Congratulations! You passed!

Grade received 100% To pass 100% or higher

Go to next item

1. 1 / 1 point

Overview

Now that you have learned about unstructured data, you can pause for a moment and apply what you are learning. In this self-reflection, you will complete tasks with a neural network, consider your thoughts about data structuring, and respond to brief questions.

This self-reflection will help you develop insights into your own learning and prepare you to apply your knowledge of data structures to your interactions with unstructured data. As you complete tasks with a neural network website, you will explore concepts, practices, and principles to help refine your understanding and reinforce your learning. You've done the hard work, so make sure to get the most out of it: This reflection will help your knowledge stick!

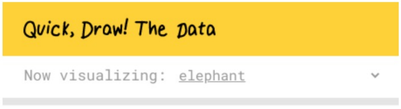
Data structuring with Quick, Draw!

In this self-reflection, you will explore the nature of unstructured data through a crowd-sourced dataset.

Quick, Draw! is a neural network dataset that has millions of pictures drawn by people separated into categories like plants, animals, or vehicles. On the Quick, Draw! website, you can view a large dataset of hundreds of thousands of real doodles made by people on the internet. You can also draw your own. Through this process, you can train a neural network to recognize objects and learn more about the importance of structured data.

1. Visit the Quick, Draw! website.

2. In the upper left-hand corner, you will notice a drop-down menu like this:



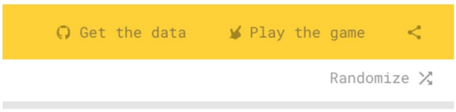
Select a type of doodle to begin.

3. Click on different pictures to see details about the images on your screen. For example, there are more than one hundred thousand different drawings of elephants. Scroll through the list and see if there are any that don't belong. If you find one that doesn't match the intended object, click on it and select **Flag as inappropriate**.

4. Explore other categories of drawings. Select three categories that interest you and check out their doodles.

5. Optional: Explore further. Click **Get the data** to visit the GitHub page containing the entire dataset. As you become more familiar with data projects and start creating your own, you can return to this dataset and analyze it yourself. Click **Play the game** to draw your own doodles and contribute to Quick, Draw!'s dataset.

6. When you're done, answer the reflection questions below.



Reflection

Consider the doodles you found in the Quick, Draw! Dataset:

- What do you notice as you explored drawings in different categories? Are there consistent themes among the pictures in a category?
- If you didn't know the category labels, how would you distinguish the pictures from each other? What would you look for?

Now, write 2-3 sentences (40-60 words) in response to each of these questions. Type your response in the text box below.

What do you notice as you explored drawings in different categories? Are there consistent themes among the pictures in a category?

If you didn't know the category labels, how would you distinguish the pictures from each other? What would you look for?

Correct

Great work reinforcing your learning with a thoughtful self-reflection! A good response would include how the data (i.e., the drawings) are vastly different across these three categories. In each category, the pictures also vary by a wide margin, almost as much as they do between categories.

Another thing to observe is that within a given category the pictures may be different, but consistent similarities persist. For example, virtually every picture of an elephant includes a trunk and big ears while pretty much every television will be rectangular and have an antenna.

2. Consider what you know about structured and unstructured data and how it connects to the Quick, Draw! website: 1 / 1 point

- How would you describe the Quick, Draw! doodles you explored from a data point of view?
- How are these doodles different from or similar to other types of data that you have previously encountered?
- What about this data makes it unstructured?

Now, write 2-3 sentences (40-60 words) in response to each of these questions. Type your response in the text box below.

How would you describe the Quick, Draw! doodles you explored from a data point of view?

How are these doodles different from or similar to other types of data that you have previously encountered?

What about this data makes it unstructured?

Correct

Great work reinforcing your learning with a thoughtful self-reflection! A good reflection on this topic would address that these doodles are unstructured data: Data that is either not organized or organized in a highly superficial manner.

The data on Quick, Draw! is organized loosely based on the category, but not beyond that. Within each category, there is no organization. Unstructured data also has no established rule about how to compare two different pieces of data. On the other hand, structured data conforms to organizational rules.

In the example of the elephant: there are no rules that make one picture more elephant-like than any other. Rules are one way to structure data, as they can act as a test to help determine if a data point (in this case, an image) should or shouldn't be considered a picture of an elephant.