Special Interest Group on Innovative Software 2012-2013
Workshop on Android app development

Scenario:

To facilitate attendance taking in Android device, you are going to create an app which allows students to type their names and course codes for attendance taking.

Objective:

The app should able to:

1. Accept users input for their names and course codes
2. Users able to read the attendance recording by searching the course code

App specification:

1. The app should have two sections: Submit and retrieve attendance record. You can separate the sections using individual Activity or Fragment.
2. The submit section should have
   - Two EditTexts for name and course code
   - One button to send the attendance record to server
3. The retrieve section should have
   - A EditText for inputting the course code
   - A button to send the search request to the server
   - A multiline TextView showing the record times and student names returned by server
4. The server accepts request and return the response using RESTful calling style.
5. You can submit an attendance record by sending a HTTP POST request to this URI:
   http://cs9206.comp.hkbu.edu.hk/maw_2013/attendance/submit_att.php
   Two parameters are required with each request:
   student_name: For student name
   course_code: For course code
   If the request succeeds, the server responds with a 200 OK HTTP status code and a string "OK".
6. You can read the attendance record by sending a HTTP GET to this URI:
   http://cs9206.comp.hkbu.edu.hk/maw_2013/attendance/get_att.php
   One parameter is required with each request:
   course_code: For course code to retrieve
   If the request succeeds, the server responds with a 200 OK HTTP status code and the attendance records in JSON format.

7. JSON data properties:

```
{
    "attendance": [
        {
            "record_time": "YYYY-MM-DD HH:MM:SS"
            "student_name": "Student A",
        },
        {
            "record_time": "YYYY-MM-DD HH:MM:SS"
            "student_name": "Student B",
        },
        . . .
    ]
}
```

Tips:

1. Read the page in W3School about the details of JSON
2. You may read this blog on how to parse the above JSON result in Android
3. You must use AsyncTask to perform any network related task

Screenshots: