**Spike outcomes**

**Name:** Load and Process Image From Camera

**Goals:**

Code for accessing the camera.

Code for displaying images from the camera in our app.

**Personnel:**

Jack Hosemans and Thomas Parasiuk

**Technologies, Tools, and Resources used:**

Java, Eclipse, Android, Git, Emacs, Android API

**Tasks undertaken:**

* Added the ability to access the camera to our application.
* Saved these images taken internally and displayed them.

**What we found out:**

How to access the camera from our application and how to get the image taken from the camera and access/save it with our application.

The android intents system for the camera does not return the full size image. Accessing the full size image entails passing in a location that the android api saves the image to, then that has to be loaded when needed.

Newer versions of Android (namely KitKat) breaks writing to any removable storage barring a private folder specified by the system. This can be worked around for now by saving images in this folder, but a full workaround is needed for saving images where the media provider can find them.

(Ref: http://source.android.com/devices/tech/storage/index.html)

**Open issues/risks:**

Thomas has no access to an android device with a camera. He should look in to getting camera functionality working on his virtual device so that he can test the way the application works with the camera in the future.

External storage cannot be written to outside of a specific directory.

**Recommendations:**

We should now use the images that we take in from the gallery/camera as test cases for image processing and work on code for the image processing spike.

We may still need to add the ability to take images in from other sources – e.g. sharing from other apps, taking images from URL.

Look into utilizing the android media provider for accessing external storage.  
(useful: http://forum.xda-developers.com/showthread.php?t=2634840)