Beginning Android

Individual Assignment 3

# Grade Sheet

Please complete this grade sheet and submit it with your final project. Give yourself a grade for each item listed below. If you completed the entire item, assign yourself 10 out of 10. If you completed part of an item, assign yourself something less than 10 out of 10. If you did not start an item, assign yourself 5 out of 10. Note that it is in your best interest to answer this grade sheet honestly. If you assign yourself anything greater than 5/10 for an item that you did not do correctly, I will assign 0/10.

Did something extra, beyond the minimum requirements here. \_\_/10

What did you do? (must complete this part to get credit) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Program is commented with JavaDoc and well formatted. All String literals are defined in Strings.xml; none are hardcoded. \_\_/10

ImageCaptureActivity invokes the Camera, using an implicit intent. \_\_/10

ImageCaptureActivity invokes the image gallery, using an implicit intent. \_\_/10

ImageCaptureActivity invokes the ImageInformationActivity, using an implicit intent. \_\_/10

ImageInformationActivity has the proper configuration in AndroidManifest.xml to be invoked as implicit intent. \_\_/10

ImageInformationActivity shows a thumbnail of the image in an ImageView. \_\_/10

ImageInfomrationActivity shows details of the image, including the file size, height, and width. \_\_/10

ImageInformationActivity has a RatingBar where the user can rate an image. It has a button that will close the Activity and return to the calling Activity. It will return the rating to the calling activity,

When ImageInformationActivity close, ImageCaptureActivity will show a toast if that rating is 4 or higher. \_\_/10

# Due Dates

See Blackboard Calendar for due dates.

# Directions

Create an app that takes a photo, saves the photo, and shows a gallery of photos.

Important note: the cameras on the Android Virtual Devices are notoriously buggy. If the camera crashes when you invoke it, don’t worry. As long as the camera invokes, you are in good shape. You may also want to test your application on an actual Android device, if you have access to one, or on the UC virtual labs, or in one of the physical UC labs.

1. Create an activity + layout that acquires an image. Call this ImageCaptureActivity. This activity should:

* Have a title describing what it does.
* Have two buttons.
  + One should open an image gallery, using an implicit intent.
  + Another should take a photo using the camera, by invoking an implicit intent.
* In the onActivityResult method, you will be able to gather the location of the photo selected from the image gallery, or the photo taken with the camera.
* Invoke the next activity, the Image Information Activity, via an *implicit* intent.
  + That event will return a rating, which will be a number between 0 and 5. If the number is 4 or higher, show a toast that says, “Glad you liked it!”

1. Create an activity + layout that displays image information. Call this ImageInformationActivity.

* This should be invoked from the first activity with an *implicit* intent, so it will need to be registered in the Android Manifest with:
  + An intent filter.
  + A category of DEFAULT.
  + It will also need to accept extra data, which will contain the file path of the image to interpret.
* This activity will need to show:
  + A thumbnail of the image, using an ImageView.
  + Details of the image. You can get all of this from class BitMap. Each of these should be in a separate TextView:
    - Width
    - Height
    - Size in Bytes
    - File Location
  + A label that says, “Do you like this image?” followed by a rating bar.
  + A button that will close this activity and return to the calling activity. It should return the value from the rating bar.
  + Hints:
    - You will need to use Bitmap and BitmapFactory to decode the bitmap from a file path.
    - The button that closes the activity should invoke finish().

1. Do something extra, beyond the minimum requirements stated here.
2. Complete the grade sheet above.