Lab Assignment #4

Due Date: Week 9.

Purpose: The purpose of this lab assignment is to:

- Develop Android Apps using Data and Storage API

References: Textbook, ppt slides and Android tutorials (http://developer.android.com/guide/topics/data/data-storage.html, http://developer.android.com/guide/topics/data/data-storage.html#db). This material provides the necessary information that you need to complete the exercises.

Be sure to read the following general instructions carefully:

- This assignment **may be completed in pairs** following **pair programming** rules: http://www.extremeprogramming.org/rules/pair.html.
- You will have to **demonstrate your solution in a scheduled lab session** and upload the solution on eCentennial through the **dropbox** link.
- Name the project using the rules indicated in assignment 1. However, you should use the full names of both team members.

Exercise 1

In this exercise you will write an Android application that allows the nurses/doctors to keep track of various tests performed daily on patients in a hospital. Your application could be used by doctors and nurses in hospitals or testing centers. Use SQLite classes (as shown in class examples) to create and manipulate the application's database. Create the following tables:

Patient	**Test**	**Nurse**	**Doctor**
patientId firstname lastname department doctorId room	testId patientId nurseId BPL BPH temperature	nurseId firstname lastname department password	doctorId firstname lastname department password

requirement 1, 2, 3 contradict each other??

Add more fields to Test table, to describe **other medical tests**.

Aplication Preferences

1. retrieve instance sharedpreferences obj

2. create sharedpreferences.editor to modify pref content

3. make changes to pref using editor

4. commit the changes

1. Allow the nurses/doctors to **login** and **enter/read test** information for a patient. Use nurseId and doctorId as user names for nurses/doctors.
2. Create another activity that allows nurses to **enter test** data.
3. Allow the doctors to **display test information** for a given patient.
4. Allow the doctors/nurses to **update/display patient information**.
5. Make sure to use **Shared Preferences** to store nurse/doctor Id after successful login.

private prefs
each activity gets only one group of private preferences
SharedPrefs sA = getPrefs (MODE_PRIVATE);

shared prefs - store private primitive data in key-value pairs
usually used for application state, simple user information, configuration options, other similar info
can be stored at the Activity level or preferences shared across all of an app's activities
cannot be shared outside of the package

-boolean, float, integer, long ,string

```
SharedPreferences settingsActivity =
    getPreferences(MODE_PRIVATE);
SharedPreferences.Editor prefEditor = settingsActivity.edit();
prefEditor.putLong("SomeLong", java.lang.Long.MIN_VALUE);
prefEditor.commit();
```

SharedPreferences Test

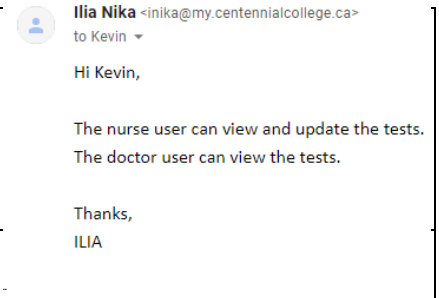
Depending on whether logged in as doctor/nurse, see different options dynamic menu

6. Provide a friendly and easy to navigate UI. Use images and image buttons.

(10 marks)

Evaluation:

Functionalities: All working, proper naming of activities, variables, and methods. Provide comments. Provide explanation when asked during the demonstration of the app.	75%
UI friendliness (proper layout, controls, styles, themes, images)	15%
Declaring resources in proper resource files	5%
Innovative features	5%
Total	**100%**



Ilia Nika <inika@my.centennialcollege.ca>
to Kevin

Hi Kevin,

The nurse user can view and update the tests.
The doctor user can view the tests.

Thanks,
ILIA