# Android Application Development

# Project Report

## Rui HUANG

### rui.huang@metropolia.fi

# Introduction

This project designed for course Android Application Development is one Android client application for Chinese “Twitter”, known as Weibo.

The project has integrated Weibo’s Open SDK library: weibosdkcore.jar. It provides Open API to implement functions of client App. For more details, please refer to: [http://open.weibo.com/wiki/%E9%A6%96%E9%A1%B5/en](https://mail.metropolia.fi/owa/redir.aspx?SURL=miACNznSKGFWyDR8CLZ0Q5Sq8I9UjPVoKhPV6X9rd5lBBcnb_13SCGgAdAB0AHAAOgAvAC8AbwBwAGUAbgAuAHcAZQBpAGIAbwAuAGMAbwBtAC8AdwBpAGsAaQAvACUARQA5ACUAQQA2ACUAOQA2ACUARQA5ACUAQQAxACUAQgA1AC8AZQBuAA..&URL=http%3a%2f%2fopen.weibo.com%2fwiki%2f%25E9%25A6%2596%25E9%25A1%25B5%2fen)

# Development Detail

In this project, I have implemented one main function: reading the timeline of login user.

For all other functions as: Forwarding posts, Writing messages, Showing user’s profile, Multi-users login will be implemented in future.

According to project requirements, my App project contains:

* Activities and UI:
* LogoActivity – app starts here, it shows the first UI as welcome.
* LoginActicity – check if there already login user, if yes, it jumps to Home UI directly, otherwise, it jumps to Authentication UI, asking to authenticate the new user via **Web View**. For this part, the Open API is taken into use.
* AuthActivity – do authentication for new user and if everything is well authenticated, save the user information into **SQLite database** and jump back to Login UI, from there, it populates the user icon and user name for login.
* MainActivity – handle main functions: reading timelines, forwarding post, writing messages, showing user’s profile, etc. This activity extends **FragmentActivity**. (For this project, there is an **improvement** from **the 2014 project in Android Platform Architecture** **course**, all of the image views are put into GridView which is embedded in ListView.)
* ImagePagerActivity – images display handling, **new activity implemented**, user can use different gestures to view the detail of the images in the timeline. Single click the image, it will show you the selected image from the 9 grid images view; Swap the image, you will get the next or previous images, depending on your swapping direction; And then double click the image, you can zoom in, etc. This activity extends **FragmentActivity**. (Please check the demo)
* Service:
* MainService – handle all kinds of different tasks for different activities.
* Resources:
* Json objects, Web images, Strings as name/values, different layouts, etc
* Data base:
* SQLite database
* Network:
* AsyncTask to load image with HTTP protocol
* HTTP to load stream of file

# Demo

Please use my test account to run the demo:

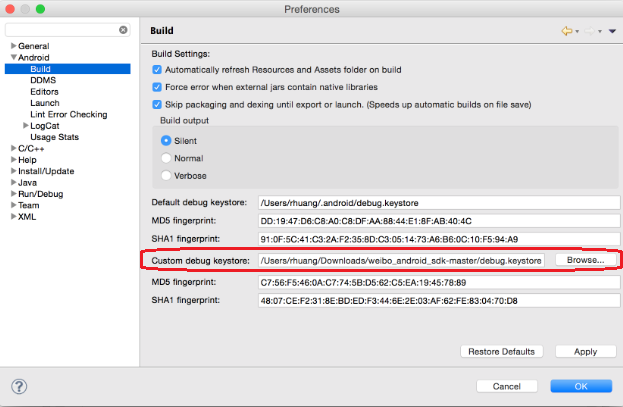
User name: [**warrior\_rui@163.com**](https://mail.metropolia.fi/owa/redir.aspx?SURL=hhjjbs_j8KM5MgbwDrcOnrGgUxOAz_M6cbUhiM6Nen5BBcnb_13SCG0AYQBpAGwAdABvADoAdwBhAHIAcgBpAG8AcgBfAHIAdQBpAEAAMQA2ADMALgBjAG8AbQA.&URL=mailto%3awarrior_rui%40163.com)

Password: **android**

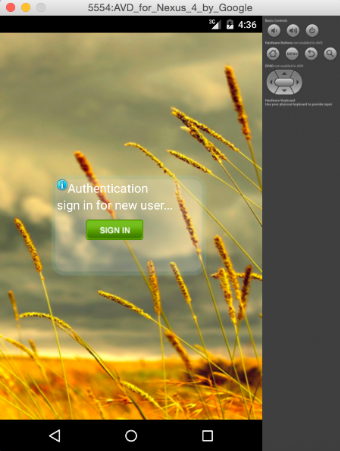
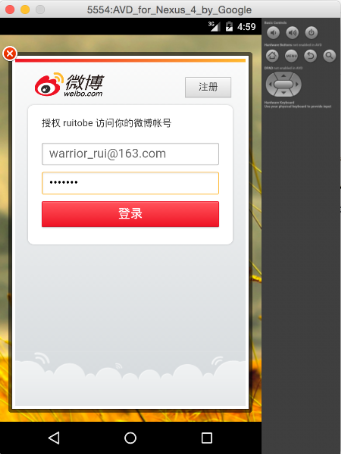
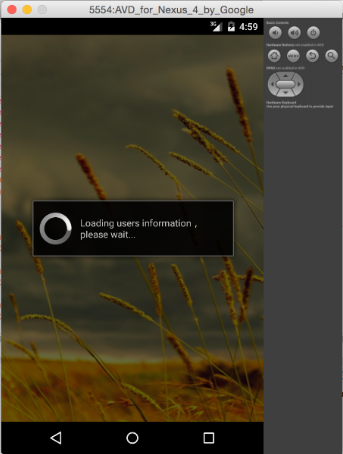
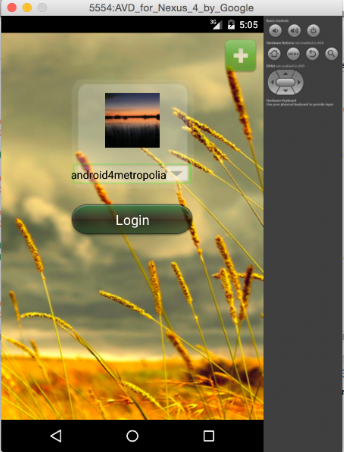
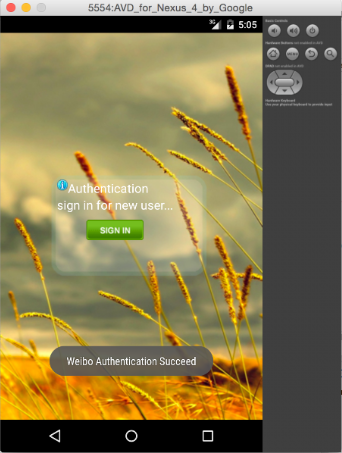
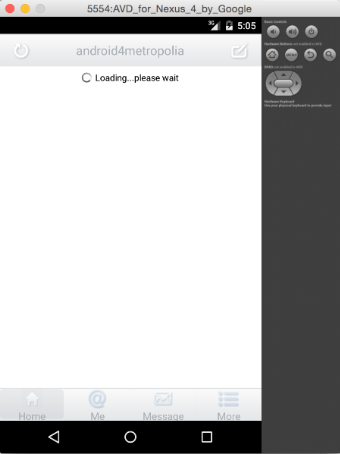
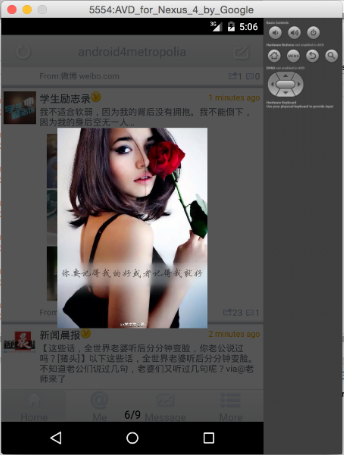
*Apologize for the Chinese text content.*

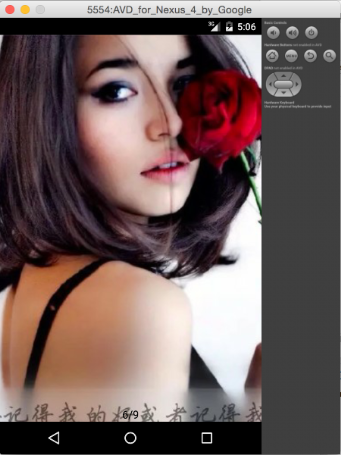
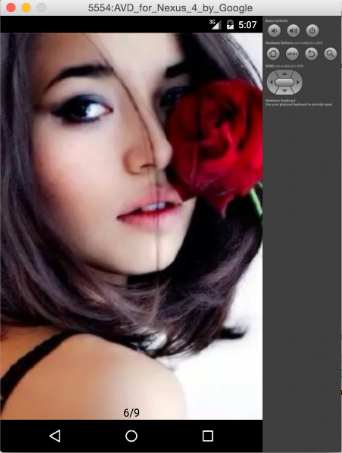
Before compiling the source code, please make sure my project keystore has been taken into use, here is how to set keystore in Eclipse:

“Windows -> Preferences -> Android -> Build”, from Custom debug keystore, please select my project debug.keystore, and Apply->OK.



Application running detail, step by step:

# Open Source:

[Android-Universal-Image-Loader](https://github.com/nostra13/Android-Universal-Image-Loader.git)