**Practical 16**

1. Write a Program to display the time picker in spinner mode.

Xml Code :

<?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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:orientation="vertical">

<TextView

android:layout\_marginTop="80dp"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Spinner (AM/PM)"

android:textSize="40dp"

android:textStyle="bold"

android:fontFamily="casual"

android:textColor="@color/black"

android:layout\_gravity="center"

/>

Graphical user interface, application

Description automatically generated <TimePicker

android:id="@+id/timepik1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:timePickerMode="spinner"

android:layout\_gravity="center"

android:layout\_marginTop="30dp" />

</LinearLayout>

Output:

1. Write a Program to display time picker in 24 hours format in spinner mode.

Xml Code :

<?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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity"

android:orientation="vertical">

<TextView

android:layout\_marginTop="80dp"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Spinner 24 Hours Format"

android:textSize="30dp"

android:textStyle="bold"

android:fontFamily="casual"

android:textColor="@color/black"

android:layout\_gravity="center"

/>

<TimePicker

android:id="@+id/t2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:timePickerMode="spinner"

android:layout\_gravity="center"

android:layout\_marginTop="30dp"/>

</LinearLayout>

Graphical user interface, application

Description automatically generatedJava Code :

package com.example.exp16;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;

import android.widget.TimePicker;

public class MainActivity2 extends AppCompatActivity {

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main2);

TimePicker tp1 = (TimePicker) findViewById(R.id.t2);

tp1.setIs24HourView(true);

}

}

Output:

1. Write a Program to display the following output.Select and display date and time on click of “select date” and “select time” buttons respectively.

Xml Code :

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

<RelativeLayout 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=".MainActivity3"

>

<TextView

android:layout\_width="match\_parent"

android:layout\_height="wrap\_content"

android:text="Date and Time picker"

android:textSize="40dp"

android:gravity="center"

android:layout\_marginTop="30dp"

android:textColor="@color/black"

android:id="@+id/txt"

/>

<EditText

android:layout\_width="200dp"

android:layout\_height="wrap\_content"

android:textSize="25dp"

android:textColor="@color/black"

android:layout\_below="@id/txt"

android:layout\_marginTop="50dp"

android:layout\_marginLeft="15dp"

android:id="@+id/datetextview"

/>

<EditText

android:layout\_width="200dp"

android:layout\_height="wrap\_content"

android:textSize="25dp"

android:textColor="@color/black"

android:layout\_below="@id/datetextview"

android:layout\_marginTop="20dp"

android:layout\_marginLeft="15dp"

android:id="@+id/timetextview"

/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Select Date"

android:textSize="20dp"

android:layout\_toRightOf="@id/datetextview"

android:layout\_marginTop="135dp"

android:layout\_marginLeft="10dp"

android:backgroundTint="@color/black"

android:id="@+id/datebutton"

/>

<Button

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Select Time"

android:textSize="20dp"

android:layout\_toRightOf="@id/timetextview"

android:layout\_marginTop="205dp"

android:layout\_marginLeft="10dp"

android:backgroundTint="@color/black"

android:layout\_alignBottom="@id/timetextview"

android:id="@+id/timebutton"

/>

</RelativeLayout>

Java Code :

package com.example.exp16;

import androidx.appcompat.app.AppCompatActivity;

import android.app.DatePickerDialog;

import android.app.TimePickerDialog;

import android.os.Bundle;

import android.text.format.DateFormat;

import android.view.View;

import android.widget.Button;

import android.widget.DatePicker;

import android.widget.EditText;

import android.widget.TimePicker;

import java.util.Calendar;

public class MainActivity3 extends AppCompatActivity {

Button date,time;

EditText dtext,ttext;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main3);

date = (Button) findViewById(R.id.datebutton);

time = (Button) findViewById(R.id.timebutton);

dtext = (EditText) findViewById(R.id.datetextview);

ttext = (EditText) findViewById(R.id.timetextview);

date.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

dispdate();

}

});

time.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View view) {

disptime();

}

});

}

public void dispdate(){

Calendar calendar = Calendar.getInstance();

int year = calendar.get(Calendar.YEAR);

int month = calendar.get(Calendar.MONTH);

int date = calendar.get(Calendar.DATE);

DatePickerDialog datePickerDialog = new DatePickerDialog(this, new DatePickerDialog.OnDateSetListener() {

@Override

public void onDateSet(DatePicker datePicker, int YEAR, int MONTH, int DATE) {

Calendar calendar1 = Calendar.getInstance();

calendar1.set(Calendar.YEAR,YEAR);

calendar1.set(Calendar.MONTH,MONTH);

calendar1.set(Calendar.DATE,DATE);

CharSequence charSequence = DateFormat.format("dd/MM/yyyy",calendar1);

dtext.setText(charSequence);

}

},year,month,date);

datePickerDialog.show();

}

public void disptime(){

Calendar calendar = Calendar.getInstance();

int hour = calendar.get(Calendar.HOUR);

int minute = calendar.get(Calendar.MINUTE);

boolean is24hour = DateFormat.is24HourFormat(this);

TimePickerDialog timePickerDialog = new TimePickerDialog(this, new TimePickerDialog.OnTimeSetListener() {

@Override

public void onTimeSet(TimePicker timePicker, int H, int M) {

Calendar calendar1 = Calendar.getInstance();

calendar1.set(Calendar.HOUR,H);

calendar1.set(Calendar.MINUTE,M);

CharSequence charSequence = DateFormat.format("h : mm a",calendar1);

ttext.setText(charSequence);

Graphical user interface, text, application

Description automatically generated }

}, hour, minute, is24hour);

timePickerDialog.show();

}

}

Output:

A screenshot of a phone

Description automatically generated with medium confidenceCalendar

Description automatically generatedA screenshot of a phone

Description automatically generated with low confidenceA screenshot of a phone

Description automatically generated with medium confidence