

Q: create an app for applying the leave in XYZ company. As per company policy, there are two types of leaves casual leave or planned leave. Employee will input the Emp Id, type of leave, number of days and starting date of leave. Employee can choose any one type of leave and he can choose the date from the calendar. On click of apply button, store all the details in DB. Help the company HR to fetch the following details from DB and display it in fragment which is next activity named "DisplayActivity".

- i. List out the employee id's who applied on specific date.
- ii. List out the employee details who applied more than 2 days.

activity_main.xml:

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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/empldBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter Emp Id"
    android:inputType="text"
    android:minHeight="48dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintBottom_toTopOf="@+id/leaveGroup"/>

<RadioGroup
    android:id="@+id/leaveGroup"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/empldBox"
    app:layout_constraintBottom_toTopOf="@+id/nodBox">

<RadioButton
    android:id="@+id/clrbBox"
```

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Casual Leave" />
```

```
<RadioButton
    android:id="@+id/plrbBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Planned Leave" />
```

```
</RadioGroup>
```

```
<EditText
    android:id="@+id/nodBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter No. of days"
    android:inputType="number"
    android:minHeight="48dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/leaveGroup"
    app:layout_constraintBottom_toTopOf="@+id/dateBox"/>
```

```
<EditText
    android:id="@+id/dateBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Select date"
    android:inputType="date"
    android:minHeight="48dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/nodBox"
    app:layout_constraintBottom_toTopOf="@+id/applyBtn"/>
```

```
<Button
    android:id="@+id/applyBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Apply"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintTop_toBottomOf="@+id/dateBox"
app:layout_constraintBottom_toTopOf="@+id/dis1Btn"/>
```

```
<Button
    android:id="@+id/dis1Btn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Display 1"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/dis2Btn"
    app:layout_constraintTop_toBottomOf="@+id/applyBtn"
    app:layout_constraintBottom_toBottomOf="parent"/>
```

```
<Button
    android:id="@+id/dis2Btn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Display 2"
    app:layout_constraintStart_toEndOf="@+id/dis1Btn"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/applyBtn"
    app:layout_constraintBottom_toBottomOf="parent"/>
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

MainActivity.java:

```
package com.example.practiceques16_05;
```

```
import androidx.appcompat.app.AppCompatActivity;
```

```
import android.app.DatePickerDialog;
```

```
import android.content.Intent;
```

```
import android.os.Bundle;
```

```
import android.util.Log;
```

```
import android.view.View;
```

```
import android.widget.Button;
```

```
import android.widget.DatePicker;
```

```
import android.widget.EditText;
```

```
import android.widget.RadioButton;
```

```
import android.widget.RadioGroup;
```

```
import android.widget.Toast;
```

```
import java.util.Calendar;
```

```

public class MainActivity extends AppCompatActivity {
    EditText id,nod,da;
    RadioGroup rg;
    RadioButton rb;
    Button ap,d1,d2;
    DBHandler db;
    String seldate;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        id = findViewById(R.id.empIdBox);
        nod = findViewById(R.id.nodBox);
        da = findViewById(R.id.dateBox);
        rg = findViewById(R.id.leaveGroup);
        ap = findViewById(R.id.applyBtn);
        d1 = findViewById(R.id.dis1Btn);
        d2 = findViewById(R.id.dis2Btn);
        db = new DBHandler(MainActivity.this,"LeavesDB",null,1);
        rg.setOnCheckedChangeListener(new RadioGroup.OnCheckedChangeListener() {
            @Override
            public void onCheckedChanged(RadioGroup group, int checkedId) {
                rb = findViewById(checkedId);
            }
        });
        da.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                Calendar cal = Calendar.getInstance();
                int cYear = cal.get(Calendar.YEAR);
                int cMonth = cal.get(Calendar.MONTH);
                int cDate = cal.get(Calendar.DATE);
                DatePickerDialog dialog = new DatePickerDialog(MainActivity.this,
android.R.style.Theme_DeviceDefault_DialogWhenLarge, new DatePickerDialog.OnDateSetListener() {
                    @Override
                    public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {
                        seldate = dayOfMonth+"/"+(month+1)+"/"+year;
                        da.setText(seldate);
                    }
                },cYear,cMonth,cDate);
                dialog.show();
            }
        });
        ap.setOnClickListener(new View.OnClickListener() {

```

```

@Override
public void onClick(View v) {
    String i = id.getText().toString();
    int n = Integer.parseInt(nod.getText().toString());
    String t = rb.getText().toString();
    db.insertRecord(i,t,n,seldate);
    Toast.makeText(MainActivity.this, "Inserted", Toast.LENGTH_LONG).show();
}
});
d1.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String rec = db.display1(seldate);
        Intent it = new Intent(MainActivity.this, ResultActivity.class);
        it.putExtra("Records",rec);
        startActivity(it);
    }
});
d2.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View v) {
        String rec = db.display2();
        Intent it = new Intent(MainActivity.this, ResultActivity.class);
        it.putExtra("Records",rec);
        startActivity(it);
    }
});
}
}
}

```

activity_result.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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=".ResultActivity">

<androidx.fragment.app.FragmentContainerView
    android:id="@+id/fragmentContainerView"
    android:name="com.example.practiceques16_05.ResultFragment"
    android:layout_width="300dp"

```

```

        android:layout_height="300dp"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout_constraintBottom_toBottomOf="parent"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

ResultActivity.java:

```

package com.example.practiceques16_05;

import androidx.appcompat.app.AppCompatActivity;
import androidx.fragment.app.FragmentTransaction;

import android.content.Intent;
import android.os.Bundle;
import android.util.Log;
import android.widget.TextView;

public class ResultActivity extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_result);
        Intent it1 = getIntent();
        String r = it1.getStringExtra("Records");
        Bundle bundle = new Bundle();
        bundle.putString("Rec",r);
        ResultFragment frag = (ResultFragment)
getSupportFragmentManager().findFragmentById(R.id.fragmentContainerView);
        frag.setArguments(bundle);
    }
}

```

fragment_result.xml:

```

<?xml version="1.0" encoding="utf-8"?>
<FrameLayout 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"
    tools:context=".ResultFragment">

    <!-- TODO: Update blank fragment layout -->
    <TextView
        android:id="@+id/Result"

```

```
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:textSize="20sp"
    android:textStyle="bold"
    android:textAlignment="center"
    android:gravity="center_vertical"/>
```

```
</FrameLayout>
```

ResultFragment.java:

```
package com.example.practiceques16_05;
```

```
import android.os.Bundle;
```

```
import androidx.fragment.app.Fragment;
```

```
import android.view.LayoutInflater;
```

```
import android.view.View;
```

```
import android.view.ViewGroup;
```

```
import android.widget.TextView;
```

```
/**
```

```
 * A simple {@link Fragment} subclass.
```

```
 * Use the {@link ResultFragment#newInstance} factory method to
```

```
 * create an instance of this fragment.
```

```
 */
```

```
public class ResultFragment extends Fragment {
```

```
    TextView res;
```

```
    // TODO: Rename parameter arguments, choose names that match
```

```
    // the fragment initialization parameters, e.g. ARG_ITEM_NUMBER
```

```
    private static final String ARG_PARAM1 = "param1";
```

```
    private static final String ARG_PARAM2 = "param2";
```

```
    // TODO: Rename and change types of parameters
```

```
    private String mParam1;
```

```
    private String mParam2;
```

```
    public ResultFragment() {
```

```
        // Required empty public constructor
```

```
    }
```

```
    /**
```

```

* Use this factory method to create a new instance of
* this fragment using the provided parameters.
*
* @param param1 Parameter 1.
* @param param2 Parameter 2.
* @return A new instance of fragment ResultFragment.
*/
// TODO: Rename and change types and number of parameters
public static ResultFragment newInstance(String param1, String param2) {
    ResultFragment fragment = new ResultFragment();
    Bundle args = new Bundle();
    args.putString(ARG_PARAM1, param1);
    args.putString(ARG_PARAM2, param2);
    fragment.setArguments(args);
    return fragment;
}

@Override
public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    if (getArguments() != null) {
        mParam1 = getArguments().getString(ARG_PARAM1);
        mParam2 = getArguments().getString(ARG_PARAM2);
    }
}

@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
    Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View v = inflater.inflate(R.layout.fragment_result, container, false);
    res = v.findViewById(R.id.Result);
    Bundle args = getArguments();
    String m = args.getString("Rec");
    res.setText(m);
    return v;
}
}

```

DBHandler.java:

```
package com.example.practiceques16_05;
```

```
import android.content.Context;
import android.database.Cursor;
```



```

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

import androidx.annotation.Nullable;

public class DBHandler extends SQLiteOpenHelper {
    public DBHandler(@Nullable Context context, @Nullable String name, @Nullable
SQLiteDatabase.CursorFactory factory, int version) {
        super(context, name, factory, version);
    }

    @Override
    public void onCreate(SQLiteDatabase db) {
        db.execSQL("create table lms(eid varchar(15),type varchar(20),nod integer,sdate varchar(15))");
    }

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

    }

    public void insertRecord(String i,String t,int n,String d){
        SQLiteDatabase db = this.getWritableDatabase();
        db.execSQL("insert into lms values('"+i+"','"+t+"','"+n+"','"+d+"')");
        db.close();
    }

    public String display1(String d){
        String id="";
        SQLiteDatabase db = this.getReadableDatabase();
        Cursor cr = db.rawQuery("select eid from lms where sdate = ?",new String[]{d});
        while (cr.moveToNext()){
            String i = cr.getString(0);
            id+=i+"\n";
        }
        db.close();
        return id;
    }

    public String display2(){
        String tdata="";
        SQLiteDatabase db = this.getReadableDatabase();
        Cursor cr = db.rawQuery("select * from lms where nod>2",null);
        while (cr.moveToNext()){
            String i = cr.getString(0);
            String t = cr.getString(1);
            int n = cr.getInt(2);

```

```
        String d = cr.getString(3);
        tdata+=i+"\t"+t+"\t"+n+"\t"+d+"\n";
    }
    db.close();
    return tdata;
}
}
```