**Learning Log: Reflect on data visualization**

**Instructions**You can use this document as a template for the learning log activity: Consider how data analysts approach tasks. Type your answers in this document, and save it on your computer or Google Drive.

We recommend that you save every learning log in one folder and include a date in the file name to help you stay organized. Important information like course number, title, and activity name are already included. After you finish your learning log entry, you can come back and reread your responses later to understand how your opinions on different topics may have changed throughout the courses.

To review detailed instructions on how to complete this activity, please return to Coursera: [Learning Log: Reflect on data visualization.](https://www.coursera.org/learn/visualize-data/supplement/3wbLY/learning-log-reflect-on-data-visualization)

| **Date:** 2023-01-06 | **Course/topic:** Course 6: Share Data Through the Art of Visualization | | |
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| **Learning Log:** Reflect on data visualization | | |
| **Data visualization in your daily life** | Before you start writing your learning log entry, consider data visualizations you have encountered on your own.  *The most common data visualization I deal with is a time series, be it an idealized function of time as you might see in differential equations, or the stochastic processes most people think of when you say time series. I’ve also dealt with functions of space, which can be encapsulated by lines for a 1D domain, surfaces for a 2D domain, or heatmaps for a 3D domain. I’m quite fond of phase plane diagrams, as they allow you to form a picture of chaos, which I think is one of the most beautiful phenomena in all of mathematics. I’m also experienced with network diagrams; one of my ongoing projects is a problem in network dynamics, so they’re par for the course.*  *In general, I’m a mathematician (albeit not a PhD certified one), so I’ve had tons of experience in visualizations.*  What kinds of visual representations of data have you seen in your daily life? What kind of data did they communicate?  *See the above.*  Now, think about a project you’ve done in the past. Did you use a visual to tell a story about the project? What kind of data did it communicate?  *Yes, I did. I used line graphs to represent a function of correlations vs. load values (details not necessary here). In another project, I came up with a spike train visualization to visualize RR intervals from ECG data.* | | |
| **Reflection:** | Write 1-3 sentences (20-60 words) answering each of the following questions: | | |
| **Questions and responses:** | * Which data visualizations have been particularly effective in communicating data? What do you think made them effective?   *Time series visualizations have been especially effective, and I think this is because people are used to seeing them.*   * Have you ever seen a data visualization that was very unclear or confusing? What do you think might have been the problem with it?   *Poor labeling or ambiguous concept have made for bad visualizations.*   * How do you think your visualizations might complement the data you’ll work on?   *Good visualizations allow people to understand some of what you’ve gathered from analysis without having to understand all of the analysis.* | | |