

Cosc 5/4735  
Due: April 21

Program 5  
50 points

Write the following program phone application. The goal is to combine varying pieces together to make an interesting app. We are going to create a "filter" like you would see for snapchat or Instagram,

Your app will do the following:

You will be using the MLkit (not vision api or cloud ml vision api), analysis it with the face detection. You will then "draw" on the face based the information you detected. You are required to have at least 3 different "drawn" objects. A drawn object could be actually drawing something on the picture or could a bmp that is scaled to fit (ie draw a hat/glasses/mustache on the person) the person. What you draw is up to you, but must be more complex as the examples, but not the example either. Think about all those filters for Instagram or snap, if you are need of an idea.

### **PROGRAM REQUIREMENTS:**

Your app must take a picture and use the MLkit.

**4735:** you will take a picture like the example of the BarcodePicDemo. Since this is a picture, instead of video you can actually use both the landmark and contour information (ie send the picture to both detectors) to generate a lot of information to help make decisions on drawing.

**5735:** You will have a live video, instead of a picture. Like the PoseDemo or MlkitFaceTrackerDemo (note this one is very complex code). You should choose likely the landmark or contour depending on what "drawn objects" you want to use.

### **TURN IN and GRADING:**

Soft copy:

1. Use this link to create your repo <https://classroom.github.com/a/VHdfTZF7>
2. Upload the project to your repo
3. Create/Edit the readme.md file, add the following:
  - Course number 5735 or 4735
  - Name
  - how to run the program,
  - Which phone/emulator to run on including special information like android version (ie 11) and screen size.
    - Or if you are using the borrowed a phone: pixel 2, etc.
4. Lastly ensure everything has uploaded to the github website and not just the local repo.

Code will be graded on correctness, comments, and coding style.