****

**UCS1711 - MOBILE APPLICATION DEVELOPMENT LAB**

**Assignment 1**

Name: Jayannthan P T

Dept: CSE ‘A’

Roll No.: 205001049

Generate a Health Insurance registration form to register the patient details under each group.

**Patient Details**

1. a. Assign a title for the registration form(TextView- textSize, textStyle , typeface)

Group1 Patient Details

1. b. Patient Name. Specify some font and colour. (use TextView, EditText-standard)
2. c. Patient Phone Number (Mobile or Landline use Checkbox)
3. d. Address (use TextView, EditText-standard)
4. e. Age (TextView, EditText)
5. f. Date of Birth (DatePicker)
6. g. Gender (RadioButton)
7. h. Marital Status (Spinner)

**Employer Details**

1. a) Patient Employer
2. b) Employment Status (full time, parttime, unemployed, retired, student, other Checkbox)

**Emergency contact Details**

1. a) Name (EditText)
2. b) Relationship (EditText)
3. c) Address (Textarea)
4. d) Phone Number (EditText- inputType, phoneNumber)

Use Submit (Button) to submit the details and display the contents. Use Reset button to clear the form.

**Additional:** Display using Table layout create an output window using OPENGL and to draw the following basic output primitives:

**Source code:**

* MainActivity.java

package com.sampleapp.healthinsurance;

import androidx.appcompat.app.AlertDialog;

import androidx.appcompat.app.AppCompatActivity;

import android.content.Intent;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.EditText;

import android.widget.RadioButton;

import android.widget.RadioGroup;

import android.widget.Spinner;

import java.text.SimpleDateFormat;

import java.util.Calendar;

import android.widget.CheckBox;

import android.widget.DatePicker;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

    // Declare your view elements

    EditText patientNameEditText, addressEditText, ageEditText, employerEditText,

            emergencyNameEditText, relationshipEditText, emergencyAddressEditText,

            emergencyPhoneNumberEditText;

    RadioGroup genderRadioGroup;

    RadioButton maleRadioButton, femaleRadioButton, otherRadioButton;

    Spinner maritalStatusSpinner;

    CheckBox mobileCheckBox, landlineCheckBox, fullTimeCheckBox, partTimeCheckBox;

    DatePicker dateOfBirthDatePicker;

    Button submitButton, resetButton;

    @Override

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

        super.**onCreate**(savedInstanceState);

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

        patientNameEditText = **findViewById**(R.id.patientNameEditText);

        addressEditText = **findViewById**(R.id.addressEditText);

        ageEditText = **findViewById**(R.id.ageEditText);

        employerEditText = **findViewById**(R.id.employerEditText);

        emergencyNameEditText = **findViewById**(R.id.emergencyNameEditText);

        relationshipEditText = **findViewById**(R.id.relationshipEditText);

        emergencyAddressEditText = **findViewById**(R.id.emergencyAddressEditText);

        emergencyPhoneNumberEditText = **findViewById**(R.id.emergencyPhoneNumberEditText);

        genderRadioGroup = **findViewById**(R.id.genderRadioGroup);

        maleRadioButton = **findViewById**(R.id.maleRadioButton);

        femaleRadioButton = **findViewById**(R.id.femaleRadioButton);

        otherRadioButton = **findViewById**(R.id.otherRadioButton);

        maritalStatusSpinner = **findViewById**(R.id.maritalStatusSpinner);

        mobileCheckBox = **findViewById**(R.id.mobileCheckBox);

        landlineCheckBox = **findViewById**(R.id.landlineCheckBox);

        fullTimeCheckBox = **findViewById**(R.id.fullTimeCheckBox);

        partTimeCheckBox = **findViewById**(R.id.partTimeCheckBox);

        dateOfBirthDatePicker = **findViewById**(R.id.dateOfBirthDatePicker);

        submitButton = **findViewById**(R.id.submitButton);

        resetButton = **findViewById**(R.id.resetButton);

        submitButton.**setOnClickListener**(new View.**OnClickListener**() {

            @Override

            public void **onClick**(View view) {

                String patientName = patientNameEditText.**getText**().**toString**();

                String address = addressEditText.**getText**().**toString**();

                int age = Integer.**parseInt**(ageEditText.**getText**().**toString**());

                String employer = employerEditText.**getText**().**toString**();

                String emergencyContactName = emergencyNameEditText.**getText**().**toString**();

                String relationship = relationshipEditText.**getText**().**toString**();

                String emergencyContactAddress = emergencyAddressEditText.**getText**().**toString**();

                String emergencyContactPhoneNumber = emergencyPhoneNumberEditText.**getText**().**toString**();

                int selectedGenderId = genderRadioGroup.**getCheckedRadioButtonId**();

                RadioButton selectedGenderRadioButton = **findViewById**(selectedGenderId);

                String gender = selectedGenderRadioButton.**getText**().**toString**();

                String maritalStatus = maritalStatusSpinner.**getSelectedItem**().**toString**();

                StringBuilder checkBoxes = new **StringBuilder**();

                if (mobileCheckBox.**isChecked**()) {

                    checkBoxes.**append**("Mobile, ");

                }

                if (landlineCheckBox.**isChecked**()) {

                    checkBoxes.**append**("Landline, ");

                }

                if (fullTimeCheckBox.**isChecked**()) {

                    checkBoxes.**append**("Full Time, ");

                }

                if (partTimeCheckBox.**isChecked**()) {

                    checkBoxes.**append**("Part Time, ");

                }

                // Get selected date from dateOfBirthDatePicker

                int year = dateOfBirthDatePicker.**getYear**();

                int month = dateOfBirthDatePicker.**getMonth**() + 1;

                int day = dateOfBirthDatePicker.**getDayOfMonth**();

                String dateOfBirth = year + "-" + month + "-" + day;

                Intent intent = new **Intent**(MainActivity.this, DisplayDataActivity.class);

                intent.**putExtra**("patientName", patientName);

                intent.**putExtra**("address", address);

                intent.**putExtra**("age", age);

                intent.**putExtra**("employer", employer);

**startActivity**(intent);

            }

        });

        resetButton.**setOnClickListener**(new View.**OnClickListener**() {

            @Override

            public void **onClick**(View view) {

                // Clear all input fields

                patientNameEditText.**getText**().**clear**();

                addressEditText.**getText**().**clear**();

                ageEditText.**getText**().**clear**();

                employerEditText.**getText**().**clear**();

                emergencyNameEditText.**getText**().**clear**();

                relationshipEditText.**getText**().**clear**();

                emergencyAddressEditText.**getText**().**clear**();

                emergencyPhoneNumberEditText.**getText**().**clear**();

                genderRadioGroup.**clearCheck**();

                maritalStatusSpinner.**setSelection**(0);

                mobileCheckBox.**setChecked**(false);

                landlineCheckBox.**setChecked**(false);

                fullTimeCheckBox.**setChecked**(false);

                partTimeCheckBox.**setChecked**(false);

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

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

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

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

                dateOfBirthDatePicker.**updateDate**(year, month, day);

            }

        });

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

        SimpleDateFormat dateFormat = new **SimpleDateFormat**("yyyy-MM-dd");

        String currentDate = dateFormat.**format**(calendar.**getTime**());

        String[] dateParts = currentDate.**split**("-");

        int year = Integer.**parseInt**(dateParts[0]);

        int month = Integer.**parseInt**(dateParts[1]) - 1;

        int day = Integer.**parseInt**(dateParts[2]);

        dateOfBirthDatePicker.**init**(year, month, day, null);

    }

}

* activity\_main.xml

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

<ScrollView xmlns:android="http://schemas.android.com/apk/res/android" android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

    <LinearLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content" android:orientation="vertical" android:padding="16dp">

        <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="@string/health\_insurance\_registration\_form" android:textSize="24sp" android:textStyle="bold" android:typeface="serif" android:layout\_gravity="center" android:layout\_marginBottom="16dp"/>

        <TableLayout android:layout\_width="match\_parent" android:layout\_height="wrap\_content">

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Patient Details" android:textStyle="bold" android:layout\_span="2" android:paddingBottom="8dp" android:paddingTop="16dp"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Patient Name:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/patientNameEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter patient name" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Patient Phone Number:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <CheckBox android:id="@+id/mobileCheckBox" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Mobile"/>

                <CheckBox android:id="@+id/landlineCheckBox" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Landline"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Address:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/addressEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter address" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Age:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/ageEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter age" android:inputType="number" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Date of Birth:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <DatePicker android:id="@+id/dateOfBirthDatePicker" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Gender:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <RadioGroup android:id="@+id/genderRadioGroup" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:orientation="horizontal" android:layout\_weight="1">

                    <RadioButton android:id="@+id/maleRadioButton" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Male"/>

                    <RadioButton android:id="@+id/femaleRadioButton" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Female"/>

                    <RadioButton android:id="@+id/otherRadioButton" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Other"/>

                </RadioGroup>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Marital Status:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <Spinner android:id="@+id/maritalStatusSpinner" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Employer Details" android:textStyle="bold" android:layout\_span="2" android:paddingBottom="8dp" android:paddingTop="16dp"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Patient Employer:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/employerEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter employer" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Employment Status:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <CheckBox android:id="@+id/fullTimeCheckBox" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Full Time"/>

                <CheckBox android:id="@+id/partTimeCheckBox" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Part Time"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Emergency Contact Details" android:textStyle="bold" android:layout\_span="2" android:paddingBottom="8dp" android:paddingTop="16dp"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Name:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/emergencyNameEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter emergency contact name" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Relationship:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/relationshipEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter relationship" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Address:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/emergencyAddressEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter emergency contact address" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <TextView android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Phone Number:" android:textColor="#000000" android:paddingEnd="8dp"/>

                <EditText android:id="@+id/emergencyPhoneNumberEditText" android:layout\_width="0dp" android:layout\_height="wrap\_content" android:hint="Enter emergency contact phone number" android:inputType="phone" android:layout\_weight="1"/>

            </TableRow>

            <TableRow>

                <Button android:id="@+id/submitButton" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Submit" android:layout\_gravity="center" android:layout\_span="2" android:layout\_marginTop="16dp"/>

            </TableRow>

            <TableRow>

                <Button android:id="@+id/resetButton" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text="Reset" android:layout\_gravity="center" android:layout\_span="2" android:layout\_marginTop="8dp"/>

            </TableRow>

        </TableLayout>

    </LinearLayout>

</ScrollView>

* DisplayDataActivity.java

package com.sampleapp.healthinsurance;

import android.content.Intent;

import android.os.Bundle;

import android.widget.TextView;

import androidx.appcompat.app.AppCompatActivity;

public class DisplayDataActivity extends AppCompatActivity {

    @Override

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

        super.**onCreate**(savedInstanceState);

**setContentView**(R.layout.activity\_display\_data);

        Intent intent = **getIntent**();

        String patientName = intent.**getStringExtra**("patientName");

        String address = intent.**getStringExtra**("address");

        int age = intent.**getIntExtra**("age", 0);

        // Find TextViews in the layout and set their text

        TextView displayPatientName = **findViewById**(R.id.displayPatientName);

        TextView displayAddress = **findViewById**(R.id.displayAddress);

        TextView displayAge = **findViewById**(R.id.displayAge);

        displayPatientName.**setText**("Patient Name: " + patientName);

        displayAddress.**setText**("Address: " + address);

        displayAge.**setText**("Age: " + age);

    }

}

* activity\_display\_data.xml

<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android" android:layout\_width="match\_parent" android:layout\_height="match\_parent" android:orientation="vertical" android:padding="16dp">

    <TextView android:id="@+id/displayPatientName" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text=""/>

    <TextView android:id="@+id/displayAddress" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text=""/>

    <TextView android:id="@+id/displayAge" android:layout\_width="wrap\_content" android:layout\_height="wrap\_content" android:text=""/>

</LinearLayout>

**Output:**

