Project 3 - Group 1

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Section 1 Execution Instructions:

Instructions for me to download and run your code. YOU NEED to show me screen shots of you doing this from your uploaded blackboard code.....this forces you to make sure that I can run your code. You MUST have the following screenshots AND give description on what to do: screenshot 1.1 = screen shot of your files uploaded to Project 1 turn in folder on blackboard

Section 1



screenshot 1.1 = screen shot of your files uploaded to Project 1 turn in folder on blackboard

Download source code from Canvas or go to Github repository https://github.com/kevinawei/Stroke Detection App

Open Android Studio. From the Welcome screen, select Open an existing Android Studio project.

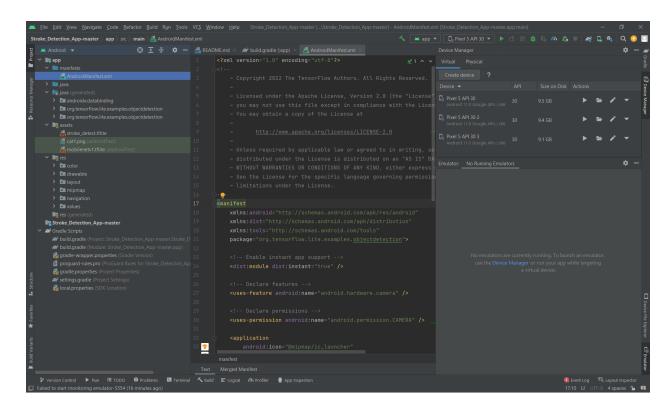
From the Open File or Project window that appears, navigate to and select the tensorflow-lite/examples/object_detection/android directory. Click OK.

If it asks you to do a Gradle Sync, click OK.

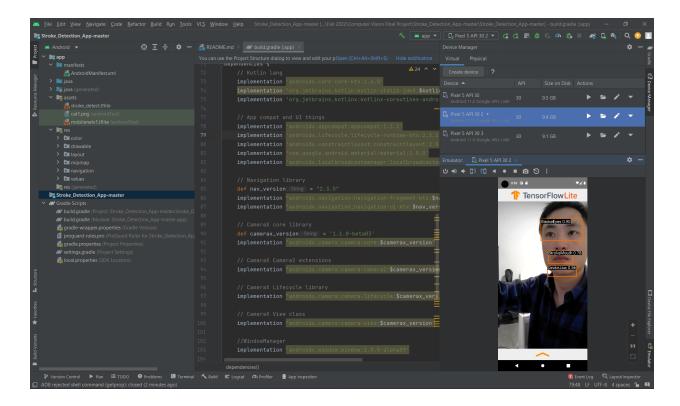
With your Android device connected to your computer and developer mode enabled, click on the green Run arrow in Android Studio.

gradle	11/28/2022 8:31 PM	File folder	
idea .idea	11/28/2022 8:36 PM	File folder	
а рр	11/28/2022 8:32 PM	File folder	
gradle	11/28/2022 8:32 PM	File folder	
build.gradle	11/28/2022 8:31 PM	GRADLE File	1 KB
gradle.properties	11/28/2022 8:31 PM	PROPERTIES File	1 KB
gradlew	11/28/2022 8:31 PM	File	6 KB
gradlew	11/28/2022 8:31 PM	Windows Batch File	3 KB
local.properties	11/28/2022 8:33 PM	PROPERTIES File	1 KB
README.md	11/28/2022 8:31 PM	MD File	2 KB
screenshot1	11/28/2022 8:31 PM	PNG File	776 KB
screenshot2	11/28/2022 8:31 PM	PNG File	448 KB
screenshot3	11/28/2022 8:31 PM	PNG File	440 KB
settings.gradle	11/28/2022 8:31 PM	GRADLE File	1 KB

screenshot 1.2 = directory view of "temp" directory you unzipped file to showing the unziped files and directory structures.



screenshot 1.3 = Eclipse running where you have opened up project file in "temp" directory.



screenshot 1.4 = Eclipse running the application - show screenshot of it running. If I must do something beyond simply hitting the "run" button, you need to give screenshots and step by step instructions.

Execution Instruction: Create/Select a virtual device from device manager. Make sure to enable the front and back cameras for the application.

- Go to Edit for the selected device
- Show advanced settings
- Set Camera Front to Webcam0 and Camera Back to Webcam0

Simply run the application with the above device configuration

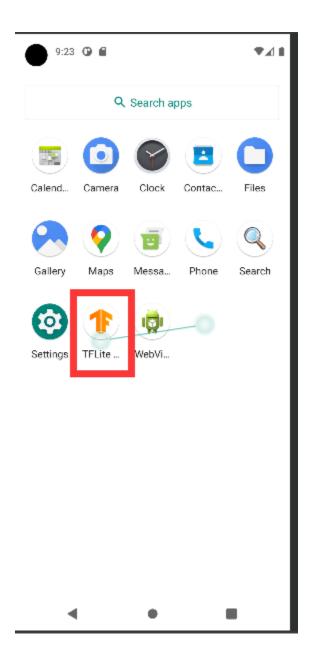
Section 2 Code Description

A describing how code is structured and the state of how it works. Give a describption for each filename listed.

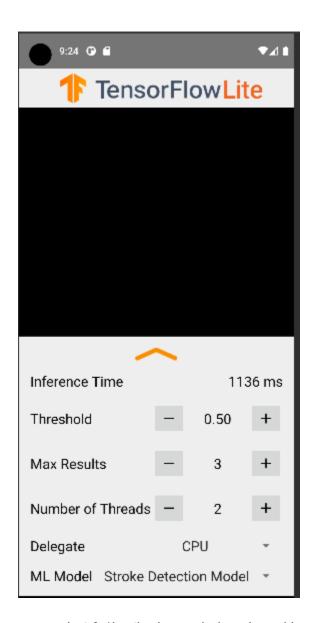
Section 3 Testing:

here you give screen shots of you running the various stages of the program as detailed here:

section 3.1: starting application

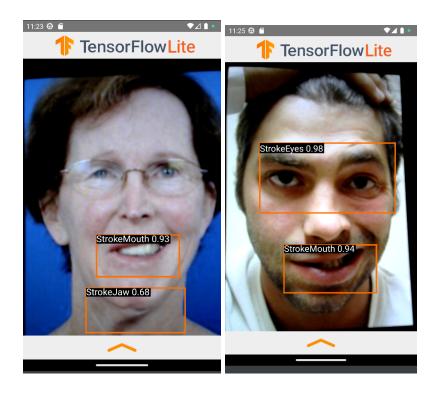


screenshot 3.1a= showing icon and resulting starting GUI.



screenshot 3.1b= the image being viewed in your application that was just loaded.

section 3.2: use-step 1 you need to discuss your results....discuss the steps involved in using the Android application including how the image or images are taken using the Android camera and the results.



From testing the app on various stroke patient images, the results are fairly accurate. The model has a difficult time ever detecting any abnormalities in patients' jaws, but this was to be expected as there were not many examples in our training data that included extremely asymmetrical jaw shape. The model also had a difficult time sometimes with detecting StrokeEyes in patients wearing glasses, although sometimes it seemed to be fine (this could be another issue with the variety of the training data provided). Overall the model was very good at detecting eyes and mouth as separate and rarely had any cases with misplaced bounding boxes. There are however many false positives and the model will detect normal looking eyes and mouth as StrokeEyes and Mouth occasionally.

Section 5 Youtube Link:

https://www.youtube.com/watch?v=cFTPK8GRpsU