**RT-LAB**

**Android Assignment 1**

**(2015)**

***Objectives:***

* XML file parsing.
* File manipulation
* Android AsyncTask.
* Android GUI.
* SQLite.
* Bonus: Android Permission checking

***Short description:***

* An Android application which get data from some XML files of user and import to the application’s SQLite database file and folder system to review later.
* The XML data will be copied to device storage by the user, in a pre-defined folder.

***Detail Requirement:***

* The data is stored in XML files (\*.xml). Those XML files is put inside a folder named “data” on your Android device.
* Write an Android app which have following function:
  + List all the XML files in “data” folder.
  + User can choose some files to “Import”.
  + When user press “Import” button, process the files and get the value between <instanceID>...</instanceID> tag. Then copy the file to a new folder named “official-data”.
  + There is a sqlite database file, store all the <instanceID> value and the location of the corresponding XML file (in “official-data” folder).
    - User can review the data they imported in a separate screen. The list must show the <instanceID> values which is gotten before and the content of the corresponding XML file (in “official-data” folder).
* The run-time errors should be catched and announced to User.
* The working progress (XML parsing, moving file, database manipulating,...) must be showed to User (by a progress bar) and be processed in an Android AsyncTask.
* You will have bonus if the application have ability to import XML files from another device, via a Local Area Network.

***Results:***

* APK file.
* Source code and the details documents.

***Note:*** The sample of data folder is in attachment.