Form Validation

MainActivity.java

package com.example.formvalidation;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.content.Intent;  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.CheckBox;  
import android.widget.EditText;  
import android.widget.RadioButton;  
import android.widget.Toast;  
  
import java.util.Arrays;  
  
public class MainActivity extends AppCompatActivity {  
 EditText e1,e2,e4,e6,e7;  
 Button b1,b2;  
 RadioButton rb1,rb2;  
 CheckBox c1,c2,c3,c4;  
  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
 e1=(EditText) findViewById(R.id.*e1*);  
 e2=(EditText) findViewById(R.id.*e2*);  
 e4=(EditText) findViewById(R.id.*e4*);  
 e6=(EditText) findViewById(R.id.*e6*);  
 e7=(EditText) findViewById(R.id.*e7*);  
 b1=(Button) findViewById(R.id.*b1*);  
 b2=(Button) findViewById(R.id.*b2*);  
 rb1=(RadioButton) findViewById(R.id.*rb1*);  
 rb2=(RadioButton) findViewById(R.id.*rb2*);  
 c1=(CheckBox) findViewById(R.id.*c1*);  
 c2=(CheckBox) findViewById(R.id.*c2*);  
 c3=(CheckBox) findViewById(R.id.*c3*);  
 c4=(CheckBox) findViewById(R.id.*c4*);

e1.setFilters(new InputFilter[]{new InputFilter() {  
 @Override  
 public CharSequence filter(CharSequence source, int start, int end, Spanned dest, int dstart, int dend) {  
 for (int i = start; i < end; i++) {  
 if (!Character.*isLetter*(source.charAt(i))) {  
 return "";  
 }  
 }  
 return null;  
 }  
}});

b1.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 if(checkAll())  
 {  
 Intent i=new Intent(MainActivity.this,MainActivity2.class);  
 startActivity(i);  
 }  
 }  
 });

b2.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View view) {  
 e1.setText("");  
 e2.setText("");  
 e4.setText("");  
 e6.setText("");  
 e7.setText("");  
 rb1.setChecked(false);  
 rb2.setChecked(false);  
 c1.setChecked(false);  
 c2.setChecked(false);  
 c3.setChecked(false);  
 c4.setChecked(false);  
 }  
});

}  
  
 private boolean checkAll() {  
 String name=e1.getText().toString();  
 String dob=e2.getText().toString();  
 String add=e4.getText().toString();  
 String pwd=e6.getText().toString();  
 String email=e7.getText().toString();  
 String em="[0-9]+[!@#$%^&\*]";  
 String special="[a-zA-Z0-9]+[!@#$%^&\*]";  
 if(name.length()==0)  
 {  
 e1.setError("This field is required");  
 return false;  
 }  
 if(add.length()==0)  
 {  
 e4.setError("Address should be enetered");  
 return false;  
 }  
 if(pwd.length()!=8 && !pwd.contains(special))  
 {  
 e6.setError("Password should have 8 characters,1 special,1 Digit");  
 return false;  
 }  
 if(!rb1.isChecked() && !rb2.isChecked())  
 {  
 Toast.*makeText*(getApplicationContext(), "Please select Gender", Toast.*LENGTH\_SHORT*).show();  
 return false;  
 }  
 if(!c1.isChecked() && !c2.isChecked() && !c3.isChecked() && !c4.isChecked())  
 {  
 Toast.*makeText*(getApplicationContext(), "Please select any hobbies", Toast.*LENGTH\_SHORT*).show();  
 return false;  
 }  
 if(!email.contains("@") && !email.contains("."))  
 {  
 e7.setError("Enter proper email");  
 return false;  
 }  
 int i;  
 String[] dd = e2.getText().toString().split("/");  
 int[] a1=new int[3];  
 for(i=0;i<3;i++) {  
 a1[i] = Integer.*parseInt*(dd[i]);  
 }  
 if(a1[0]<0 || a1[0]>12)  
 {  
 e2.setError("Invalid month");  
 return false;  
 }  
 if(a1[1]<0 || a1[1]>31)  
 {  
 e2.setError("Invalid day");  
 return false;  
 }  
 if((dd[2].length()>4) || (a1[2] >2024))  
 {  
 e2.setError("Invalid year");  
 return false;  
 }  
 return true;  
 }  
}

activity)main.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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">  
  
 <TextView  
 android:id="@+id/textView8"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Form Validation"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.41"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.015" />  
  
 <TextView  
 android:id="@+id/t1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Name:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.091"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.136" />  
  
 <EditText  
 android:id="@+id/e1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="text"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.781"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.104" />  
  
 <TextView  
 android:id="@+id/t2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="DOB:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.089"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.198" />  
  
 <EditText  
 android:id="@+id/e2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:hint="(MM/DD/YYYY)"  
 android:inputType="text"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.776"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.185" />  
  
 <TextView  
 android:id="@+id/t3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Gender:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.093"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.268" />  
  
 <TextView  
 android:id="@+id/t4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Address:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.095"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.375" />  
  
 <EditText  
 android:id="@+id/e4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:gravity="start|top"  
 android:inputType="textMultiLine"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.786"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.371" />  
  
 <TextView  
 android:id="@+id/t5"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Hobbies:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.095"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.469" />  
  
 <CheckBox  
 android:id="@+id/c1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Dance"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.47"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.467" />  
  
 <CheckBox  
 android:id="@+id/c2"  
 android:layout\_width="82dp"  
 android:layout\_height="49dp"  
 android:text="Singing"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.796"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.466" />  
  
 <CheckBox  
 android:id="@+id/c3"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Cooking"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.487"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.566" />  
  
 <TextView  
 android:id="@+id/t6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Password:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.098"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.658" />  
  
 <CheckBox  
 android:id="@+id/c4"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Others"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.779"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.566" />  
  
 <EditText  
 android:id="@+id/e6"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="text"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.786"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.658" />  
  
 <TextView  
 android:id="@+id/t7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Email Id:"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.094"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.741" />  
  
 <EditText  
 android:id="@+id/e7"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="text"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.781"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.755" />  
  
 <Button  
 android:id="@+id/b1"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Submit"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.138"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.897" />  
  
 <Button  
 android:id="@+id/b2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Clear"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.77"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.897" />  
  
 <RadioGroup  
 android:layout\_width="213dp"  
 android:layout\_height="72dp"  
 android:orientation="horizontal"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.803"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.277">  
  
 <RadioButton  
 android:id="@+id/rb1"  
 android:layout\_width="64dp"  
 android:layout\_height="wrap\_content"  
 android:text="M" />  
  
 <RadioButton  
 android:id="@+id/rb2"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="F" />  
 </RadioGroup>

</androidx.constraintlayout.widget.ConstraintLayout>

Activity\_main2.xml

<?xml version="1.0" encoding="utf-8"?>  
<androidx.constraintlayout.widget.ConstraintLayout 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:background="@color/design\_default\_color\_primary"  
 tools:context=".MainActivity2">  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Successfull"  
 android:textColor="#EA1909"  
 android:textSize="48sp"  
 android:textStyle="bold"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
</androidx.constraintlayout.widget.ConstraintLayout>

Output



