These are instructions to setup SensorDC and Wobistdu on an Android phone, for Mac. Similar steps can be followed for setting up on a Windows machine.

A. Setting up the Android dev environment

1. Follow the instructions provided on the link:
   This includes downloading and installing the SDK.

2. Add SDK for the required phone by following the instructions at:

   In the SDK Manager select Android 4.0 and all additional Android version upto 4.4.4.

   Eclipse and Android SDK are now set.

B. Setting up the SensorDC and Wobistdu Android app projects

1. Open the Terminal application on mac, and cd to a directory where you would like to download the apps source code. Example /home/<your user name>/git/

2. In that directory, get the source code of the apps by typing
   git clone https://rayman7718@bitbucket.org/rayman7718/sensordc.git then,
   git clone https://rayman7718@bitbucket.org/rayman7718/wobistdu.git

3. Use command ls to verify both projects were downloaded and separate directories were created.

4. Now open the EclipseADT (Android SDK) that was installed in A.

5. In this window click File -> Import. Select ‘Existing android code into workspace’ and click next.

6. Click browse and select the folder sensorDC which was created above. Click Finish.

7. Build the project in the EclipseADT by clicking on Project-> Build All.

8. Repeat 6 and 7 for setting up the wobistdu app.
Both app project codes have now been setup, and apk files to be installed on the phones are now built.

C. Installing apk on phone.

1. Enable USB debugging on the phone. Go to Settings>Developer Options>USB Debugging. Check.
2. Enable “Unknown Sources”. Go to Settings>Security>Unknown Sources. Check.
3. Navigate to the directory where we downloaded the sensordc code.
4. Root the phone. For rooting a phone with Android 4.3, see Section D1. For rooting a phone with Android 4.4, see Section D2.

5. Go to SensorDC/scripts/platform-tools.
6. Now install the wobistdu app by running the following command. Make sure the wobistdu apk path in this script is correct.

   ./putapp.sh

7. Install sensorDC from Eclipse by Right clicking on SensorDC and select ‘Run As’, ‘Android Application’

8. After this close and open sensorDC on the phone manually once by clicking on its icon.

9. Activate the SIM card for the phone on the cell provider website, e.g. speakeasy.

10. Reboot the phone, and check data logs are being collected, using MyFiles on the phone navigate to My Files/sensordc/data/data.log.
D1. Rooting Galaxy S3 with Android 4.3

1. Go to SensorDC/scripts/platform-tools.
2. Connect the phone to the computer, and run

   sudo ./doroot.sh

   Enter the computer root password when asked. When it asks for options select the root phone option using the command line.

3. The phone will finish rooting and reboot once. After reboot go the SuperSU app on the phone, and chose ‘Access: Grant always’ under settings.

D2. Rooting Galaxy S3 with Android 4.4

1. Windows PC with Windows 8 or higher required.
2. Install USB Driver for Samsung Device for your phone from the link http://www.skyneel.com/2015/05/download-latest-samsung-usb-drivers.html
   The driver for Galaxy S3 i747 is already downloaded and added to SensorDC/scripts/platform-tools/ Samsung_USB_Driver_GS3_i747.exe
   Run to install

3. Now we will transition the phone into Download Mode.
   First power off the phone. After phone is completely powered off, then hold down the Volume Down Key, Power Button, and the Home Button together for 10 seconds as shown in this image.
4. You will see a warning massage on your phone screen. See image. Then press Volume up key to continue to enter Download Mode. Your phone will enter download mode and you will see the image on the right.

5. Now open folder
   SensorDC/scripts/platform-tools/CF-Auto-Root-GS3-i747
6. Double click on Odin3-v3.07.exe. Now, connect the phone to the PC using a USB cable. When you connect, Odin will detect your phone automatically.

7. Now click on the PDA button in the Odin tool’s window. It will ask you to select a file. Select the following file, and click open.

   CF-Auto-Root-d2can-d2vl-sghi747m.tar.md5
   in Folder
   SensorDC/scripts/platform-tools/CF-Auto-Root-GS3-i747/

8. After selecting the file, now click start in the Odin tool window. This will start the root process, which will take a few seconds. After it is complete you will see a green box in the top left corner.
9. In this process, the phone will automatically reboot. Now disconnect your phone. After it finishes booting, check if there is a SuperSu app installed. If so the rooting was successful, now continue the remaining set up process.