

CSC 120: Image Editor

Object Interaction

1 Introduction

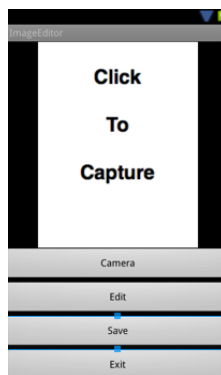
The purpose of this lab is to introduce and learn the concept of object interaction. An object consists of data and methods grouped together to form an entity. It also has a sort of "object interface" which consists of methods that define how the object will interact with other objects.

For this lab, you will be developing two classes: a CameraActivity and an EditActivity class. The camera capabilities on the Android phone will be utilized. You will be required to code each of these objects in a way that they can interact with each other to accomplish the task of capturing a picture and editing that picture.

The CameraActivity class should be able to take a picture with the camera, and then send it to the EditActivity class to be manipulated by the user.

In this lab, you will be required to use certain classes from the Android SDK API. Here is a list of things you will need to research before beginning:

- android.content.Intent
- android.graphics.Bitmap
- android.net.Uri
- android.provider.MediaStore
- android.widget.ImageView



2 Objective

In this lab, you will develop a camera/image editor app. A picture will be taken with a simple method call, and then the image will be manipulated with different effects, such as greyscale. There will be two different classes: Camera and Image. Using different objects of these classes, the concept of object interaction will be learned.

3 Activity

3.1 Research

*classes and methods from APIs will be added here to research

3.2 Explore

Open the ImageEditor.java file. Explore the file. Read the comments. Note the parts of the code that you will be required to fill in. They will be labeled.

3.3 Import

In order to use the classes and methods from APIs, you have to import the required libraries. Import the *names will be given* libraries.

4 Conclusion

In this lab, you have learned the concept of object interaction. This was done through designing two separate classes: a Camera and Image class, and having them interact with each other to capture and edit an image. In the future, you should be able to design different objects and have them work together to solve complex problems.

5 Deliverables

The deliverables for this project are as follows:

ImageEditor.pkg - with your version of ImageEditor.java