

CPET 565/CPET 499 Mobile Computing Systems
Assignment 8: Lab Activity 4
Using Android Data and Storage APIs and Developing UML Diagrams

References

- [1] Android Wireless Application Development, 2nd Edition, by Lauren Darcey and Shane Conder, published by Addison-Wesley, <http://androidbook.blogspot.com/p/book-code-downloads.html>
- [2] Practical UML: A Hands-On Instruction for Developer, by Randy Miller, <http://edn.embarcadero.com/article/31863>
- [3] Introduction to OMG's Unified Modeling Language (UML), http://www.omg.org/gettingstarted/what_is_uml.htm
- [4] Android Developer, <http://developer.android.com/develop/index.html>
- [5] Android Training, <http://developer.android.com/training/index.html>
- [6] Android API Guides, <http://developer.android.com/guide/components/index.html>
- [7] Android Package Index, <http://developer.android.com/reference/packages.html>
- [8] Google on Android, <https://developers.google.com/android/>

Assigned date: 11/7/2012

Assignment 8– Lab Activity 4 Due date: 11/14/2012, before 3:30 PM

Lab Activity 4. Programming Exercise – Using Android Data Storage and Database APIs

- Study references [2] and [3]
- Download and unzip the code example of the reference book [1]
- Start Eclipse to create an Android Project from Existing Code
 - Click File => New => Project to open New Project (Wizard dialog box)
 - Chose Android => Android Project from Existing Code, click Next
 - Browse “**Ch10-Data and Storage/FileStreamOfConsciousness**” folder, click Finish to the setup for the **Chat & Send To Log** application project:
com.androidbook.filesoc.FileStreamOfConsciousnessActivity
 - If Project Explorer view is not visible: Click Window => Show View => Project Explorer
 - Click to expand the view of **com.androidbook.filesoc.FileStreamOfConsciousnessActivity**, and then right click to open them with Text Editor, and copy the info of your Lab4 Report for study and illustration purposes:
 - AndroidManifest.xml
 - res/values/stringx.xml
 - res/layout/chat.xml
 - res/layout/showfile.xml
 - src/com.androidbook.filesoc/FileStreamOfConsciousnessActivity.java
 - src/com.androidbook.filesoc/ViewLogActivity
- Set up the desired run configuration through
 - Run => Run Configurations
- Run this **Chat and Send To Log** application using either a simulator or an actual Android-based Phone
- Study all XML files, and Java codes
- **Prepare** the following UML diagrams (using **Microsoft Visio**) for this application

- Use case diagram
- Class Diagram
- Package and object diagram
- Sequence diagram
- State chart/diagrams
- Activity diagram

Lab Activity 4: Hand-In Items – due Nov 14, 2012

Submit one lab report for each Lab Activity (name it cpet565-499-Lab4.docx) which includes the following section: (see the following guideline for your reference, <http://www.etcslipfw.edu/~lin/InfoForAllCourses/laboratoryreport.htm>)

** Objective

** Computer Equipment and Software Used

** Procedure

** Data (Screen shots, UML diagrams, results; and a brief summary for each UML diagram)

** Conclusion