

EX NO 1: APPLICATION USING GUI COMPONENTS, FONT AND COLOURS

AIM: To generate a hospital form for patients using GUI components, fonts and colours.

DESCRIPTION:

1. Scroll View:

Used to scroll through the elements in the layout, to have a Linear layout containing elements in it.

2. Linear Layout:

Used to place other views, available in 2 orientations, horizontal and vertical.

3. Text View:

Used to display text to the user. Has properties like the font and style etc.

4. Edit Text:

Used to accept text from the user. Can accept different types like text (specific variations), numbers and so on.

5. Date Picker:

Widget used to select a date, spinner and calendar view available.

6. Radio Group:

Has a group of radio buttons, acceptable choices can be either one or more than one.

7. Radio Button:

Displays different options available, can be either checked or unchecked.

8. Spinner:

Used to show various options as a top-down list when clicked upon.

9. Time Picker:

Allows time to be selected, can be done as a spinner or a clock.

10. Check Box:

Allows user to check options which are applicable to them, can allow one or multiple options.

11. Buttons:

They can be clicked to lead to different pages, or different functionalities can be assigned to them.

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"
    android:orientation="vertical"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:gravity="center"
        android:id="@+id/hospitalHeader"
        android:text="HOSPITAL REGISTRATION FORM\n"
        android:textAlignment="center"
        android:textColor="@android:color/black"
        android:textSize="20sp"
        android:textStyle="bold"/>

    <ScrollView
        android:layout_width="match_parent"
        android:layout_height="match_parent">

        <LinearLayout
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:orientation="vertical" >

            <LinearLayout
```

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/name"
        android:text="Name: "
        android:fontFamily="sans-serif"
        android:textColor="@color/colorPrimaryDark"
        android:textSize="15sp"/>
```

```
    <EditText
        android:id="@+id/patientname"
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:inputType="textPersonName"
        android:ems="15"
        android:text=""/>
```

```
</LinearLayout>
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/address"
        android:text="Address: "
```

```
        android:fontFamily="sans-serif"
        android:textColor="@color/colorPrimaryDark"
        android:textSize="15sp"/>
    <EditText
        android:id="@+id/addressval"
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:inputType="textPersonName"
        android:ems="14"
        android:text=""/>
</LinearLayout>
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/age"
        android:text="Age: "
        android:fontFamily="sans-serif"
        android:textColor="@color/colorPrimaryDark"
        android:textSize="15sp"/>
    <EditText
        android:id="@+id/ageval"
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:inputType="number"
```

```
        android:ems="3"
        android:text=""/>
</LinearLayout>
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

```
<TextView
    android:id="@+id/dob"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="sans-serif"
    android:text="Date of Birth: "
    android:textColor="@color/colorPrimaryDark"
    android:textSize="15sp" />
```

```
<DatePicker
    android:layout_width="wrap_content"
    android:layout_height="390dp"
    android:datePickerMode="calendar"
    android:isScrollContainer="true"
    android:layout_marginLeft="90px"
    android:layout_marginTop="20px"/>
```

```
</LinearLayout>
<LinearLayout
```

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/gender"
        android:text="\n\nGender: "
        android:fontFamily="sans-serif"
        android:textColor="@color/colorPrimaryDark"
        android:textSize="15sp"/>
    <RadioGroup
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">
        <RadioButton android:id="@+id/male"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Male"/>

        <RadioButton android:id="@+id/female"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
            android:text="Female"/>

        <RadioButton android:id="@+id/other"
            android:layout_width="wrap_content"
            android:layout_height="wrap_content"
```

```

        android:text="Other"/>
    </RadioGroup>
</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:id="@+id/phone"
        android:text="Phone number: "
        android:fontFamily="sans-serif"
        android:textColor="@color/colorPrimaryDark"
        android:textSize="15sp"/>
    <EditText
        android:id="@+id/number"
        android:layout_height="wrap_content"
        android:layout_width="wrap_content"
        android:inputType="phone"
        android:ems="8"
        android:text=""/>
</LinearLayout>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content">

```

<TextView

```
    android:id="@+id/maritalstatus"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:fontFamily="sans-serif"
    android:text="Marital Status: "
    android:textColor="@color/colorPrimaryDark"
    android:textSize="15sp" />
```

<Spinner

```
    android:id="@+id/maritalstats"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content" />
```

</LinearLayout>

<LinearLayout

```
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

<TextView

```
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/reg_time"
    android:text="Registration time: "
    android:fontFamily="sans-serif"
    android:textColor="@color/colorPrimaryDark"
    android:textSize="15sp"/>
```



```
<TimePicker
    android:id="@+id/time"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:timePickerMode="spinner"></TimePicker>
```

```
</LinearLayout>
```

```
<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal">
```

```
<TextView
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/addiction"
    android:text="Addiction: "
    android:fontFamily="sans-serif"
    android:textColor="@color/colorPrimaryDark"
    android:textSize="15sp"/>
```

```
<CheckBox
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/smokes"
    android:text="Smoking"/>
```

```
<CheckBox
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/drinks"
    android:text="Drinking"/>
```

```
</LinearLayout>
```

```
<LinearLayout
```

```
    android:layout_width="match_parent"
```

```
    android:layout_height="wrap_content"
```

```
    android:orientation="horizontal">
```

```
    <Button
```

```
        android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
```

```
        android:id="@+id/submit"
```

```
        android:text="SUBMIT"/>
```

```
    <Button
```

```
        android:layout_width="wrap_content"
```

```
        android:layout_height="wrap_content"
```

```
        android:id="@+id/reset"
```

```
        android:text="RESET"/>
```

```
</LinearLayout>
```

```
</LinearLayout>
```

```
</ScrollView>
```

```
</LinearLayout>
```

JAVA CODE:

```
package com.example.android.ex1;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.ArrayAdapter;
import android.widget.Spinner;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        Spinner spinner = (Spinner) findViewById(R.id.maritalstats);
        // Create an ArrayAdapter using the string array and a default spinner layout
        ArrayAdapter<CharSequence> adapter = ArrayAdapter.createFromResource(this,
            R.array.marital_array, android.R.layout.simple_spinner_item);
        // Specify the layout to use when the list of choices appears
        adapter.setDropDownViewResource(android.R.layout.simple_spinner_dropdown_item);
        // Apply the adapter to the spinner
        spinner.setAdapter(adapter);
    }
}
```

STRINGS.XML FOR SPINNER:

```
<resources>

    <string name="app_name">Ex1</string>

    <string-array name="marital_array">

        <item>Married</item>

        <item>Unmarried</item>

    </string-array>

</resources>
```

OUTPUT SCREENSHOTS:

Ex1

HOSPITAL REGISTRATION FORM

Name:

Address:

Age:

Date of Birth:

2020
Wed, Feb 5

< February 2020 >

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

☐ Male

Ex1

HOSPITAL REGISTRATION FORM

16 17 18 19 20 21 22

23 24 25 26 27 28 29

Gender: ☐ Male
☐ Female
☐ Other

Phone number:

Marital Status:

Married
Unmarried

Registration time:

33 AM
4 : 34 PM
5 35

Addiction: ☐ Smoking ☐ Drinking

SUBMIT RESET