Lab: Teachable Machine

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TinyML4D Academic Network Co-Chair

https://teachablemachine.withgoogle.com

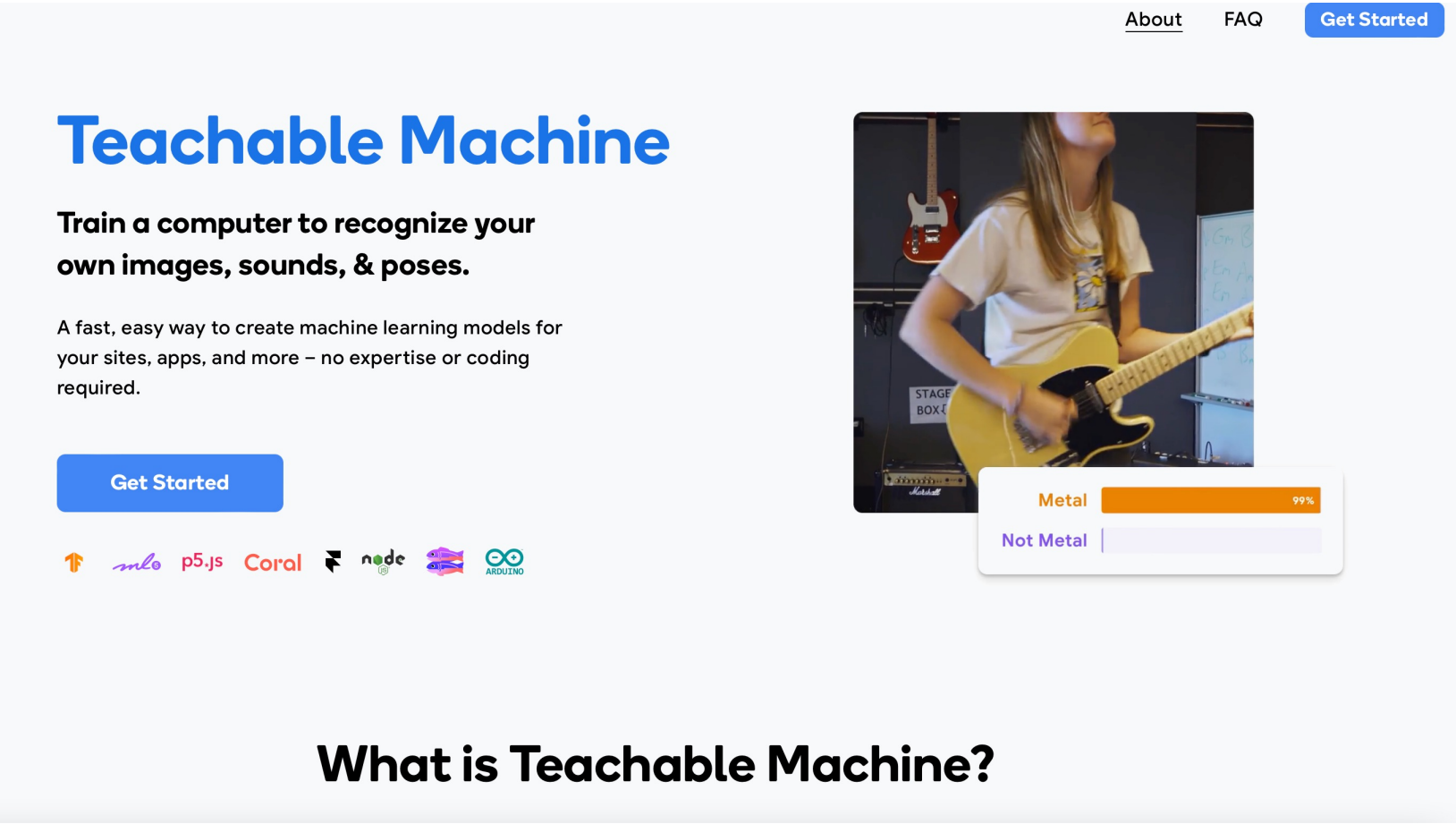
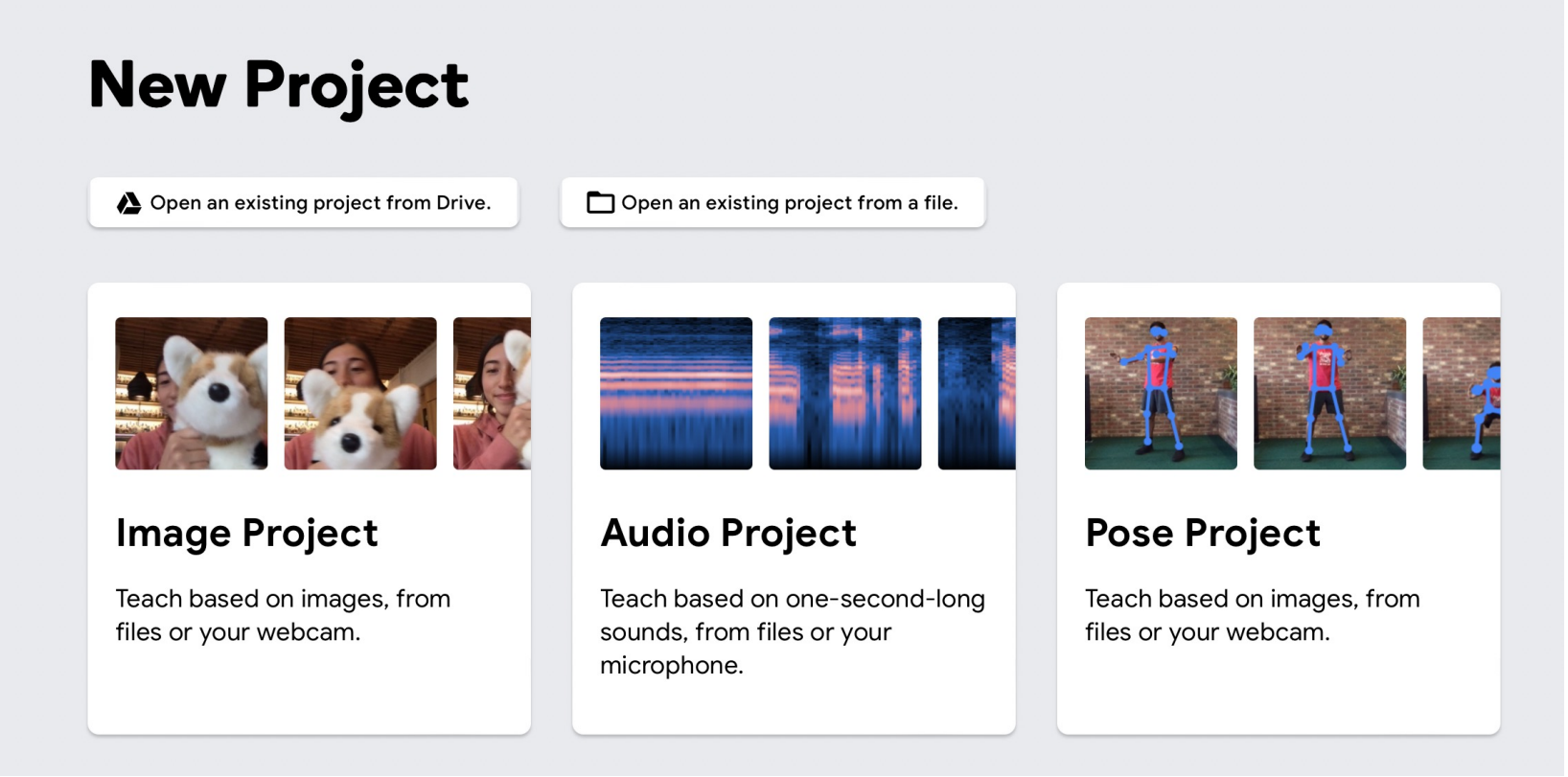


Image Project



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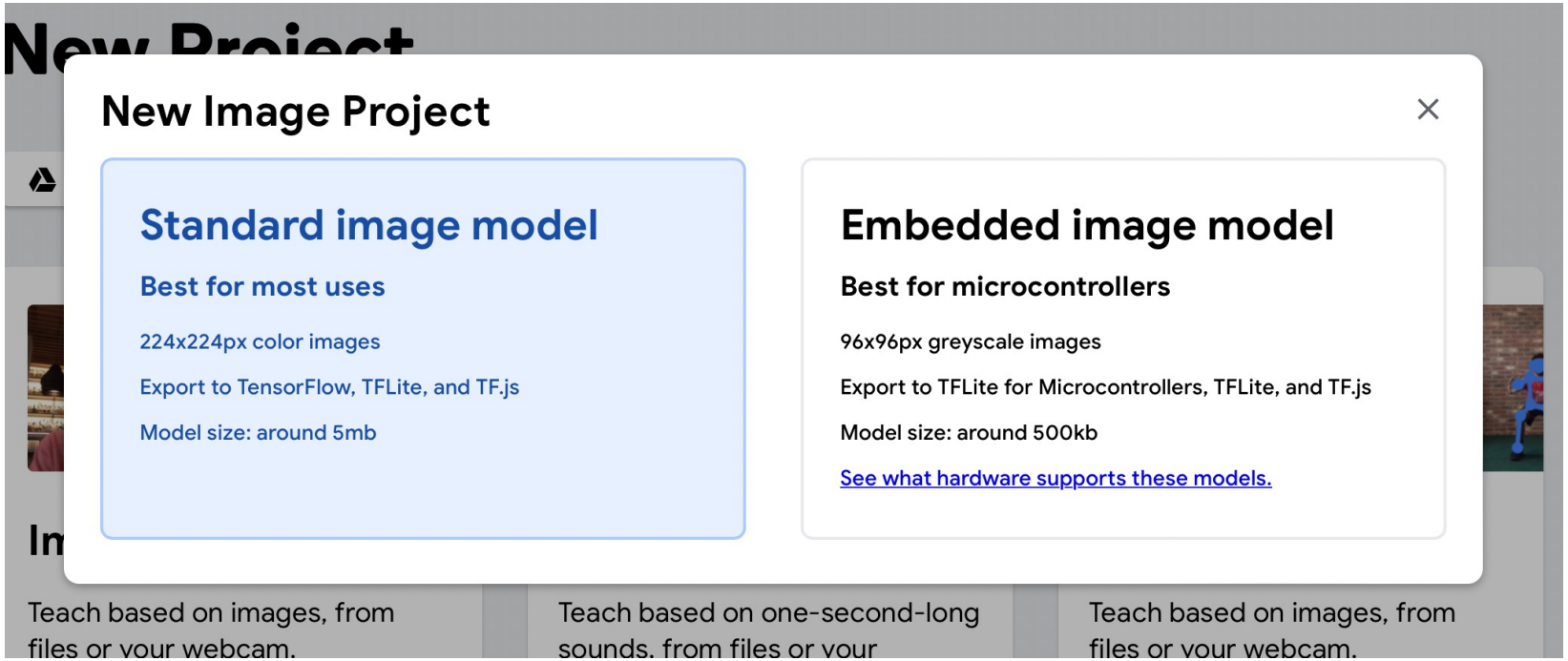

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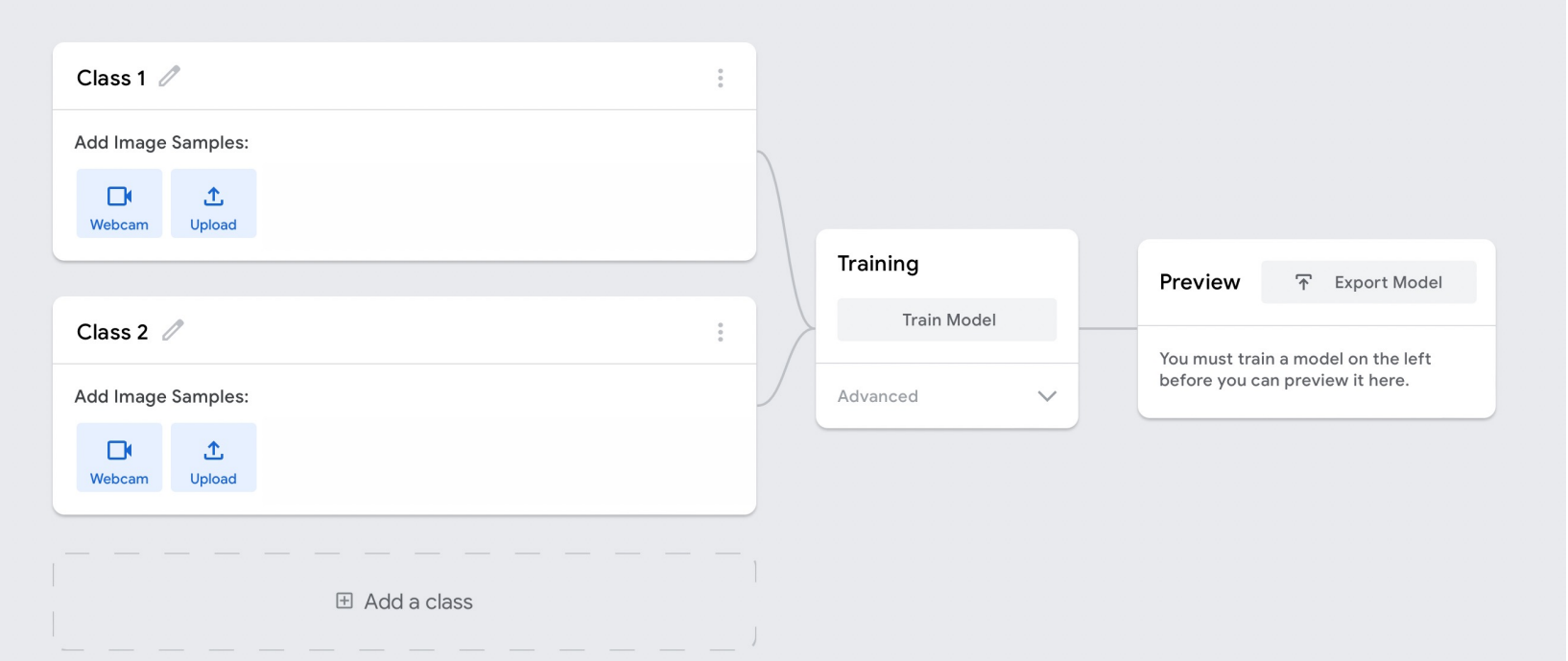
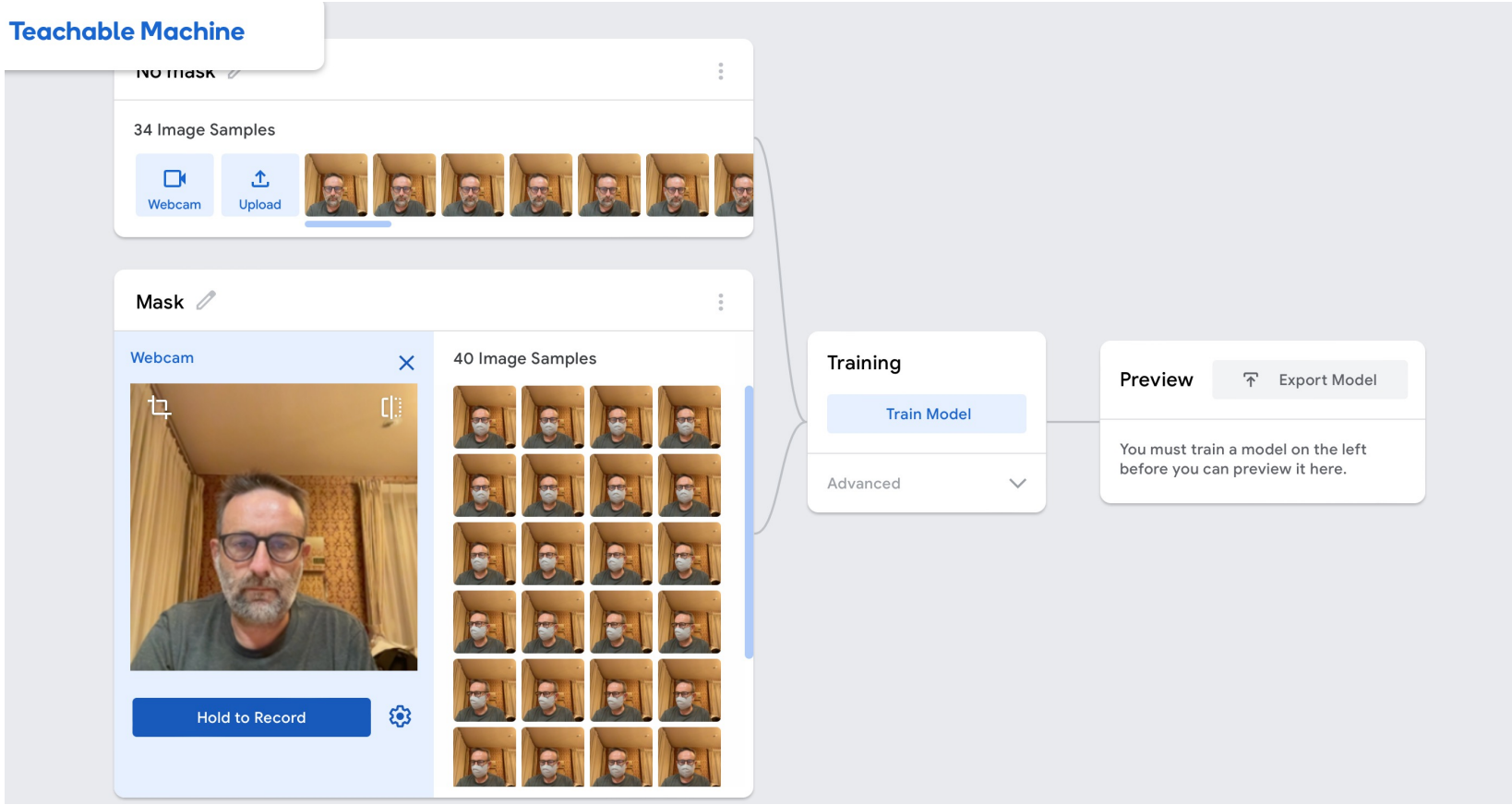


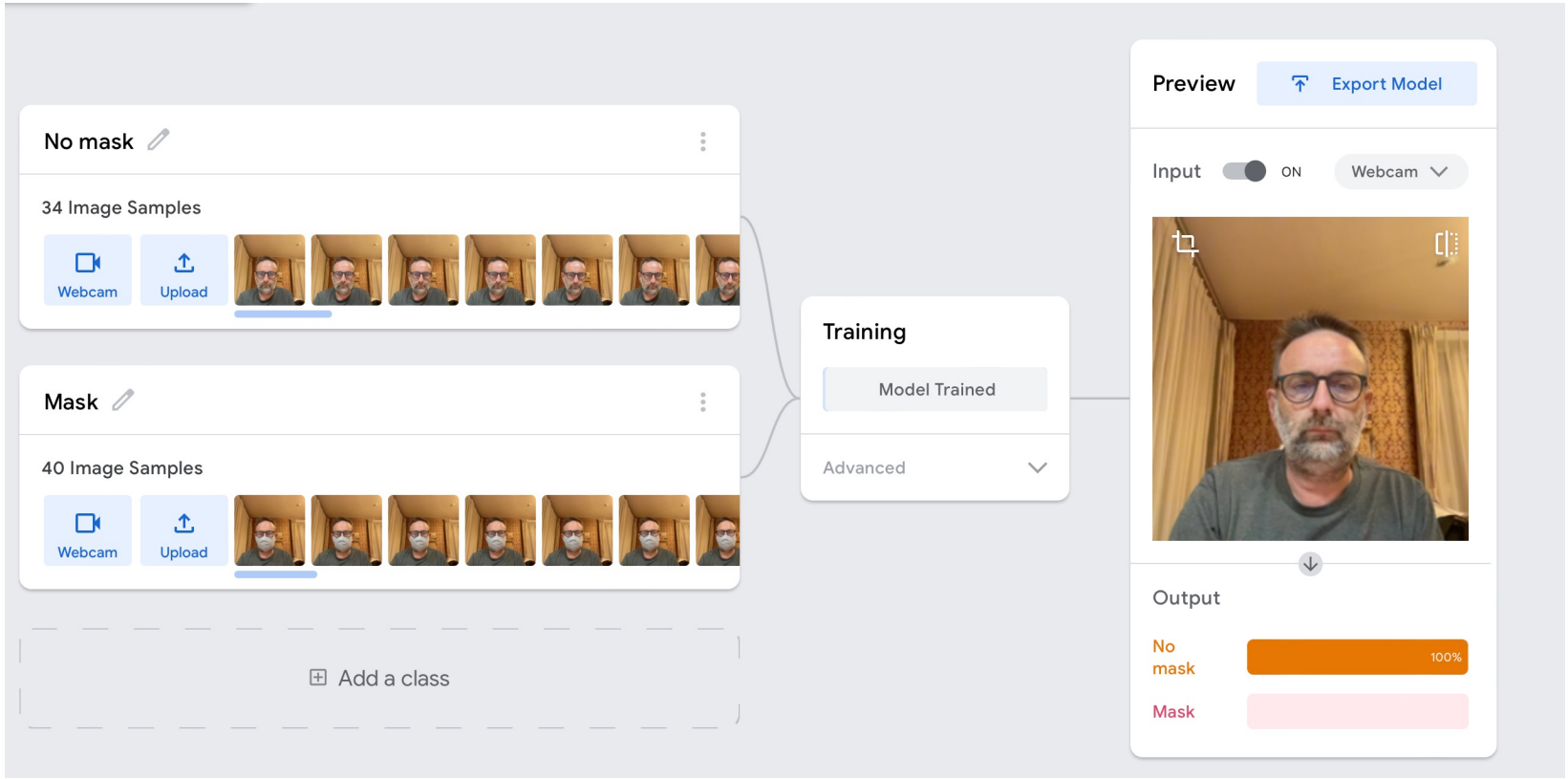
1) Give classes a name (Glasses/No Glasses, Mask/No Mask, Smiling/Serious, etc)
2) Click and Hold on Webcam to take many pictures
3) Make sure the classes have the same number of pictures

Image Project



Click on Train!

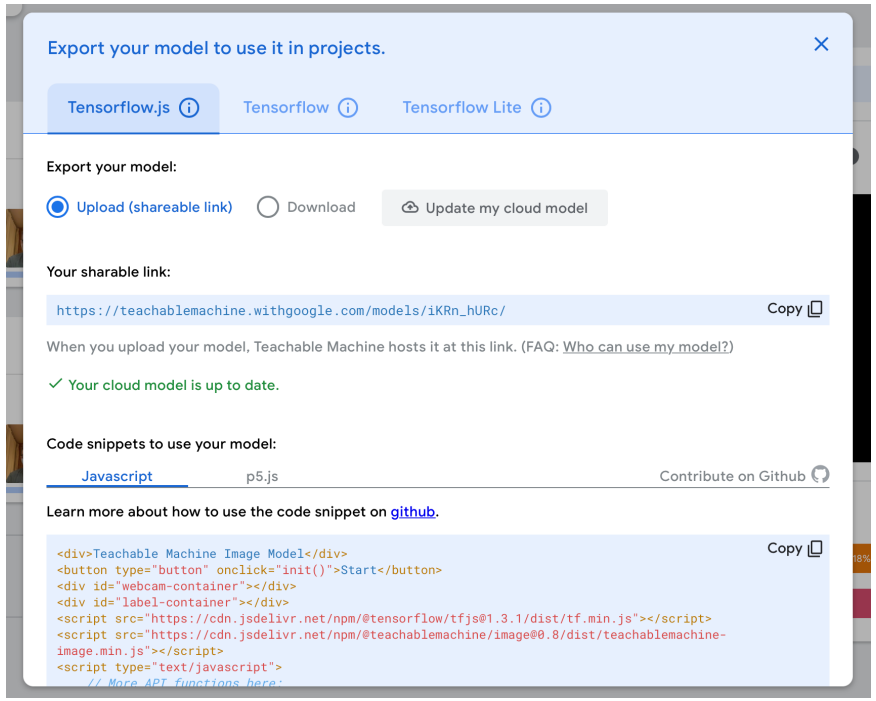
Image Project



Click on Preview

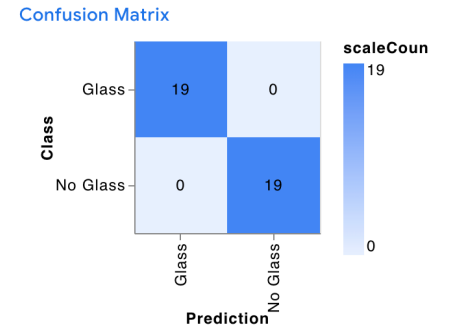
Questions

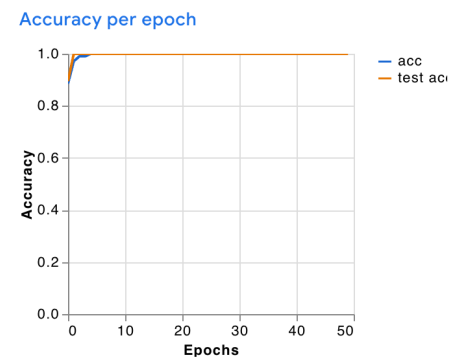
- How many pictures do you need to have a good model?
- What happens if the two classes are unbalanced?
- Export the model as a Sharable Link (Tensorflow.js → Upload) and give the link to a colleague. Does it still work fine?



Questions

- Under Training → Under the hood, you will find more technical information about the model. How does it perform?





Running on Android

- https://github.com/mstale007/Teachable_Machine_Mobile

1. Train your model on Teachable Machine web app.
2. Select Export Model and chose Tensorflow Lite option and then Floating Point model and download those.
3. This will download a zip file containing .tflite and labels.txt. Extract it and send both files to your mobile.

Running on Android

Install and Start the App	Browse and Select your .tflite and labels.txt file extracted from the zip file	Press start tflite	Have Fun...!