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|  | **Activity Guide - Discover a Data Story** |  |

## Exploring a Dataset with Visualizations

We collect data in order to learn more about the world around us. It is usually hard to see patterns in a dataset when viewing it in its raw form. Computational tools like summary tables and visualizations make it easier to find interesting trends and relationships within the data.

## Terminology

* **README:** a document providing background information about a dataset
* **CSV:** abbreviation of “comma-separated values,” this is a widely-used format for storing data
* **Raw data:** the original data as it was collected
* **Summary table:** a table of aggregate information about a dataset (e.g., the average, sum, count of some values)

## Getting Started

Collaborate with a partner to **explore the datasets** and **choose one** you would like to explore further.

* For each of the 5 datasets…
  + **Read the README** to understand the **raw data** that was collected.
  + **Look at the rawData.csv file** - see if it makes sense, based on the README.
  + **Look at the other CSV files in the folder -** they aresummary tablesprovided for your dataset.
* **Repeat these steps** with additional datasets.
* **Choose** one to explore more deeply.

## Discover a Data Story

Now that you’ve chosen a dataset, you’ll want to use visualization to help find an interesting pattern in your dataset.

* **Open a summary table** from your dataset.
* **Experiment with different chart types** for visualizing that data.
* **Discuss with your partner** what you are seeing in each chart. Have any interesting patterns appeared?
* **Repeat these steps** with additional summary tables.
* **Choose** the summary table and visualization which was most interesting or insightful.

## Present Your Findings

You should have found an interesting trend or relationship within your data. Now you’ll want to communicate your findings in a way that others can easily understand.

* **Use the** [**Data Visualization 101**](http://content.visage.co/hs-fs/hub/424038/file-2094950163-pdf) **guide** (<http://content.visage.co/hs-fs/hub/424038/file-2094950163-pdf>) to make sure you are making good choices for presenting the pattern or trend you have found.
* **On the next page,** you will find a template for presenting the pattern you found.

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## Your Visualization

**Paste your visualization** in the space below.

## Prompts

1. Provide a brief description of the dataset you chose to visualize.

(approximately 50 words)

1. **Describe the trend, pattern, or relationship** you found within your data. How is it shown with your visualization?

(approximately 100 words)

1. Come up with a **possible story or explanation** for the trend you described. Make sure to note any assumptions you are making in this interpretation of the data.

(approximately 100 words)