**CMPSC 591
Principles of Mobile Applications
Fall 2013**

Homework Assignment Five: Installing and Configuring AppInventor

Introduction

In this homework assignment, we will investigate the use of new tools for implementing mobile applications for the Android operating system, with a focus on the AppInventor system developed jointly by Google and the Massachusetts Institute of Technology. You can learn more about AppInventor by visiting the Web site `http://appinventor.mit.edu/` and browsing the chapters in the AppInventor textbook provided by the course instructor.

Installing and Configuring AppInventor

Before you start this assignment, please make sure that you are sitting at a laboratory computer that has a USB cable available for your use. Furthermore, you must ensure that when you checkout your Nexus 7 tablet you also take the USB cable that is used to connect it to the power supply. After logging into your workstation, carefully connect your tablet to the workstation's USB cable.

When you go to the settings section of the Android operating system, you will notice that the "Developer options" menu item is not currently available to you. Since we need this item and the features that it provides, you will need to investigate how to enable it for the "Jelly Bean" version of Android. What trick did you discover? Once the discover how to enable this menu, please turn on USB debugging and take a screen shot to demonstrate that you have completed this task.

After configuring your tablet and visiting the Web site `http://appinventor.mit.edu/`, you should click the "Invent" button and log into AppInventor using your `allegheny.edu` email address. What do you see on the screen? What are the key features of AppInventor? How does it work?

Now, we have to make sure that your tablet is correctly recognized by the Ubuntu operating system on your workstation. Open a terminal window and type the command `adb devices`. If this command does not return output indicating that your tablet is properly registered with the workstation, then further investigate this issue. Next, you should return to your tablet and install the app called "MIT AI Companion". See the instructor if you have problems with these steps.

Once your tablet is properly registered with the workstation and the app is installed on the tablet, you should click a button in the AppInventor window that will run the "Blocks Editor". Next, make sure that AppInventor can connect to your tablet. Once you think that this process worked correctly, you should take a screen shot on both your workstation and tablet.

As the final task for this homework assignment, you should browse the provided text book and several online sources as you brainstorm examples of five apps that you could ultimately implement.

To complete the assignment, you should turn in one copy of the following signed printouts:

1. A description of the steps that you took to turn on the developer options

2. Screen shots that convincingly demonstrate that you correctly configured AppInventor

3. The complete description of five ideas for apps that you could create in AppInventor