# PROGRAMMING ASSIGNMENT 1: LOCATION TRACKING

### **DESCRIPTION:**

The program creates an android app **shareMyLocation.apk** that performs the following two actions:

- 1. Retrieve GPS location co-ordinates like longitude and latitude on an android emulator from a DDMS via LocationListener.
- 2. Send this information to another android device as an SMS via SmsManager.

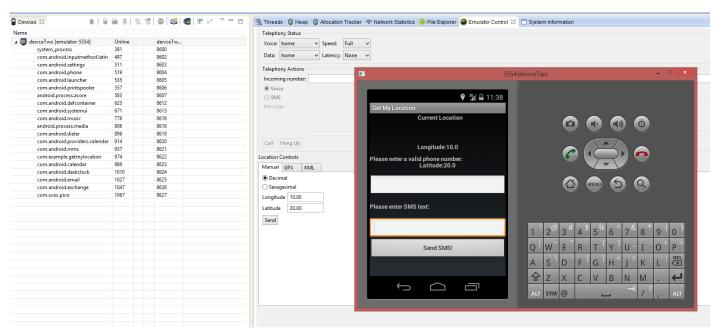
## **TOOLS:**

Eclipse with android bundle packages installed for android 4.3 and higher versions. The application supports API 20 in android 4.4 (KitKat) version.

## **IMPLEMENTATION:**

#### 1. Location Details:

A DDMS sends user entered latitude and longitude details to an emulator device. The device displays this information as shown below:



# 2. SMS:

One android emulator device sends a text message of up to 160 characters to another android emulator device. The phone number of the second emulator is: 1-555-521-*port*. Here, the port number is mentioned with the device name on top of the emulator. For example, emulator one has name: deviceTwo:5554 and the name of the second emulator is deviceOne:5556. deviceTwo will send a text message to deviceOne with the phone number of 1-555-521-5556. Once, a message is received, deviceTwo shows the message sent successfully status as shown below, else shows an error.



# **REFERENCES:**

P535 Pervasive Computing: Lab 3

http://wptrafficanalyzer.in/blog/android-gps-with-locationmanager-to-get-current-location-example/

http://www.sitepoint.com/how-to-handle-sms-in-android/

http://www.tutorialspoint.com/android/android\_sending\_sms.htm

http://developer.android.com/guide/topics/location/strategies.html

http://developer.android.com