Image Enhancer Project application

Step-by-step instructions. We here assume that you are working in Android Studio under Windows.

1. **Install Android Studio** (see https://developer.android.com/sdk). If you do not already have Java installed, you will be asked to also install that. If you have Java there are instructions to check if your version is high enough.

2. **When Android Studio is** installed and started, you go on with opening (the un-zipped) *ImageEnhancerExample* project as an existing project. Your edits will then be saved in these project files, so please keep the zipped project so you can return to that if needed. Android Studio will probably ask you to install a number of modules, and you should follow those recommendations.

3. **Build the project** (use *Rebuild project* the first time).

4. **Download and run the application**. We recommend you to run the code in an Android unit rather than in an emulator, if you have the possibility. The unit needs to be set in developer mode to be able to accept apps via the USB interface. How this is done depends on your unit, usually you can find how by a simple web search. In some Android-versions you are supposed to find 'System version' in the menu system and click it seven times, but in some models it is only a setting. Also make sure your Android unit is set to allow USB debugging.
When you have your unit in debug-mode you connect it to the computer with an USB cable. Download and run the app in the unit with the command *run* in Android Studio. If Android Studio does not find your unit you may need to install in the computer a driver for your unit (try to have Windows find and install the driver, if it does not succeed you can search the net for *<unit model> Android Debug Driver*).

5. **Run the app** named *ImageEnhancer* in your unit (probably it starts by itself after the download described above). Test the app, in the example there are some image manipulations. When you have reached this point the environment is ready for you to develop your own app.

6. **Study the given source code**. Image manipulations are now performed in the class TestEnhancer. Look into the code to get an understanding of it and the overall structure. You can either edit this file (TestEnhancer.java) to develop your enhancer or create a new class.

2021-07-11
Benny L. and Ronnie L.
BTH