

# Data Visualization



## Assignment\*

Create an data visualization following the examples of [Dear Data \(http://www.dear-data.com/theproject\)](http://www.dear-data.com/theproject) and [Dear Data Two \(http://www.dear-data-two.com/\)](http://www.dear-data-two.com/) in which you visualize one week's worth of data about yourself.

## Purpose

Many of the most popular sources of information in today's online, technical world can be found in visual form. More than just a collection of images put together to create a message, a data visualization is as much about conveying information (facts) as it is about being visually appealing. Equally important as the visuals is the data that supports/informs them. Being able to identify, collect, analyze, and present data in an understandable manner is the bedrock of primary research in any field: humanities, sciences, or social sciences.



You'll be most successful with this project if you keep this advice in mind:

- select topics that are genuinely interesting to you
- test your data collection plan before you start
- collect data carefully and completely throughout the week
- keep notes and reflect on the project as you're working on it
- analyze the data you've collected in order to find the most interesting messages or stories in it
- experiment with different ways to visualize the data and get feedback from others on your designs
- take time to reflect on what you're learned and compose your reflection with care

## Requirements

For this project you will identify an area of personal interest, gather data for one week, analyze it, and then present it visually in infographic form. Following the example of Dear Data and Dear Data Two you can choose to gather your data by counting by hand (e.g., number of doors you pass each day, number of wild animals you encounter on campus each day, etc.) or you can use various apps or devices to gather new data about yourself or your topic (e.g., Fitbit, RescueTime, FaceBook, etc).

Unlike Dear Data and Dear Data Two you are not required to fit your infographic on a postcard. You may choose to do so if you want to challenge yourself, but you may also chose to use any size

graphic (5"x5", 8"x11", 24"x36", etc.). You may draw your visualization by hand or use programs such as Photoshop, Illustrator, Paint, etc. to create your visual representations. **You must create your own visualizations.** (i.e., Not only should you draw the visualizations, but you cannot use readily recognizable graphics in your visualization:  = Coke/soda,  = Instagram/social

media, etc.) The visualization itself should be abstract; we are not creating infographics, which rely on commonly understood icons and graphics to convey meaning; We are creating visualizations of data, not bar graphs, pie charts, or scatterplots.. Your visualization may not include any text or numbers.

In addition to your visualization, you must provide a legend that helps readers understand the representations somewhere on the graphic (e.g., back, to the side, etc.).

You will turn in your visualization digitally, so if you decide to draw your images by hand you will need to scan your project and convert it to a digital format.

## Deliverables

1. 1. A one-page reflective memo(500-1000 words):
  - o Summarize your process of developing/researching/assembling your materials for your infographic (one paragraph).
  - o Summarize who your audience analysis and purpose for your infographic (one paragraph).
  - o Describe your process of testing the readability/usability of your infographic (one paragraph).
  - o Describe which of the course goals you feel you encountered in completing this assignment (one paragraph)
2. Data Visualization
3. Key or Legend for the visualization
  - o Include a brief description of the purpose or topic of your visualization in the key/legend
  - o Include a title

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\* This is assignment is based on an Infographic assignment developed by my friend and colleague [Madeline Sorapure \(http://sorapure.net/\)](http://sorapure.net/) at UC Santa Barbara. I have used it with her permission.

**Points** 100

**Submitting** a file upload

**Due**

**For**

**Available from**

**Until**

| <b>Due</b>   | <b>For</b> | <b>Available from</b> | <b>Until</b> |
|--------------|------------|-----------------------|--------------|
| Feb 28, 2021 | Everyone   | -                     | -            |

**Data Visualization**

| Criteria   | Ratings   |  |   |  |
|--|---|--|---|--|
| <p>Content</p> <p>Clearly defined topic that answers a specific question or facilitates decision making.</p> | <p><b>Exceeds Expectations (A)</b></p> <p>Visualization has a concise and clearly defined topic that addresses more than one data point.</p>                            | <p><b>Proficiency (B)</b></p> <p>The topic is well defined but addresses too many data points.</p>   | <p><b>Some Proficiency (C)</b></p> <p>The topic is somewhat defined but addresses too many data points.</p>   | <p><b>Little to No Proficiency (D/F)</b></p> <p>Poorly defined topic that addresses too many data points.</p>  |
| <p>Clarity</p> <p>Applies appropriate graphic variable types for the data type and scale.</p>                | <p><b>Exceeds Expectations (A)</b></p> <p>All of the graphic variable types used are well--suited for the type and scale of the data they represent.</p>                | <p><b>Proficiency (B)</b></p> <p>Most of the graphic variable types used are well suited for the type and scale of the data they represent.</p>                    | <p><b>Some Proficiency (C)</b></p> <p>Only a few of the graphic variable types used are well suited for the type and scale of the data they represent.</p>    | <p><b>Little to No Proficiency (D/F)</b></p> <p>None of the graphic variable types used are suited for the type and scale of the data they represent.</p>              |
| <p>Readability</p> <p>Legends should describe and explain every graphic variable type employed.</p>          | <p><b>Exceeds Expectations (A)</b></p> <p>Legend describes every graphic variable type present in the visualization.</p>  | <p><b>Proficiency (B)</b></p> <p>Legend describes most of the graphic variable types present in the visualization.</p>   | <p><b>Some Proficiency (C)</b></p> <p>Legend describes only a few of the graphic variable types present in the visualization.</p>                             | <p><b>Little to No Proficiency (D/F)</b></p> <p>Either there is no legend, or it does not describe any of the graphic variable types present in the visualization.</p> |
| <p>Design</p> <p>Everything in the visualization conveys some information to the viewer.</p>                 | <p><b>Exceeds Expectations (A)</b></p> <p>Visualization contains no color, symbolism, or text that is irrelevant to the question the visualization seeks to answer.</p> | <p><b>Proficiency (B)</b></p> <p>Visualization has very little color, symbolism, or text that is irrelevant to the question the visualization seeks to answer.</p> | <p><b>Some Proficiency (C)</b></p> <p>Visualization some color, symbolism, or text that is irrelevant to the question the visualization seeks to address.</p> | <p><b>Little to No Proficiency (D/F)</b></p> <p>Visualization is overwhelmed by symbolism, text, and color that are irrelevant to the question the visualization</p>   |