Google's Teachable Machine Instructions

Activity Description: Google Teachable Machine is a powerful Artificial Intelligence Tool that can be used to train a computer to recognize your own images, sounds, & poses.

Materials:

- Website Link: <u>https://teachablemachine.withgoogle.com/</u>
- Apples vs Oranges images
 - Note: We encourage teachers to download this folder and place it under desk for easy access.

Instructions:

- 1. Press "Get Started"
- 2. Choose **"Image Project"**
- 3. Choose "Standard Image Model"
- 4. Tell students we will first teach a computer how to recognize an apple from an orange. In class 1, type oranges.
 - a. Proceed to upload images of oranges found in the provided folder.
 - b. Press *"upload"* then *"choose images from your files"*, look for the apples and oranges file in your desktop.
- 5. In class 2, type apples and proceed to upload images of apples found in the provided folder.
 - a. Press **"upload"** then **"choose images from your files"**, look for the apples and apples file in your desktop. Choose the apple images.
- 6. Press "train model"

| 3 Image Samples | | | | | |
|----------------------------------|-----------------|--------|--|----------------------------|---|
| Apples | 2 Image Samples | 0 0 | | | |
| Choose images from your files, | s image samples | | Training Train Model | Preview | ☆ Export Model |
| or drag & drop here | | | Advanced | You must tra before you | ain a model on the left can preview it here. |
| Coogle Drive | | | 2. Train your Model Solution S | × | |
| Images will be cropped to square | | | | - Gyant W | |

- 7.
- 8. We now need to see if our model has learned the difference between an orange and apple, therefore we need to test it. To do that, we need to find an image (of an apple or orange) online that our computer hasn't seen. So, find an image online and upload it.
 - a. To upload, click the arrow next to the **webcam**, and **select file**. Here you can upload your test image



b. As you can see, our computer classified our test image as an orange!