\*\*\* issues\*\*\*

Python was not running in the command prompt. Had to add a path to C:\ so python would work in prompt. This was necessary in order to install and use pip, as pip must be run in the prompt.

Various invalid syntax sources that had to be researched and fixed.

The tutorial uses code that is out of date. Attribute placeholder from tf.placeholder is no longer used in tensorflow v2. Had to downgrade to version 1 for it to work. Various issues when running the third block of code meant to optimize the graph

Rasberry pi has not been booting properly. Much time was spent trying to figure out what the issue was.( Wasn’t sure if it was a bad cable, bad SD card, etc.) Came to the conclusion that it may have been the raspberry pi itself due to the following:

Source: <https://www.makeuseof.com/tag/raspberry-pi-wont-boot-fix/>

When a Raspberry Pi boots, one or more LEDs will activate. One is red, indicating power (PWR); the other is green, and indicates activity (ACT). (There is also a trio of LEDs indicating the Ethernet status, if connected.)

No ACT light was lit. Only a power led would light up. The issue may also be with the SD card not having a boot file, but on windows this is difficult to see.

<https://www.raspberrypi.org/forums/viewtopic.php?t=45638>

In Windows normally you can only access the small boot partition which contains the boot files and some configuration files (12 files).  
You cannot read the rest of the OS in Windows without installing some special software. Something like this:  
[http://www.howtogeek.com/112888/3-ways- ... m-windows/](http://www.howtogeek.com/112888/3-ways-to-access-your-linux-partitions-from-windows/)  
  
Your best option would be to find a Linux desktop where you can browse the entire OS on the SD card.

A new Rasberry pi was given to us on Friday in class. Attempts to get it working will be done this coming week.

VirtualEnv was not used on the tensorflow coding part. Unsure if this caused issues, but was unable to get it to work properly, so just skipped it.

<https://ci.tensorflow.org/view/Nightly/job/nightly-android/> is a deprecated link and no longer works.

\*\*\*end issues section\*\*\*

\*\*\*resources and research section\*\*\*

echo %PATH% // shows available files from C:\ in command

<https://stackoverflow.com/questions/8548030/why-does-pip-install-inside-python-raise-a-syntaxerror>

pip is run from the command line, not the Python interpreter. It is a program that **installs** modules, so you can use them from Python. Once you have installed the module, then you can open the Python shell and do import

Pip install virtualenv

Pip install open cv

<https://appuals.com/fix-pip-is-not-recognized-as-an-internal-or-external-command/>

Press **Windows key + R** to open up a Run dialog box. Then, type “**sysdm.cpl**” and press **Enter** to open up the **System Properties** screen.

Inside the System Properties screen, go to the **Advanced** tab, then click on **Environment Variables**.

In the Environment Variables screen, go to **System variables** and click on **Path** to select it. Then with the **Path** selected, click the **Edit…** button.

In the **Edit** environment variable screen, click on **New** and add the path where the PiP installation is located. Right click, show in folder. Right click address at top and “copy as text”. Add semi colon and paste.

C:\Users\Mikaela\AppData\Local\Programs\Python\Python37; C:\Users\Mikaela\AppData\Local\Programs\Python\Python37\Scripts

<https://pip.pypa.io/en/stable/installing/>

python -m pip install -U pip // check if pip is installed

<https://pip.pypa.io/en/stable/user_guide/#running-pip>

python -m pip <pip arguments> // use pip

python –m pip install virtualenv //works

<https://docs.python.org/3/library/venv.html>

c:\>c:\Python35\python -m venv c:\path\to\myenv

* Vgg\_19 audio classification with pretrained vgg; skip downloading audio file

C:\Users\Mikaela\my\_project // virtual env file location

<https://python-docs.readthedocs.io/en/latest/dev/virtualenvs.html>

virtualenv my\_project // makes project env

my\_project\Scripts\activate //run

deactivate // close

<https://stackoverflow.com/questions/31661694/import-module-works-in-terminal-but-not-in-idle>

1. Open python in cmd (type python and press enter)
2. Import the module in cmd (type import modulename)

<https://stackoverflow.com/questions/37383812/tensorflow-module-object-has-no-attribute-placeholder>

if you have this error after an upgrade to TensorFlow 2.0, you can still use 1.X API by replacing:

import tensorflow as tf

by

import tensorflow.compat.v1 as tf

tf.disable\_v2\_behavior()

<https://github.com/tensorflow/tensorflow/issues/27614>

from tensorflow.python.tools import freeze\_graph

import tensorflow.keras as keras

import tensorflow as tf

###tensorflow should be working

##android app

<https://developer.android.com/studio?gclid=Cj0KCQjwgNXtBRC6ARIsAIPP7Ru8WHEhRghKPmGiV8EB5QeEhOPSW1T0S3iYU_30-7A06Y2EMWyZtJcaAmibEALw_wcB>

We need to get the tensorflow libraries for Android, create an Android app and configure it to use these libraries, and then invoke the tensorflow model inside the app.

Android Studio to create an Android project with an empty activity.

* Github for tensorflow models

<https://github.com/tensorflow/tensorflow/tree/master/tensorflow/examples/android>

Holds models we need for speech and item recognition.

<https://github.com/tensorflow/tensorflow/blob/master/tensorflow/tools/android/inference_interface/README.md>

The TensorFlow Inference Interface is also available as a [JCenter package](https://bintray.com/google/tensorflow/tensorflow) (see the tensorflow-android directory) and can be included quite simply in your android project with a couple of lines in the project's build.gradle file:

allprojects {

repositories {

jcenter()

}

}

dependencies {

compile 'org.tensorflow:tensorflow-android:+'

}

if your **project** name is MyApplication MyApplication/app/**build**.**gradle**. At this location, you will be adding dependencies for your **project**

\*\*\*end resources and research section\*\*\*