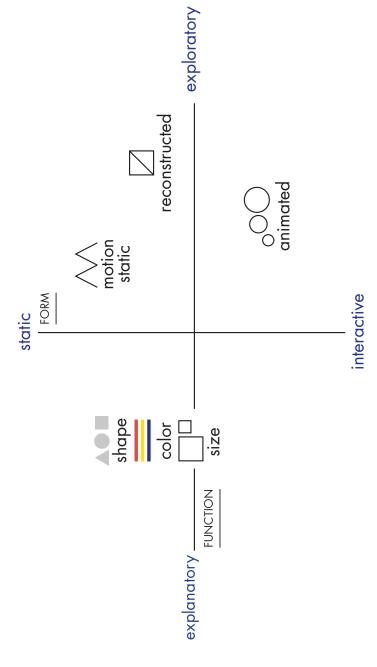
Here are some prompts to get you started: Who sent the most, the least?

Who received the most, the least? When did____occur the most, the least? How many of____? How much of____?









When you finish your data visualization, take a picture and share with Thi and Stephanie!

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Useful Links

nycfoodiverse.com okela.org/es/red

Tweets map: omnisci.com/demos/tweetmap

Big Data in Higher Ed bigdata-madesimple.com/how-higher-education-canput-data-visualization-to-work

Dear Data: dear-data.com

Data Driven Design (Adobe Blog) theblog.adobe.com/the-importance-of-data-in-design

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