PROFILE CAPTURING

Mobile App Development.
CSE4002.
SLOT: L3+L4.

Submitted by
18BCE7040
Avhijit Nair

activity_main.xml:

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
        xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:paddingLeft="@dimen/activity_horizontal_margin"
        android:paddingRight="@dimen/activity_horizontal_margin"
        android:paddingTop="@dimen/activity_vertical_margin"
        android:paddingBottom="@dimen/activity_vertical_margin"
        tools:context="com.instinctcoder.sqlitedb.MainActivity$PlaceholderFragment">

        <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Add"
        android:id="@+id/btnAdd"
        android:layout_alignParentBottom="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true" />

        <ListView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@android:id/list"
        android:layout_centerHorizontal="true"
        android:layout_alignParentTop="true"
        android:layout_above="@+id/btnAdd" />

        <Button
        android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
        android:text="List All"
        android:id="@+id/btnGetAll"
        android:layout_alignParentBottom="true"
        android:layout_toRightOf="@+id/btnAdd" />

</RelativeLayout>
```

Activity_student_detail.xml:

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
        xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:paddingLeft="@dimen/activity_horizontal_margin"
        android:paddingRight="@dimen/activity_horizontal_margin"
        android:paddingTop="@dimen/activity_vertical_margin"
        android:paddingBottom="@dimen/activity_vertical_margin"
        tools:context="com.instinctcoder.sqlitedb.StudentDetail$PlaceholderFragment">

        <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Name"
        android:id="@+id/textView"
        android:layout_alignParentTop="true"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="30dp" />

        <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Email"
        android:id="@+id/textView2"
        android:layout_below="@+id/textView"
        android:layout_alignParentLeft="true"
        android:layout_alignParentStart="true"
        android:layout_marginTop="29dp" />

        <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textAppearance="?android:attr/textAppearanceMedium"
        android:text="Age"
        android:id="@+id/textView3"
```

```
android:layout_below="@+id/textView2"
android:layout_alignParentLeft="true"
android:layout_alignParentStart="true"
android:layout_marginTop="29dp" />

<EditText
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:inputType="textPersonName"
android:ems="10"
android:id="@+id/editTextName"
android:layout_above="@+id/textView2"
android:layout_toRightOf="@+id/textView"
android:layout_alignParentRight="true"
android:layout_alignParentEnd="true" />

<EditText
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:inputType="textEmailAddress"
android:ems="10"
android:id="@+id/editTextEmail"
android:layout_above="@+id/textView3"
android:layout_toRightOf="@+id/textView"
android:layout_alignRight="@+id/editTextName"
android:layout_alignEnd="@+id/editTextName" />

<EditText
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:inputType="number"
android:ems="10"
android:id="@+id/editTextAge"
android:layout_alignBottom="@+id/textView3"
android:layout_alignLeft="@+id/editTextEmail"
android:layout_alignStart="@+id/editTextEmail"
android:layout_alignRight="@+id/editTextEmail"
android:layout_alignEnd="@+id/editTextEmail" />

<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:text="Save"
android:id="@+id/btnSave"
android:layout_alignParentBottom="true"
android:layout_toLeftOf="@+id/btnClose" />

<Button
android:layout_width="wrap_content"
android:layout_height="wrap_content"
```

```
        android:text="Close"
        android:id="@+id/btnClose"
        android:layout_alignParentBottom="true"
        android:layout_alignParentRight="true"
        android:layout_alignParentEnd="true" />

        <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Delete"
        android:id="@+id/btnDelete"
        android:layout_alignTop="@+id/btnSave"
        android:layout_toLeftOf="@+id/btnSave" />

</RelativeLayout>
```

View_student_entry.xml:

```
<?xml version="1.0" encoding="utf-8"?>

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
        android:orientation="vertical" android:layout_width="match_parent"
        android:layout_height="match_parent">
        <TextView
        android:id="@+id/student_Id"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:visibility="gone" />

        <TextView
        android:id="@+id/student_name"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:paddingLeft="6dip"
        android:paddingTop="6dip"
        android:textSize="22sp"
        android:textStyle="bold" />

</LinearLayout>
```

Student.java:

```
package com.instinctcoder.sqlitedb;
public class Student {
   // Labels table name
   public static final String TABLE = "Student";

   // Labels Table Columns names
   public static final String KEY_ID = "id";
   public static final String KEY_name = "name";
   public static final String KEY_email = "email";
   public static final String KEY_age = "age";

   // property help us to keep data
   public int student_ID;
   public String name;
   public String email;
   public int age;
}
```

DBHelper.java:

```
package com.instinctcoder.sqlitedb;

import android.content.Context;
import android.database.sqlite.SQLiteDatabase;
import android.database.sqlite.SQLiteOpenHelper;

public class DBHelper  extends SQLiteOpenHelper {
        //version number to upgrade database version
        //each time if you Add, Edit table, you need to change the
        //version number.
        private static final int DATABASE_VERSION = 4;

        // Database Name
        private static final String DATABASE_NAME = "crud.db";

        public DBHelper(Context context ) {
        super(context, DATABASE_NAME, null, DATABASE_VERSION);
        }

        @Override
```

```
        public void onCreate(SQLiteDatabase db) {
        //All necessary tables you like to create will create here

        String CREATE_TABLE_STUDENT = "CREATE TABLE " + Student.TABLE  + "("
        + Student.KEY_ID  + " INTEGER PRIMARY KEY AUTOINCREMENT ,"
        + Student.KEY_name + " TEXT, "
        + Student.KEY_age + " INTEGER, "
        + Student.KEY_email + " TEXT )";

        db.execSQL(CREATE_TABLE_STUDENT);

        }

        @Override
        public void onUpgrade(SQLiteDatabase db, int oldVersion, int newVersion) {
        // Drop older table if existed, all data will be gone!!!
        db.execSQL("DROP TABLE IF EXISTS " + Student.TABLE);

        // Create tables again
        onCreate(db);

        }

}
```

StudentRepo.java:

```
package com.instinctcoder.sqlitedb;

import android.content.ContentValues;
import android.content.Context;
import android.database.Cursor;
import android.database.sqlite.SQLiteDatabase;
import java.util.ArrayList;
import java.util.HashMap;

public class StudentRepo {
        private DBHelper dbHelper;

        public StudentRepo(Context context) {
        dbHelper = new DBHelper(context);
        }

        public int insert(Student student) {
```

```
        //Open connection to write data
        SQLiteDatabase db = dbHelper.getWritableDatabase();
        ContentValues values = new ContentValues();
        values.put(Student.KEY_age, student.age);
        values.put(Student.KEY_email,student.email);
        values.put(Student.KEY_name, student.name);

        // Inserting Row
        long student_Id = db.insert(Student.TABLE, null, values);
        db.close(); // Closing database connection
        return (int) student_Id;
        }

        public void delete(int student_Id) {

        SQLiteDatabase db = dbHelper.getWritableDatabase();
        // It's a good practice to use parameter ?, instead of concatenate string
        db.delete(Student.TABLE, Student.KEY_ID + "= ?", new String[] {
String.valueOf(student_Id) });
        db.close(); // Closing database connection
        }

        public void update(Student student) {

        SQLiteDatabase db = dbHelper.getWritableDatabase();
        ContentValues values = new ContentValues();

        values.put(Student.KEY_age, student.age);
        values.put(Student.KEY_email,student.email);
        values.put(Student.KEY_name, student.name);

        // It's a good practice to use parameter ?, instead of concatenate string
        db.update(Student.TABLE, values, Student.KEY_ID + "= ?", new String[] {
String.valueOf(student.student_ID) });
        db.close(); // Closing database connection
        }

        public ArrayList<HashMap<String, String>>  getStudentList() {
        //Open connection to read only
        SQLiteDatabase db = dbHelper.getReadableDatabase();
        String selectQuery =  "SELECT  " +
                Student.KEY_ID + "," +
                Student.KEY_name + "," +
```

```
                Student.KEY_email + "," +
                Student.KEY_age +
                " FROM " + Student.TABLE;

        //Student student = new Student();
        ArrayList<HashMap<String, String>> studentList = new ArrayList<HashMap<String,
String>>();

        Cursor cursor = db.rawQuery(selectQuery, null);
        // looping through all rows and adding to list

        if (cursor.moveToFirst()) {
        do {
                HashMap<String, String> student = new HashMap<String, String>();
                student.put("id", cursor.getString(cursor.getColumnIndex(Student.KEY_ID)));
                student.put("name",
cursor.getString(cursor.getColumnIndex(Student.KEY_name)));
                studentList.add(student);

        } while (cursor.moveToNext());
        }

        cursor.close();
        db.close();
        return studentList;

        }

        public Student getStudentById(int Id){
        SQLiteDatabase db = dbHelper.getReadableDatabase();
        String selectQuery =  "SELECT  " +
                Student.KEY_ID + "," +
                Student.KEY_name + "," +
                Student.KEY_email + "," +
                Student.KEY_age +
                " FROM " + Student.TABLE
                + " WHERE " +
                Student.KEY_ID + "=?";// It's a good practice to use parameter ?, instead of
concatenate string

        int iCount =0;
        Student student = new Student();
```

```
        Cursor cursor = db.rawQuery(selectQuery, new String[] { String.valueOf(Id) } );

        if (cursor.moveToFirst()) {
        do {
                student.student_ID =cursor.getInt(cursor.getColumnIndex(Student.KEY_ID));
                student.name =cursor.getString(cursor.getColumnIndex(Student.KEY_name));
                student.email  =cursor.getString(cursor.getColumnIndex(Student.KEY_email));
                student.age =cursor.getInt(cursor.getColumnIndex(Student.KEY_age));

        } while (cursor.moveToNext());
        }

        cursor.close();
        db.close();
        return student;
        }

}
```

StudentDetail.java:

```
package com.instinctcoder.sqlitedb;

import android.app.Activity;
import android.content.Intent;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.Button;
import android.widget.EditText;
import android.widget.Toast;

public class StudentDetail extends Activity implements android.view.View.OnClickListener{

        Button btnSave ,  btnDelete;
        Button btnClose;
        EditText editTextName;
        EditText editTextEmail;
        EditText editTextAge;
        private int _Student_Id=0;

        @Override
        protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
```

```
setContentView(R.layout.activity_student_detail);

btnSave = (Button) findViewById(R.id.btnSave);
btnDelete = (Button) findViewById(R.id.btnDelete);
btnClose = (Button) findViewById(R.id.btnClose);

editTextName = (EditText) findViewById(R.id.editTextName);
editTextEmail = (EditText) findViewById(R.id.editTextEmail);
editTextAge = (EditText) findViewById(R.id.editTextAge);

btnSave.setOnClickListener(this);
btnDelete.setOnClickListener(this);
btnClose.setOnClickListener(this);


_Student_Id =0;
Intent intent = getIntent();
_Student_Id =intent.getIntExtra("student_Id", 0);
StudentRepo repo = new StudentRepo(this);
Student student = new Student();
student = repo.getStudentById(_Student_Id);

editTextAge.setText(String.valueOf(student.age));
editTextName.setText(student.name);
editTextEmail.setText(student.email);
}

@Override
public void onClick(View view) {
// TODO Auto-generated method stub
if (view == findViewById(R.id.btnSave)){
StudentRepo repo = new StudentRepo(this);
Student student = new Student();
student.age= Integer.parseInt(editTextAge.getText().toString());
student.email=editTextEmail.getText().toString();
student.name=editTextName.getText().toString();
student.student_ID=_Student_Id;

if (_Student_Id==0){
        _Student_Id = repo.insert(student);

        Toast.makeText(this,"New Student Insert",Toast.LENGTH_SHORT).show();
}else{

        repo.update(student);
        Toast.makeText(this,"Student Record updated",Toast.LENGTH_SHORT).show();
}
}else if (view== findViewById(R.id.btnDelete)){
StudentRepo repo = new StudentRepo(this);
repo.delete(_Student_Id);
```

```
            Toast.makeText(this, "Student Record Deleted", Toast.LENGTH_SHORT);
            finish();
            }else if (view== findViewById(R.id.btnClose)){
            finish();
            }
            }
}
```

MainActivity.java:

```
package com.instinctcoder.sqlitedb;

import android.app.ListActivity;
import android.content.Intent;
import android.support.v7.app.ActionBarActivity;
import android.support.v7.app.ActionBar;
import android.support.v4.app.Fragment;
import android.os.Bundle;
import android.view.LayoutInflater;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.view.ViewGroup;
import android.os.Build;
import android.widget.AdapterView;
import android.widget.Button;
import android.widget.ListAdapter;
import android.widget.ListView;
import android.widget.SimpleAdapter;
import android.widget.TextView;
import android.widget.Toast;

import java.util.ArrayList;
import java.util.HashMap;

public class MainActivity extends ListActivity  implements android.view.View.OnClickListener{

            Button btnAdd,btnGetAll;
            TextView student_Id;

            @Override
            public void onClick(View view) {
            if (view== findViewById(R.id.btnAdd)){

            Intent intent = new Intent(this,StudentDetail.class);
            intent.putExtra("student_Id",0);
            startActivity(intent);

            }else {

            StudentRepo repo = new StudentRepo(this);

            ArrayList<HashMap<String, String>> studentList =  repo.getStudentList();
            if(studentList.size()!=0) {
```

```
		ListView lv = getListView();
		lv.setOnItemClickListener(new AdapterView.OnItemClickListener() {
		@Override
		public void onItemClick(AdapterView<?> parent, View view,int position, long id) {
			student_Id = (TextView) view.findViewById(R.id.student_Id);
			String studentId = student_Id.getText().toString();
			Intent objIndent = new Intent(getApplicationContext(),StudentDetail.class);
			objIndent.putExtra("student_Id", Integer.parseInt( studentId));
			startActivity(objIndent);
		}
		});
		ListAdapter adapter = new SimpleAdapter( MainActivity.this,studentList, R.layout.view_student_entry, new String[] {
"id","name"}, new int[] {R.id.student_Id, R.id.student_name});
		setListAdapter(adapter);
		}else{
		Toast.makeText(this,"No student!",Toast.LENGTH_SHORT).show();
		}

		}
		}

		@Override
		protected void onCreate(Bundle savedInstanceState) {
		super.onCreate(savedInstanceState);
		setContentView(R.layout.activity_main);

		btnAdd = (Button) findViewById(R.id.btnAdd);
		btnAdd.setOnClickListener(this);

		btnGetAll = (Button) findViewById(R.id.btnGetAll);
		btnGetAll.setOnClickListener(this);

		}
}
```

OUTPUT:

5554:InstinctCoder-Phone

5554:InstinctCoder-Phone