**1.Create an application to demonstrate date and time picker.**

**XML code:**

<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"  
 android:orientation="vertical"  
 android:padding="16dp"  
 tools:context=".MainActivity"  
 android:background="#E0FFFF">  
 <TextView  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:id="@+id/title"  
 android:text="DATE AND TIME PICKER"  
 android:textColor="@color/black"  
 android:textStyle="bold"  
 android:textSize="20sp"  
 android:layout\_gravity="center"/>  
 <EditText  
 android:id="@+id/e1"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Email"  
 android:layout\_marginTop="16dp"  
 android:inputType="textEmailAddress"/>  
 <EditText  
 android:id="@+id/e2"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Event Name" />  
 <EditText  
 android:id="@+id/elocation"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Location" />  
 <EditText  
 android:id="@+id/e3"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Date"  
 android:focusable="false"  
 android:clickable="true" />  
  
 <EditText  
 android:id="@+id/e4"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:hint="Time"  
 android:focusable="false"  
 android:clickable="true" />  
  
 <Button  
 android:id="@+id/Datebtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Pick Date" />  
  
 <Button  
 android:id="@+id/Timebtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Pick Time" />  
  
 <Button  
 android:id="@+id/Acceptbtn"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:text="Accept"  
 />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="match\_parent"  
 android:layout\_height="wrap\_content"  
 android:layout\_marginTop="16dp"  
 android:text=""  
 android:textSize="16sp" />  
</LinearLayout>

**Java code:**

package com.example.myapplication;

import android.app.DatePickerDialog;

import android.app.TimePickerDialog;

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 androidx.appcompat.app.AppCompatActivity;

import java.text.SimpleDateFormat;

import java.util.Calendar;

import java.util.Locale;

public class MainActivity extends AppCompatActivity {

EditText editTextEmail, editTextEventName, editTextDate, editTextTime,editTextLocation;

Button buttonPickDate, buttonPickTime, buttonAccept;

TextView textViewResult;

Calendar calendar;

SimpleDateFormat dateFormat, timeFormat;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

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

editTextEmail = findViewById(R.id.*e1*);

editTextEventName = findViewById(R.id.*e2*);

editTextDate = findViewById(R.id.*e3*);

editTextTime = findViewById(R.id.*e4*);

editTextLocation=findViewById(R.id.*elocation*);

buttonPickDate = findViewById(R.id.*Datebtn*);

buttonPickTime = findViewById(R.id.*Timebtn*);

buttonAccept = findViewById(R.id.*Acceptbtn*);

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

calendar = Calendar.*getInstance*();

dateFormat = new SimpleDateFormat("dd/MM/yyyy", Locale.*ENGLISH*);

timeFormat = new SimpleDateFormat("hh:mm a", Locale.*ENGLISH*);

buttonPickDate.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

showDatePickerDialog();

}

});

buttonPickTime.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

showTimePickerDialog();

}

});

buttonAccept.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

displaySelectedData();

}

});

}

public void showDatePickerDialog() {

DatePickerDialog datePickerDialog = new DatePickerDialog(

this,

new DatePickerDialog.OnDateSetListener() {

@Override

public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {

calendar.set(Calendar.*YEAR*, year);

calendar.set(Calendar.*MONTH*, month);

calendar.set(Calendar.*DAY\_OF\_MONTH*, dayOfMonth);

editTextDate.setText(dateFormat.format(calendar.getTime()));

}

},

calendar.get(Calendar.*YEAR*),

calendar.get(Calendar.*MONTH*),

calendar.get(Calendar.*DAY\_OF\_MONTH*)

);

datePickerDialog.show();

}

public void showTimePickerDialog() {

TimePickerDialog timePickerDialog = new TimePickerDialog(

this,

new TimePickerDialog.OnTimeSetListener() {

@Override

public void onTimeSet(TimePicker view, int hourOfDay, int minute) {

calendar.set(Calendar.*HOUR\_OF\_DAY*, hourOfDay);

calendar.set(Calendar.*MINUTE*, minute);

editTextTime.setText(timeFormat.format(calendar.getTime()));

}

},

calendar.get(Calendar.*HOUR\_OF\_DAY*),

calendar.get(Calendar.*MINUTE*),

false

);

timePickerDialog.show();

}

public void displaySelectedData() {

String email = editTextEmail.getText().toString();

String eventName = editTextEventName.getText().toString();

String location=editTextLocation.getText().toString();

String date = editTextDate.getText().toString();

String time = editTextTime.getText().toString();

String resultText = "Email: " + email + "\nEvent Name: " + eventName + "\nLocation: "+location+"\nDate: " + date + "\nTime: " + time;

textViewResult.setText(resultText);

}

}

**2. Create an Android Application that Demonstrates DatePicker and DatePicker Dialog**

**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"  
 android:padding="16dp"  
 tools:context=".MainActivity"  
 android:background="#E0FFFF">  
 <Button  
 android:id="@+id/DatePickerBtn"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Show Date Picker"  
 android:layout\_marginTop="50dp"  
 android:layout\_marginLeft="100dp"/>  
 <TextView  
 android:id="@+id/TextView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:layout\_below="@id/DatePickerBtn"  
 android:layout\_marginTop="16dp"  
 android:layout\_marginLeft="100dp"  
 android:textColor="@color/black"  
 android:textStyle="bold"  
 android:textSize="20sp"/>  
</RelativeLayout>

**Java code:**

package com.example.myapplication;

import android.app.DatePickerDialog;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.DatePicker;

import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

import java.util.Calendar;

public class MainActivity extends AppCompatActivity {

Button showDatePickerBtn;

TextView selectedDateTextView;

DatePickerDialog datePickerDialog;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

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

showDatePickerBtn = findViewById(R.id.*DatePickerBtn*);

selectedDateTextView = findViewById(R.id.*TextView1*);

showDatePickerBtn.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

showDatePickerDialog();

}

});

}

public void showDatePickerDialog() {

final Calendar calendar = Calendar.*getInstance*();

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

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

int day = calendar.get(Calendar.*DAY\_OF\_MONTH*);

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

@Override

public void onDateSet(DatePicker view, int year, int month, int dayOfMonth) {

String selectedDate = dayOfMonth + "/" + (month + 1) + "/" + year;

selectedDateTextView.setText("Selected Date: " + selectedDate);

}

}, year, month, day);

datePickerDialog.show();

}

}

**3. Create an Android Application that Demonstrates TimePicker and displays Selected Time on TextView**

**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=".MainActivity"  
 android:background="#E0FFFF">  
 <Button  
 android:id="@+id/TimeButton"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Pick Time"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="32dp" />  
 <TextView  
 android:id="@+id/TextView1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text=""  
 android:textStyle="bold"  
 android:textColor="@color/black"  
 android:textSize="20sp"  
 android:layout\_below="@id/TimeButton"  
 android:layout\_centerHorizontal="true"  
 android:layout\_marginTop="16dp" />  
</RelativeLayout>

**Java code:**

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.app.TimePickerDialog;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

import android.widget.TimePicker;

import java.util.Calendar;

public class MainActivity extends AppCompatActivity {

TextView selectedTimeTextView;

Button pickTimeButton;

int selectedHour, selectedMinute;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

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

selectedTimeTextView = findViewById(R.id.*TextView1*);

pickTimeButton = findViewById(R.id.*TimeButton*);

pickTimeButton.setOnClickListener(new View.OnClickListener() {

@Override

public void onClick(View v) {

Calendar currentTime = Calendar.*getInstance*();

int hour = currentTime.get(Calendar.*HOUR\_OF\_DAY*);

int minute = currentTime.get(Calendar.*MINUTE*);

TimePickerDialog timePickerDialog = new TimePickerDialog(

MainActivity.this,

new TimePickerDialog.OnTimeSetListener() {

@Override

public void onTimeSet(TimePicker view, int hourOfDay, int minute) {

selectedHour = hourOfDay;

selectedMinute = minute;

selectedTimeTextView.setText(

String.*format*("%02d:%02d", selectedHour, selectedMinute)

);

}

},

hour, minute, true

);

timePickerDialog.show();

}

});

}

}