1.Grid view

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

<**android.support.constraint.ConstraintLayout**

**xmlns:android="http://schemas.android.com/apk/res/android"**

**xmlns:tools="http://schemas.android.com/tools"**

**xmlns:app="http://schemas.android.com/apk/res-auto"**

**android:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity"**>

<**GridView**

**android:id="@+id/gv"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:columnWidth="100dp"**

**android:minHeight="100dp"**

**android:numColumns="auto\_fit"**

**android:stretchMode="columnWidth"**

**app:layout\_constraintBottom\_toBottomOf="parent"**

**app:layout\_constraintLeft\_toLeftOf="parent"**

**app:layout\_constraintRight\_toRightOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"** />

</**android.support.constraint.ConstraintLayout**>

**package** com.example.sjcet.gridview;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.AdapterView;

**import** android.widget.ArrayAdapter;

**import** android.widget.GridView;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity **implements**

AdapterView.OnItemClickListener {

GridView **gridView**;

**static final** String[] ***gridviewvalue***={

**"facebook"**,**"Instagram"**,**"YouTube"**,

**"facebook"**,**"Instagram"**,**"YouTube"**,

**"facebook"**,**"Instagram"**,**"YouTube"**

};

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**gridView**=findViewById(R.id.***gv***);

ArrayAdapter adapter = **new**

ArrayAdapter(**this**,android.R.layout.***simple\_list\_item\_1***,***gridviewvalue***);

**gridView**.setAdapter(adapter);

**gridView**.setOnItemClickListener(**this**);

}

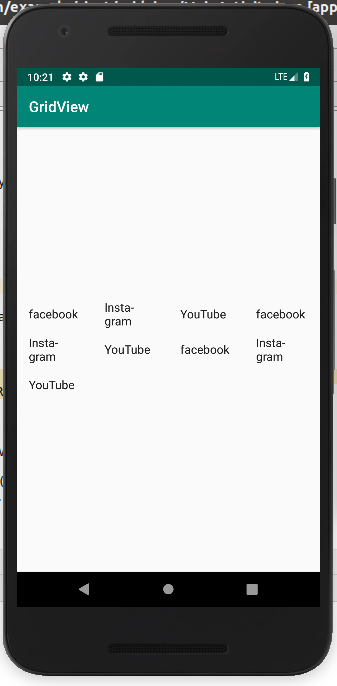
**public void** onItemClick(AdapterView<?> adapterView, View view, **int** i, **long** l) {

String itemname=**gridView**.getItemAtPosition(i).toString();

Toast.*makeText*(**this**,itemname,Toast.***LENGTH\_SHORT***).show();

}

}



1. Database

Mainacivity.xml

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

<**android.support.constraint.ConstraintLayout**

**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:layout\_width="match\_parent"**

**android:layout\_height="match\_parent"**

**tools:context=".MainActivity"**>

<**EditText**

**android:id="@+id/ed1"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginStart="8dp"**

**android:layout\_marginLeft="8dp"**

**android:layout\_marginTop="8dp"**

**android:ems="10"**

**android:hint="name"**

**android:inputType="textPersonName"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toTopOf="parent"** />

<**EditText**

**android:id="@+id/ed2"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginStart="8dp"**

**android:layout\_marginLeft="8dp"**

**android:layout\_marginTop="36dp"**

**android:ems="10"**

**android:hint="Surname"**

**android:inputType="textPersonName"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/ed1"** />

<**EditText**

**android:id="@+id/ed3"**

**android:layout\_width="match\_parent"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginStart="8dp"**

**android:layout\_marginLeft="8dp"**

**android:layout\_marginTop="28dp"**

**android:ems="10"**

**android:hint="marks"**

**android:inputType="textPersonName"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/ed2"** />

<**Button**

**android:id="@+id/button"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginTop="19dp"**

**android:onClick="SaveDat"**

**android:text="Insert"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/ed3"**

**tools:ignore="OnClick"** />

<**Button**

**android:id="@+id/button2"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginStart="96dp"**

**android:layout\_marginLeft="96dp"**

**android:layout\_marginTop="19dp"**

**android:onClick="read"**

**android:text="Read"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/ed3"**

**tools:ignore="OnClick"** />

<**TextView**

**android:id="@+id/textView"**

**android:layout\_width="match\_parent"**

**android:layout\_height="207dp"**

**android:layout\_marginTop="20dp"**

**android:hint="data"**

**app:layout\_constraintTop\_toBottomOf="@+id/button"** />

<**Button**

**android:id="@+id/button3"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginStart="192dp"**

**android:layout\_marginLeft="192dp"**

**android:layout\_marginTop="19dp"**

**android:onClick="update"**

**android:text="update"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/ed3"**

**tools:ignore="OnClick"** />

<**Button**

**android:id="@+id/button4"**

**android:layout\_width="wrap\_content"**

**android:layout\_height="wrap\_content"**

**android:layout\_marginStart="288dp"**

**android:layout\_marginLeft="288dp"**

**android:layout\_marginTop="19dp"**

**android:onClick="delete"**

**android:text="delete"**

**app:layout\_constraintStart\_toStartOf="parent"**

**app:layout\_constraintTop\_toBottomOf="@+id/ed3"**

**tools:ignore="OnClick"** />

</**android.support.constraint.ConstraintLayout**>

Mainactivity.java

**package** com.example.sjcet.database;

**import** android.content.ContentValues;

**import** android.database.Cursor;

**import** android.database.sqlite.SQLiteDatabase;

**import** android.support.v7.app.AppCompatActivity;

**import** android.os.Bundle;

**import** android.view.View;

**import** android.widget.EditText;

**import** android.widget.TextView;

**import** android.widget.Toast;

**public class** MainActivity **extends** AppCompatActivity {

EditText **Name**,**Mark**,**Surname**;

TextView **DataV**;

MyDatabase **database** = **new** MyDatabase(**this**) ;

@Override

**protected void** onCreate(Bundle savedInstanceState) {

**super**.onCreate(savedInstanceState);

setContentView(R.layout.***activity\_main***);

**Name** = findViewById(R.id.***ed1***);

**Surname** = findViewById(R.id.***ed2***);

**Mark** = findViewById(R.id.***ed3***);

**DataV** = findViewById(R.id.***textView***);

}

**public void** SaveDat(View view) {

String UserVal = **Name**.getText().toString();

String SurnameVal = **Surname**.getText().toString();

Integer PassVal = Integer.*parseInt*(**Mark**.getText().toString());

Boolean result = **database**.insertdata(UserVal, PassVal,SurnameVal);

**if** (result == **true**) {

Toast.*makeText*(getApplicationContext(), **"Data inserted Sucessfully"**,

Toast.***LENGTH\_SHORT***).show();

} **else** {

Toast.*makeText*(getApplicationContext(), **"Data inserted failed"**,

Toast.***LENGTH\_SHORT***).show();

}

}

**public void** read(View view) {

Cursor res = **database**.getAllData();

StringBuffer stringBuffer = **new** StringBuffer();

**if** (res != **null** && res.getCount() > 0) {

**while** (res.moveToNext()) {

stringBuffer.append(**"Id: "** + res.getString(0) + **"\n"**);

stringBuffer.append(**"Name: "** + res.getString(1) + **"\n"**);

stringBuffer.append(**"Surname: "** + res.getString(2) + **"\n"**);

stringBuffer.append(**"marks: "** + res.getString(3) + **"\n"**);

}

**DataV** .setText(stringBuffer.toString());

} **else** {

Toast.*makeText*(getApplicationContext(), **"Data Retrieved Successfully"**,

Toast.***LENGTH\_SHORT***).show();

}

Toast.*makeText*(getApplicationContext(), **"Data Retrieved Successfully"**,

Toast.***LENGTH\_SHORT***).show();

}

**public void** update(View view) {

String UserVal = **Name**.getText().toString();

String SurnameVal = **Surname**.getText().toString();

Integer PassVal = Integer.*parseInt*(**Mark**.getText().toString());

Boolean result = **database**.updateData(UserVal, PassVal, SurnameVal);

**if** (result==**true**){

Toast.*makeText*(getApplicationContext(), **"Data updated Successfully"**,

Toast.***LENGTH\_SHORT***).show();

}

**else** {

Toast.*makeText*(getApplicationContext(), **"No Rows Affected"**,

Toast.***LENGTH\_SHORT***).show();

}

}

**public void** delete(View view) {

String UserVal = **Name**.getText().toString();

**int** result=**database**.deletedata(UserVal);

Toast.*makeText*(getApplicationContext(), **"Rows Affected"**,

Toast.***LENGTH\_SHORT***).show();

}

}

MyDatabase.java

**package** com.example.sjcet.database;

**import** android.content.ContentValues;

**import** android.content.Context;

**import** android.database.Cursor;

**import** android.database.sqlite.SQLiteDatabase;

**import** android.database.sqlite.SQLiteOpenHelper;

**class** MyDatabase **extends** SQLiteOpenHelper {

**public** MyDatabase(Context context) {

**super**(context, **"Login.db"**, **null**, 1);

}

@Override

**public void** onCreate(SQLiteDatabase db) {

db.execSQL(**"Create table USERS(ID INTEGER PRIMARY KEY AUTOINCREMENT,NAME text,SURNAME text,MARKS INTEGER)"**);

}

@Override

**public void** onUpgrade(SQLiteDatabase db, **int** oldVersion, **int** newVersion) {

db.execSQL(**"DROP TABLE IF EXISTS USERS"**);

}

**public** Cursor getAllData() {

SQLiteDatabase db=**this**.getWritableDatabase();

Cursor res = db.rawQuery(**"Select \* from USERS"**,**null**);

**return** res;

}

**public** Boolean insertdata(String userVal, Integer passVal, String surnameVal) {

SQLiteDatabase db = **this**.getWritableDatabase();

ContentValues contentValues = **new** ContentValues();

contentValues.put(**"NAME"**, userVal);

contentValues.put(**"SURNAME"**, surnameVal);

contentValues.put(**"MARKS"**, passVal);

**long** result = db.insert(**"USERS"**, **null**, contentValues);

db.close();

**if** (result == -1) {

**return false**;

} **else** {

**return true**;

}

}

**public int** deletedata(String userVal) {

SQLiteDatabase db=**this**.getWritableDatabase();

**int** i =db.delete(**"USERS"**,**"NAME=?"**,**new** String[]{userVal});

**return** i;

}

**public** Boolean updateData(String userVal, Integer passVal, String surnameVal) {

SQLiteDatabase db=**this**.getWritableDatabase();

ContentValues contentValues=**new** ContentValues();

contentValues.put(**"NAME"**,userVal);

contentValues.put(**"SURNAME"**,surnameVal);

contentValues.put(**"MARKS"**,passVal);

**int** result=db.update(**"USERS"**,contentValues,**"NAME=?"**,**new** String[]{userVal});

**if** (result>0) {

**return true**;

}

**else**

{

**return false**;

}

}

}

