

# MultiFuncApp

This Android application features a simple layout overview of a single button, prompting the user to take a picture. Once the user takes the picture, the picture appears in an imageview on the front page of the app. If the user is satisfied with the picture they have taken, they can then choose between different “filters” (image effects) in which they can alter their image. Then, once that is chosen, they can then choose whether they want to record their voice, which will then convert their speech to text. The text they have recorded they can then choose to act as a title for their image, or as a descriptor/text message. The image should then be saved to their gallery directory. I wrote this application because I was assigned to create an app that utilizes two functions of an Android device, so I chose to use the microphone to record a voice to be converted to speech, on top of the camera utilization and the image manipulation we were supposed to implement. The purpose that this application is supposed to serve, is to act as an application where users can manipulate their images with fun and interesting “filters” as well as add unique text to them.

## System Design

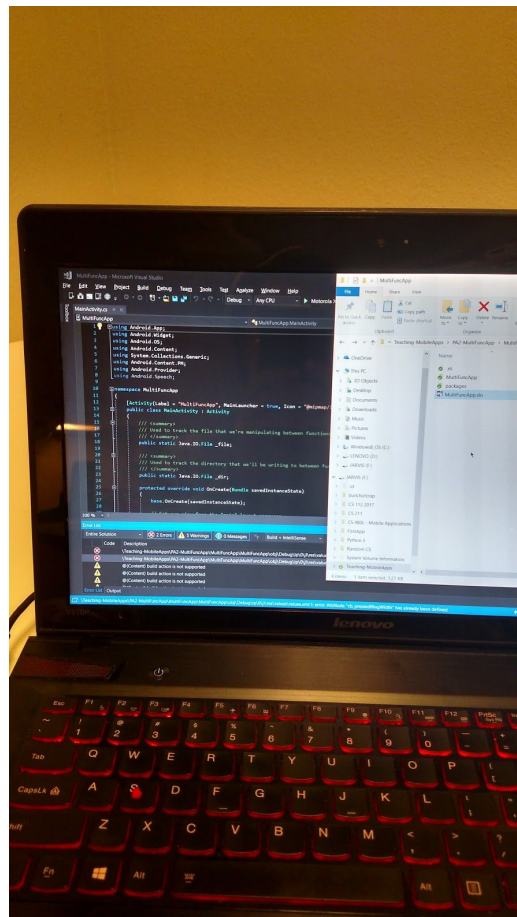
System Requirements: requires Android 7.1.1 Nougat at most, moderate amount of readable access memory, permissions to access and use the device’s microphone and camera. The best scenarios in which to use this application would be to use it for personalization of photographs, for personal printing uses, for physical or digital portfolios, for sharing and sending to friends or family, or even for labeling and organizing images with a descriptive label.

## Usage

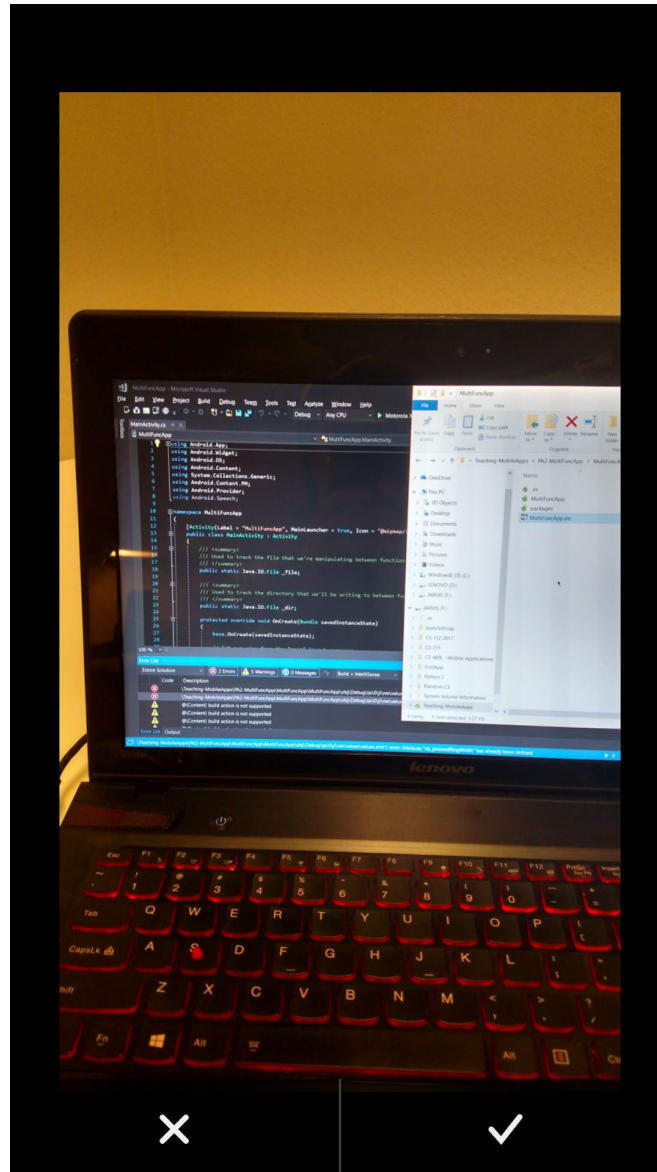
To use this application:

1. Boot up the MultiFuncApp on your device. On the front page of the Android application, you will be met with a single button prompting use to take a picture. To take a picture, press the “*Take Picture*” button. Upon pressing the button, you will be met with a pop-up notification asking for permission to use your device’s camera. Please confirm that you would like to allow the app to use your device’s camera. The app will not work as intended without this permission.

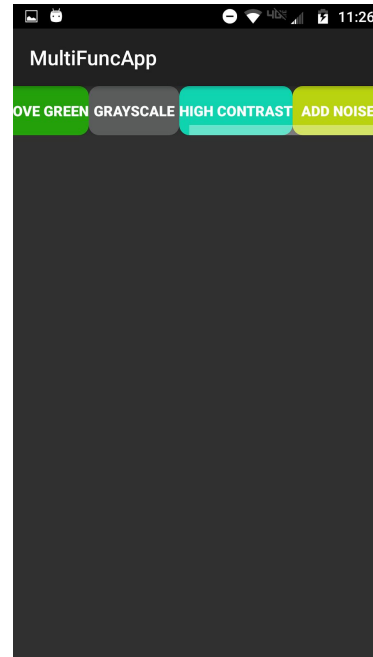
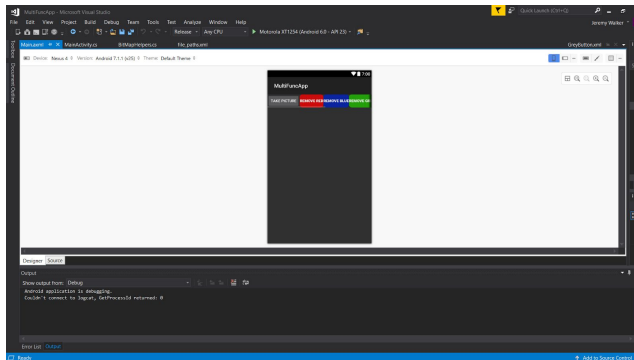
## *Picture taken with MultiFuncApp*



2. Once you have taken a picture, a series of buttons will pop up. If you are satisfied with the image you have taken, click on the **check** button to save the image. If you are not satisfied with the image you have taken, click on the **X** button to discard the image and to take a new one.



3. After you have confirmed the image, you will then be prompted by a series of different filters and layouts to apply to your image. Click on the layout that you desire, and then press on the pop-up **check** button to confirm. You may click on the pop-up **X** button to discard the layout you have chosen.



4. Once you are satisfied with layout/filter you have chosen, you have the option to add text to your image via a voice-recording button. If you wish to record your voice, press on the white round button. Upon pressing the button, you may start speaking to record your voice. Press the button again to end recording your voice. If you do not speak after the button has been pressed, the recording will automatically end.
5. Once you are done altering your image, and satisfied with the results, your image will be saved to your **Gallery** file on your device.