**Assignment:-14**

**14. Submit your User Defined Android Application.**

**Ans:- 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" >

<Button

android:id="@+id/button1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentLeft="true"

android:layout\_alignParentRight="true"

android:layout\_alignParentTop="true"

android:text="Date Of Birth" />

<TextView

android:id="@+id/textView1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentLeft="true"

android:layout\_below="@+id/button1"

android:layout\_marginTop="23dp"

android:text="Current Date" />

<TextView

android:id="@+id/textView2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentLeft="true"

android:layout\_below="@+id/textView1"

android:layout\_marginTop="18dp"

android:text="Birth Date" />

<TextView

android:id="@+id/textView3"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:layout\_alignParentLeft="true"

android:layout\_below="@+id/textView2"

android:layout\_marginTop="16dp"

android:text="Result" />

</RelativeLayout>

**MAINACTIVITY.JAVA:-**

public class AgeCalculation {

private int startYear;

private int startMonth;

private int startDay;

private int endYear;

private int endMonth;

private int endDay;

private int resYear;

private int resMonth;

private int resDay;

public String getCurrentDate()

{

Calendar c=Calendar.getInstance();

endYear=c.get(Calendar.YEAR);

endMonth=c.get(Calendar.MONTH);

endMonth++;

endDay=c.get(Calendar.DAY\_OF\_MONTH);

return endDay+":"+endMonth+":"+endYear;}

public void setDateOfBirth(int sYear, int sMonth, int sDay){

startYear=sYear;

startMonth=sMonth;

startMonth++;

startDay=sDay;}

public void calcualteYear(){

resYear=endYear-startYear;}

public void calcualteMonth(){

if(endMonth>=startMonth){

resMonth= endMonth-startMonth;}

else{resMonth=endMonth-startMonth;

resMonth=12+resMonth;

resYear--;}}

public void calcualteDay(){

if(endDay>=startDay){

resDay= endDay-startDay;}

else{

resDay=endDay-startDay;

resDay=30+resDay;

//resMonth--;}}

public String getResult(){return resDay+":"+resMonth+":"+resYear;}}

**ADD THE DATEPICKERFRAGMENT CLASS BELOW:-**

public class MainActivity extends Activity implements OnClickListener{

private Button btnStart;

static final int DATE\_START\_DIALOG\_ID = 0;

private int startYear=1970;

private int startMonth=6;

private int startDay=15;

private AgeCalculation age = null;

private TextView currentDate;

private TextView birthDate;

private TextView result;

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

age=new AgeCalculation();

currentDate=(TextView) findViewById(R.id.textView1);

currentDate.setText( age.getCurrentDate());

birthDate=(TextView) findViewById(R.id.textView2);

result=(TextView) findViewById(R.id.textView3);

btnStart=(Button) findViewById(R.id.button1);

btnStart.setOnClickListener(this);

}

@Override

protected Dialog onCreateDialog(int id) {

switch (id) {

case DATE\_START\_DIALOG\_ID:

return new DatePickerDialog(this,

mDateSetListener,

startYear, startMonth, startDay);

}

return null;

}

private DatePickerDialog.OnDateSetListener mDateSetListener

= new DatePickerDialog.OnDateSetListener() {

public void onDateSet(DatePicker view, int selectedYear,

int selectedMonth, int selectedDay) {

startYear=selectedYear;

startMonth=selectedMonth;

startDay=selectedDay;

age.setDateOfBirth(startYear, startMonth, startDay);

birthDate.setText(""+selectedDay+":"+(startMonth+1)+":"+startYear);

calculateAge();}};

public void onClick(View v) {

// TODO Auto-generated method stub

switch (v.getId()) {

case R.id.button1:

showDialog(DATE\_START\_DIALOG\_ID);

break;default:break;}

}

private void calculateAge(){

age.calcualteYear();

age.calcualteMonth();

age.calcualteDay();

Toast.makeText(getBaseContext(), "click the resulted button"+age.getResult() , Toast.LENGTH\_SHORT).show();

result.setText(age.getResult());}}

**Output:-**

