Recitation 5 Daniel Kim

Team member:

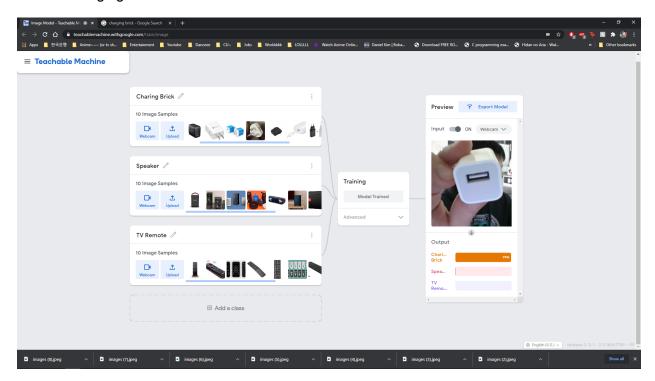
- Daniel Kim
- Zixiao Wang

Classes:

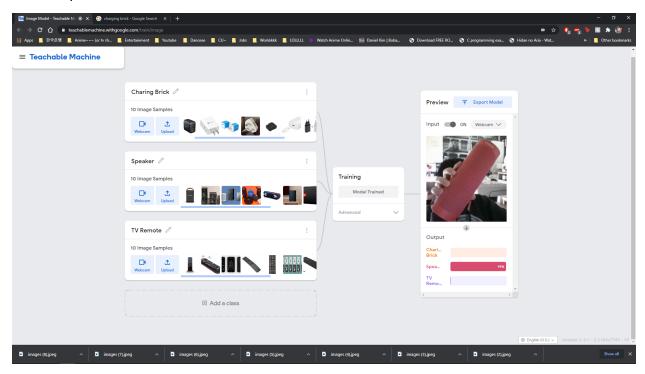
- Charging Brick
- Speaker
- TV Remote

Screenshots:

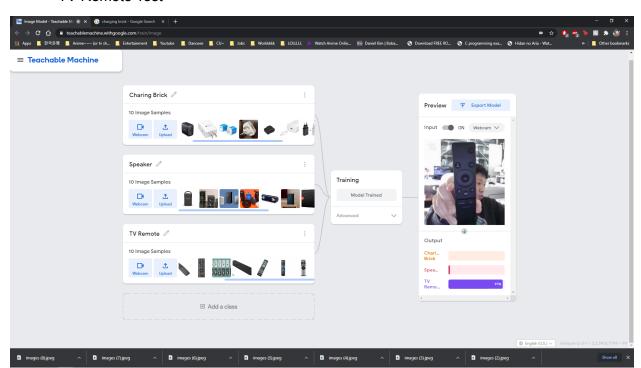
Charging Brick Test



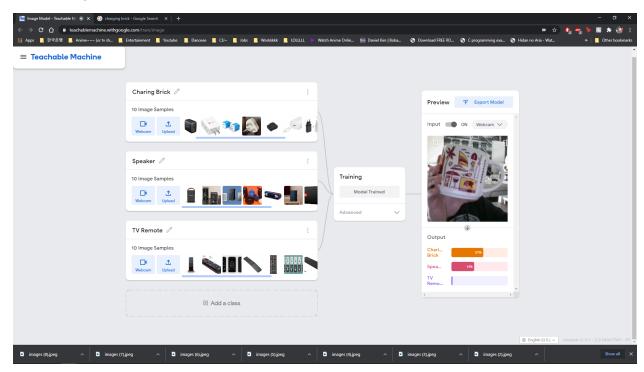
Speaker Test



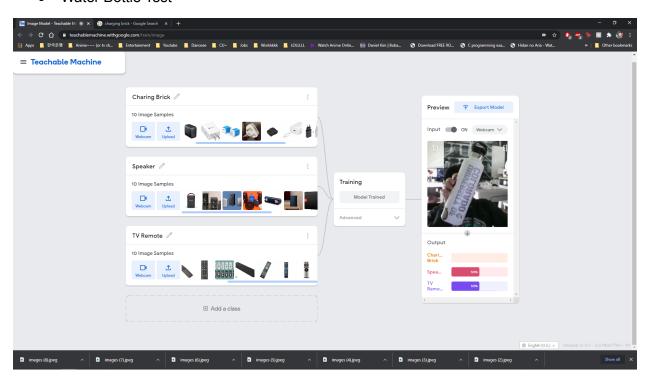
TV Remote Test



• Mug Test



Water Bottle Test



Reflection questions:

- If someone were to use your model in real life, what problems would they have?
 - The user should notice that the result says Speaker at 100% at default all the time even though there is nothing related to that. The user will also face a problem where you have to put the object at a certain angle and distance in order to register. For example, when I used the TV remote as the object, the result was saying that the object is a speaker when it was sideways, but when I turned it vertically, it was saying it's a TV remote. The main problem the user will experience is the false output.
- What could you do to mitigate those problems?
 - The model simply needs more data such as more images, and I believe that it will be more accurate if you actually take photos from a webcam instead of jpeg images. In addition, you can take multiple angles of the object when the webcam is used to take photos. More photos/images will improve the accuracy of the objects and have less false output.

Partner's feedback:

• All of the examples worked quite well. Since there aren't many similarities between the classes, I think the model worked well being able to differentiate the objects. The two problems that someone might encounter problems with this model are that the model was able to correctly guess the objects only when it's at a certain angle, and webcam image quality. I would recommend adding more images so that the model would know all the angles of the object in order to guess the objects more accurately. I noticed that the image quality was poor so I thought maybe that impacted the accuracy and result.