

Q: Design an app to book an appointment for tuition center. Input the name, phone number, The user should input the city where he is looking for tuition. Auto complete suggestion for the city should be provided to the user. Choose one of the subject using CheckBox.[Java, Python, JS, ML, DS, DSA, MAD]. On click of "Submit" Button, show the new activity where user can choose the date and time of appointment. On click of "Confirm" button in this screen, show a message "Booking Confirmed" and save into db and perform the following tasks:

- 1.Find out the appointment details of given username
- 2.Find out number of appointments registered in the given city
- 3.Find out the appointment details on given date.

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/nameBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter name"
    android:inputType="text"
    android:minHeight="48dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintBottom_toBottomOf="@+id/phnoBox"/>

<EditText
    android:id="@+id/phnoBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Enter Phone Number"
    android:inputType="number"
    android:minHeight="48dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintTop_toBottomOf="@+id/nameBox"
app:layout_constraintBottom_toTopOf="@+id/cityBox"/>
```

```
<AutoCompleteTextView
    android:id="@+id/cityBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:hint="Select City"
    android:minHeight="48dp"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/phnoBox"
    app:layout_constraintBottom_toTopOf="@+id/jBox"/>
```

```
<CheckBox
    android:id="@+id/jBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Java"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/dsBox"
    app:layout_constraintTop_toBottomOf="@+id/cityBox"
    app:layout_constraintBottom_toTopOf="@+id/pBox"/>
```

```
<CheckBox
    android:id="@+id/pBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Python"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/dsaBox"
    app:layout_constraintTop_toBottomOf="@+id/jBox"
    app:layout_constraintBottom_toTopOf="@+id/jsBox" />
```

```
<CheckBox
    android:id="@+id/jsBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Java Script"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/mlBox"
    app:layout_constraintTop_toBottomOf="@+id/pBox"
    app:layout_constraintBottom_toTopOf="@+id/madBox" />
```

```
<CheckBox
    android:id="@+id/dsBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Data Structure"
    app:layout_constraintStart_toEndOf="@+id/jBox"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/cityBox"
    app:layout_constraintBottom_toTopOf="@+id/dsaBox"/>
```

```
<CheckBox
    android:id="@+id/dsaBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Data Science"
    app:layout_constraintStart_toEndOf="@+id/pBox"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/dsBox"
    app:layout_constraintBottom_toTopOf="@+id/mlBox" />
```

```
<CheckBox
    android:id="@+id/mlBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Machine Learning"
    app:layout_constraintStart_toEndOf="@+id/jsBox"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/dsaBox"
    app:layout_constraintBottom_toTopOf="@+id/madBox" />
```

```
<CheckBox
    android:id="@+id/madBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Mobile Application Development"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/jsBox"
    app:layout_constraintBottom_toTopOf="@+id/submitBtn"/>
```

```
<Button
    android:id="@+id/submitBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```

        android:text="Submit"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintTop_toBottomOf="@+id/madBox"
        app:layout_constraintBottom_toBottomOf="parent"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

MainActivity.java:

```
package com.example.practiceques17_05;
```

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

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

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

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

```
import android.widget.AdapterView;
```

```
import android.widget.AutoCompleteTextView;
```

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

```
import android.widget.CheckBox;
```

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

```
public class MainActivity extends AppCompatActivity {
```

```
    EditText nameVal,phnoVal;
```

```
    AutoCompleteTextView cityVal;
```

```
    CheckBox j,js,p,ml,mad,ds,dsa;
```

```
    Button btn;
```

```
    String[] cities = {"Bangalore","Chennai","Delhi","Hyderabad"};
```

```
    @Override
```

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

```
        super.onCreate(savedInstanceState);
```

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

```
        nameVal = findViewById(R.id.nameBox);
```

```
        phnoVal = findViewById(R.id.phnoBox);
```

```
        cityVal = findViewById(R.id.cityBox);
```

```
        j = findViewById(R.id.jBox);
```

```
        js = findViewById(R.id.jsBox);
```

```
        p = findViewById(R.id.pBox);
```

```
        ml = findViewById(R.id.mlBox);
```

```
        mad = findViewById(R.id.madBox);
```

```
        ds = findViewById(R.id.dsBox);
```

```
        dsa = findViewById(R.id.dsaBox);
```

```
        btn = findViewById(R.id.submitBtn);
```

```
        ArrayAdapter aa = new ArrayAdapter(this, android.R.layout.select_dialog_item,cities);
```

```
        cityVal.setAdapter(aa);
```

```

cityVal.setThreshold(1);
btn.setOnClickListener(new View.OnClickListener() {
    @Override
    public void onClick(View view) {
        StringBuilder sub = new StringBuilder("");
        if(j.isChecked())
            sub.append("Java");
        if(js.isChecked())
            sub.append("Java Script");
        if(p.isChecked())
            sub.append("Python");
        if(ds.isChecked())
            sub.append("Data Structures");
        if(dsa.isChecked())
            sub.append("Data Science");
        if(ml.isChecked())
            sub.append("Machine Learning");
        if(mad.isChecked())
            sub.append("Mobile Application Development");
        Intent it = new Intent(MainActivity.this, ResultActivity.class);
        it.putExtra("Name",nameVal.getText().toString());
        it.putExtra("Phno",phnoVal.getText().toString());
        it.putExtra("City",cityVal.getText().toString());
        it.putExtra("Sub",sub.toString());
        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">

<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"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintBottom_toTopOf="@+id/timeBox"/>
```

```
<EditText
    android:id="@+id/timeBox"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:ems="10"
    android:hint="Select Time"
    android:inputType="time"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/datebox"
    app:layout_constraintBottom_toTopOf="@+id/confirmBtn"/>
```

```
<Button
    android:id="@+id/confirmBtn"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Confirm"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/timeBox"
    app:layout_constraintBottom_toTopOf="@+id/dis2Box"/>
```

```
<Button
    android:id="@+id/dis1Box"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Display1"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toStartOf="@+id/dis2Box"
    app:layout_constraintTop_toBottomOf="@+id/confirmBtn"
    app:layout_constraintBottom_toTopOf="@+id/Result"/>
```

```
<Button
    android:id="@+id/dis2Box"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
```

```

        android:text="Display2"
        app:layout_constraintStart_toEndOf="@+id/dis1Box"
        app:layout_constraintEnd_toStartOf="@+id/dis3Box"
        app:layout_constraintTop_toBottomOf="@+id/confirmBtn"
        app:layout_constraintBottom_toTopOf="@+id/Result"/>

<Button
    android:id="@+id/dis3Box"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:text="Display3"
    app:layout_constraintStart_toEndOf="@id/dis2Box"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/confirmBtn"
    app:layout_constraintBottom_toTopOf="@+id/Result"/>

<TextView
    android:id="@+id/Result"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/dis2Box"
    app:layout_constraintBottom_toBottomOf="parent"/>
</androidx.constraintlayout.widget.ConstraintLayout>

```

ResultActivity.java:

```

package com.example.practiceques17_05;

import androidx.appcompat.app.AppCompatActivity;

import android.app.DatePickerDialog;
import android.app.TimePickerDialog;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.DatePicker;
import android.widget.EditText;
import android.widget.TextView;
import android.widget.TimePicker;
import android.widget.Toast;

import java.util.Calendar;

```

```

public class ResultActivity extends AppCompatActivity {
    EditText da,ti;
    Button con,dis1,dis2,dis3;
    TextView res;
    DBH db;
    String sdate,stime;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_result);
        da = findViewById(R.id.datebox);
        ti = findViewById(R.id.timeBox);
        con = findViewById(R.id.confirmBtn);
        dis1 = findViewById(R.id.dis1Box);
        dis2 = findViewById(R.id.dis2Box);
        dis3 = findViewById(R.id.dis3Box);
        res = findViewById(R.id.Result);
        db = new DBH(this,"TuitionDb",null,1);
        Intent it1 = getIntent();
        String n = it1.getStringExtra("Name");
        String ph = it1.getStringExtra("Phno");
        String c = it1.getStringExtra("City");
        String s = it1.getStringExtra("Sub");
        da.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                Calendar cal = Calendar.getInstance();
                int cY = cal.get(Calendar.YEAR);
                int cM = cal.get(Calendar.MONTH);
                int cD = cal.get(Calendar.DATE);
                DatePickerDialog dialog = new DatePickerDialog(ResultActivity.this,
android.R.style.Theme_DeviceDefault_DialogWhenLarge, new DatePickerDialog.OnDateSetListener() {
                    @Override
                    public void onDateSet(DatePicker datePicker, int i, int i1, int i2) {
                        sdate = i2+"/"+(i1+1)+"/"+i;
                        da.setText(sdate);
                    }
                },cY,cM,cD);
                dialog.show();
            }
        });
        ti.setOnClickListener(new View.OnClickListener() {
            @Override

```



```

        public void onClick(View view) {
            Calendar cal = Calendar.getInstance();
            int cH = cal.get(Calendar.HOUR);
            int cMi = cal.get(Calendar.MINUTE);
            TimePickerDialog dialog = new TimePickerDialog(ResultActivity.this,
android.R.style.Theme_DeviceDefault_DialogWhenLarge, new TimePickerDialog.OnTimeSetListener() {
                @Override
                public void onTimeSet(TimePicker timePicker, int i, int i1) {
                    stime = i+":"+i1;
                    ti.setText(stime);
                }
            },cH,cMi,false);
            dialog.show();
        }
    });
    con.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            db.insertRecord(n,ph,c,s,sdate,stime);
            Toast.makeText(ResultActivity.this, "Inserted", Toast.LENGTH_LONG).show();
        }
    });
    dis1.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String rec = db.displayRecord1(n);
            res.setText(rec);
        }
    });
    dis2.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            int ct = db.displayRecord2(c);
            res.setText(String.valueOf(ct));
        }
    });
    dis3.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View view) {
            String rec = db.displayRecord3(sdate);
            res.setText(rec);
        }
    });
}

```

```
}
```

DBH.java:

```
package com.example.practiceques17_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 DBH extends SQLiteOpenHelper {
```

```
    public DBH(@Nullable Context context, @Nullable String name, @Nullable  
SQLiteDatabase.CursorFactory factory, int version) {  
        super(context, name, factory, version);  
    }  
}
```

```
@Override
```

```
public void onCreate(SQLiteDatabase sqLiteDatabase) {  
    sqLiteDatabase.execSQL("create table tc(name varchar(20),phno varchar(20),city varchar(20),sub  
varchar(100),date varchar(20),time varchar(20))");  
}
```

```
@Override
```

```
public void onUpgrade(SQLiteDatabase sqLiteDatabase, int i, int i1) {
```

```
}
```

```
public void insertRecord(String n,String p,String c,String s,String d,String t){
```

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

```
    db.execSQL("insert into tc values(?,?,?,?,?)",new String[]{n,p,c,s,d,t});
```

```
    db.close();  
}
```

```
public String displayRecord1(String n){
```

```
    String td = "";
```

```
    SQLiteDatabase db = this.getReadableDatabase();
```

```
    Cursor cr = db.rawQuery("select * from tc where name=?",new String[]{n});
```

```
    while (cr.moveToNext()){
```

```
        String na = cr.getString(0);
```

```
        String p = cr.getString(1);
```

```
        String c = cr.getString(2);
```

```
        String s = cr.getString(3);
```

```
        String d = cr.getString(4);
```

```
        String t = cr.getString(5);
```

```

        td+=na+"\t"+p+"\t"+c+"\t"+s+"\t"+d+"\t"+t+"\n";
    }
    db.close();
    return td;
}
public int displayRecord2(String c){
    int ct = 0;
    SQLiteDatabase db = this.getReadableDatabase();
    Cursor cr = db.rawQuery("select * from tc where city = ?",new String[]{c});
    while (cr.moveToNext())
        ct++;
    db.close();
    return ct;
}
public String displayRecord3(String d){
    String td = "";
    SQLiteDatabase db = this.getReadableDatabase();
    Cursor cr = db.rawQuery("select * from tc where date=?",new String[]{d});
    while (cr.moveToNext()){
        String na = cr.getString(0);
        String p = cr.getString(1);
        String c = cr.getString(2);
        String s = cr.getString(3);
        String da = cr.getString(4);
        String t = cr.getString(5);
        td+=na+"\t"+p+"\t"+c+"\t"+s+"\t"+da+"\t"+t+"\n";
    }
    db.close();
    return td;
}
}

```