Sri Lanka Institute of Information Technology

B.Sc. Honours Degree in Information Technology

Specialized in Information Technology

Final Examination
Year 2, Semester 2

IT2010 – Mobile Application Development

Model Paper

Duration: 2 Hours

Instructions to Candidates:
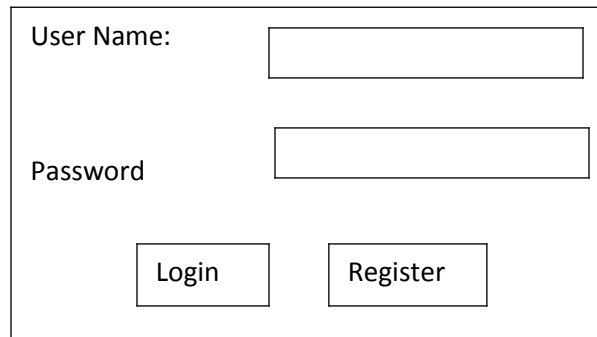
♦ This paper has 6 questions.

♦ Answer all questions.

♦ The total marks for the paper is 100.

♦ This paper contains 4 pages, including the cover page.

♦ Electronic devices capable of storing and retrieving text, including calculators and mobile phones are not allowed.

♦ Students must **return the paper** at the end of the exam.

♦ **Project name** must be **student ID** number.

♦ **Only the submitted answer will be graded.**

♦ **Accessing social media, email and sharing files over the internet is prohibited.**

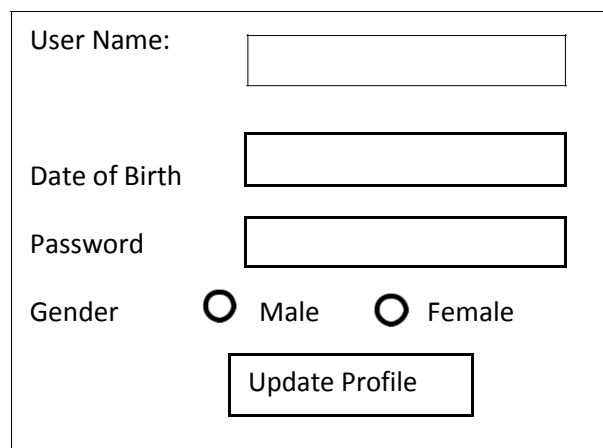Create an application to manage user profiles

Question 01 - Activity   **10 Marks**

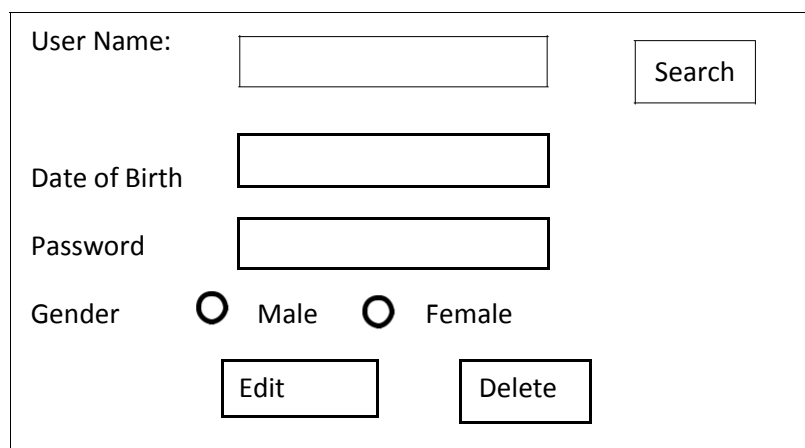a. Create an Activity called **Home** and design the given layout

User Name: _____

Password _____

[Login]   [Register]

b. Create an Activity called **ProfileManagement** and design the given layout.

User Name: _____

Date of Birth _____

Password _____

Gender   ◯ Male   ◯ Female

[Update Profile]

c. Create an Activity called **EditProfile** and design the given layout.

User Name: _____   [Search]

Date of Birth _____

Password _____

Gender   ◯ Male   ◯ Female

[Edit]   [Delete]

Question 02 – UserProfile Class   **5 Marks**

a. Final class called '**UserProfile**'. Make the default constructor private. Create an inner class called 'Users' by implementing 'BaseColumn' interface. Inside the inner class, define the columns you need along with the table.

Question 03 – DBHandler Class   **50 Marks**

a. Create another class called DBHelper inside the database folder by extending the class SQLiteOpenHelper as its superclass. Implement the relevant methods and constructors.

                                                   5 Marks

Database Table Name	UserInfo
Column Name:	_ID - Primary Key
	userName
	dateOfBirth
	Gender

b. Implement a method named addInfo() to store user details details .

c. Implement a method named updateInfor() to modify stored user details based on the user ID. Method must return a Boolean value based on the success or failure.

d. Implement a method named readAllInfor() to retrieve all the user details stored in the database table.

e. Overload the method readAllInfor() to retrieve the user details based on the primary key.

f. Implement a method named deleteInfo() to delete a specific user

Question 04 – Main Activity   **6 Marks**

Create intent objects to start

a. ProfileManagement activity from 'Register' button
b. EditProfile activity from 'Update Profile' button

Question 05 – ProfileManagement Activty   **7 Marks**

a. Call addInfor() method implemented in DbHandler class from the onClick event of Register
    button. Display a Toast Message indicating success or failure

Question 06 – EditProfile Activty   **10 Marks**

a. Call readAllInfor() method implemented in DbHandler class from the onClick event of
    the Search button to retrieve profile of a specific user.
b. Call updateInfor() method implemented in DbHandler class from the onClick event of the
    Edit button to update user details
c. Call deleteinfor() method implemented in DbHandler class from the onClick event of the
    Delete button to delete a user