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| **SVKM’S NMIMS** | | | | | | | | |
| **Mukesh Patel school of Technology Management & Engineering** | | | | | | | | |
| Programme: | | B TECH CE | | Year: | | III | Semester: | V |
| **Academic Year : 2024-25**  **MMT-2** | | | | | | | | |
|  |  | |  | |  | |  |  |
| Subject: | Mobile Application Development | | | | | | Maximum Marks: | 10 |
|  |  | |  | |  | | Time: | 45 Min |
| Date: | 20/10/2024 | |  | |  | | Duration: | 8:25 to 9.10AM |

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Roll No: B215

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Note :

* Assume necessary data if required.

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| Picture 1 | Fig 1: Design |
|  | Fig2: Form feeling |
|  | Fig 3: Output screen |

Q: **Desing the activity as per the Figure 1,2, 3**

1. On Click of “Register User” button Doner record should be inserted in SQLite Databse
2. On click “Fetch the Doner Record” button all the record should be fetched and displayed in textbox.
3. On click of “Delete Doner” button all the record with blood group “A” should be deleted from databse.

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| **Question Number** |  | **Code & Output** |
| Q1 | **MainActivity.Java** | package com.example.b215;  import android.os.Bundle;  import android.view.View;  import android.widget.Button;  import android.widget.EditText;  import android.widget.Spinner;  import android.widget.TextView;  import android.widget.Toast;  import androidx.activity.EdgeToEdge;  import androidx.appcompat.app.AppCompatActivity;  import androidx.core.graphics.Insets;  import androidx.core.view.ViewCompat;  import androidx.core.view.WindowInsetsCompat;  public class MainActivity extends AppCompatActivity {  EditText id,name,mn;  Spinner sp;  Button rd,sd,dd;  TextView tv1;  DBHelper dbhelper;  @Override  protected void onCreate(Bundle savedInstanceState) {  super.onCreate(savedInstanceState);  EdgeToEdge.*enable*(this);  setContentView(R.layout.*activity\_main*);  id = findViewById([R.id.id](http://R.id.id));  name = findViewById(R.id.*name*);  mn = findViewById(R.id.*mn*);  dd = findViewById(R.id.*dd*);  rd = findViewById(R.id.*rd*);  sd = findViewById(R.id.*sd*);  sp = findViewById(R.id.*sp*);  tv1 = findViewById(R.id.*tv1*);  dbhelper = new DBHelper(getApplicationContext());  ViewCompat.*setOnApplyWindowInsetsListener*(findViewById(R.id.*main*), (v, insets) -> {  Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.*systemBars*());  v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);  return insets;  });  }  public void registerDoner(View view) {  int id = Integer.*parseInt*(this.id.getText().toString());  String name = this.name.getText().toString();  int mn = Integer.*parseInt*(this.mn.getText().toString());  String sp = this.sp.getSelectedItem().toString();  boolean b = dbhelper.registerDoner(id,name,mn,sp);  if(b){  Toast.*makeText*(this, "Donar Registered Successfully", Toast.*LENGTH\_SHORT*).show();  }else{  Toast.*makeText*(this, "Something went wrong", Toast.*LENGTH\_SHORT*).show();  }  }  public void fetchDoner(View view) {  String s1 = dbhelper.getDataHelper();  tv1.setText(s1);  }  public void deleteDoner(View view) {  // delete Doner with blood group A  int rowsDeleted = dbhelper.deleteUser();  if (rowsDeleted > 0) {  Toast.*makeText*(getApplicationContext(), "User deleted successfully", Toast.*LENGTH\_SHORT*).show();  } else {  Toast.*makeText*(getApplicationContext(), "Error in deleting user", Toast.*LENGTH\_SHORT*).show();  }  }  } |
|  | **Helper class** | package com.example.b215;  import android.content.ContentValues;  import android.content.Context;  import android.database.Cursor;  import android.database.sqlite.SQLiteDatabase;  import android.database.sqlite.SQLiteOpenHelper;  import androidx.annotation.Nullable;  public class DBHelper extends SQLiteOpenHelper {  private static final String *DATABASE\_NAME* ="DB";  private static final int *DATABASE\_VERSION* = 1;  public DBHelper(@Nullable Context context) {  super(context, *DATABASE\_NAME*, null, *DATABASE\_VERSION*);  }  @Override  public void onCreate(SQLiteDatabase sqLiteDatabase) {  String CREATE\_TABLE\_QUERY="CREATE TABLE Donar(id INTEGER PRIMARY KEY,name TEXT,Mn INTEGER,BloodGroup TEXT)";  sqLiteDatabase.execSQL(CREATE\_TABLE\_QUERY);  }  @Override  public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {  String DROP\_TABLE\_QUERY = "DROP TABLE IF EXISTS Donar";  sqLiteDatabase.execSQL(DROP\_TABLE\_QUERY);  onCreate(sqLiteDatabase);  }  public boolean registerDoner(int id, String name, int mn, String sp) {  SQLiteDatabase db = this.getWritableDatabase();  ContentValues values = new ContentValues();  values.put("id",id);  values.put("name",name);  values.put("Mn",mn);  values.put("BloodGroup",sp);  long b = db.insert("Donar",null,values);  db.close();  if(b > 0){  return true;  }else{  return false;  }  }  public String getDataHelper() {  SQLiteDatabase db = this.getReadableDatabase();  String[] colnames = {"id","name","Mn","BloodGroup"};  String selection = null;  String[] selectionArgs = null;  Cursor cursor = db.query("Donar", colnames, selection, selectionArgs, null, null, null );  StringBuffer buffer = new StringBuffer();  cursor.moveToFirst();  while(cursor.moveToNext()){  int eid = cursor.getInt(cursor.getColumnIndexOrThrow("id"));  String name = cursor.getString(cursor.getColumnIndexOrThrow("name"));  int mno = cursor.getInt(cursor.getColumnIndexOrThrow("Mn"));  String bloodGroup = cursor.getString(cursor.getColumnIndexOrThrow("BloodGroup"));  buffer.append(eid+"Id"+"\t"+name+"Donar Name" +"\t" + mno + "Mobile Number" + bloodGroup + "BloodGroup" + "\n");  }  cursor.close();  return buffer.toString();  }  public int deleteUser() {  SQLiteDatabase db = this.getWritableDatabase();  return db.delete("Donar", "BloodGroup = ?", new String[]{String.*valueOf*("A")}  );  }  } |
|  | **Activity\_main.xml** | <?xml version="1.0" encoding="utf-8"?>  <LinearLayout xmlns:android="<http://schemas.android.com/apk/res/android>"  xmlns:app="<http://schemas.android.com/apk/res-auto>"  xmlns:tools="<http://schemas.android.com/tools>"  android:id="@+id/main"  android:layout\_width="match\_parent"  android:layout\_height="match\_parent"  android:gravity="center"  android:orientation="vertical"  tools:context=".MainActivity">  <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Blood Doner App"  android:textColor="@color/red"  android:textSize="34sp"  android:layout\_marginBottom="48dp"  app:layout\_constraintBottom\_toBottomOf="parent"  app:layout\_constraintEnd\_toEndOf="parent"  app:layout\_constraintStart\_toStartOf="parent"  app:layout\_constraintTop\_toTopOf="parent" />  <LinearLayout  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:orientation="vertical"  android:gravity="center"  android:background="@drawable/layout">  <EditText  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:id="@+id/id"  android:hint="Enter Donar Id"  />  <EditText  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:id="@+id/name"  android:hint="Enter Name"  />  <EditText  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:id="@+id/mn"  android:hint="Enter Mobile Number"  />  <LinearLayout  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:orientation="horizontal"  android:gravity="center"  >  <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Select the Blood Group"  android:id="@+id/bg"  />  <Spinner  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:id="@+id/sp"  android:entries="@array/ram"  />  </LinearLayout>  </LinearLayout>  <Button  android:layout\_width="match\_parent"  android:layout\_height="wrap\_content"  android:text="Register Doner"  android:onClick="registerDoner"  android:id="@+id/rd"  />  <Button  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Fetch the Doner Records"  android:onClick="fetchDoner"  android:id="@+id/sd"  />  <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Doner Records"  android:id="@+id/tv1"  />  <TextView  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="Delete Doner with Blood Group A"  android:id="@+id/sdfsdf"  />  <Button  android:layout\_width="wrap\_content"  android:layout\_height="wrap\_content"  android:text="click to Delete Doner"  android:onClick="deleteDoner"  android:id="@+id/dd"  />  </LinearLayout> |
|  | **String.xml** | <resources>  <string name="app\_name">B215</string>  <string-array name="ram">  <item>A</item>  <item>B</item>  <item>AB</item>  <item>O</item>  </string-array>  </resources> |
|  | **Color.xml** | <?xml version="1.0" encoding="utf-8"?>  <resources>  <color name="black">#FF000000</color>  <color name="white">#FFFFFFFF</color>  <color name="red">#E03131</color>  </resources> |
|  | **Layout.xml** | <?xml version="1.0" encoding="utf-8"?>  <selector xmlns:android="<http://schemas.android.com/apk/res/android>">  <item>  <shape>  <corners android:radius="10dp"></corners>  <solid android:color="#D0C353"></solid>  </shape>  </item>  </selector> |
|  | **O/P** | Before Registering Data  pasted-image.png |
|  | **O/P** | After Registering Data  Screenshot 2024-10-20 at 9.46.41 AM.png |
|  | **O/P** | After Deleting Donar Fetched Data  pasted-image.png |
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