

EX:NO:06

FORM VALIDATION

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AIM:-

Design an android activity with two text boxes where the user can enter (username and ID) and a button (validate). Validate the entered username and ID field for the following using android code. i) Both the fields should not be empty ii) Name field should have alphabets iii) ID field should have numeric values (only 4-digit).

PROCEDURE:-

Step 1: Create Layout XML File.

Step 2: Implement Input Validation.

Step 3: Display Validation Results.

Step 4: Handle Button Click.

PROGRAM CODE:-

AndroidManifest.xml:

```
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.validation">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
```

```
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name=".MainActivity2" />
    </application>
</manifest>
```

activity_main.xml:

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    tools:context=".MainActivity">
    <EditText
        android:id="@+id/editTextUsername"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:hint="Enter Username" />
    <EditText
        android:id="@+id/editTextID"
```

```
android:layout_below="@id/editTextUsername"
```

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

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

```
android:layout_marginTop="16dp"
```

```
android:hint="Enter ID" />
```

```
<Button
```

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

```
android:layout_below="@id/editTextID"
```

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

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

```
android:layout_centerHorizontal="true"
```

```
android:layout_marginTop="16dp"
```

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

```
</RelativeLayout>
```

activity_main2.xml:

```
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
```

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

```
android:layout_height="match_parent"
```

```
android:gravity="center"
```

```
android:orientation="vertical">
```

```
<TextView
```

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

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

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

```
    android:textSize="18sp"
```

```
    android:textStyle="bold"
```

```
    android:visibility="gone" />
```

```
</LinearLayout>
```

MainActivity.kt:

```
package com.example.validation
```

```
import android.content.Intent
```

```
import androidx.appcompat.app.AppCompatActivity
```

```
import android.os.Bundle
```

```
import android.widget.Button
```

```
import android.widget.EditText
```

```
import android.widget.Toast
```

```
class MainActivity : AppCompatActivity() {
```

```
    override fun onCreate(savedInstanceState: Bundle?) {
```

```
        super.onCreate(savedInstanceState)
```

```
        setContentView(R.layout.activity_main)
```

```
        val editTextUsername = findViewById<EditText>(R.id.editTextUsername)
```

```
        val editTextID = findViewById<EditText>(R.id.editTextID)
```

```
        val buttonValidate = findViewById<Button>(R.id.buttonValidate)
```

```
        buttonValidate.setOnClickListener {
```

```
            val username = editTextUsername.text.toString()
```

```
            val id = editTextID.text.toString()
```

```

        if (username.isEmpty() || id.isEmpty()) {

            Toast.makeText(this, "Both fields are required",
Toast.LENGTH_SHORT).show()

        } else if (!username.matches("[a-zA-Z]+".toRegex())) {

            Toast.makeText(this, "Username should contain only alphabets",
Toast.LENGTH_SHORT).show()

        } else if (!id.matches("\\d{4}".toRegex())) {

            Toast.makeText(this, "ID should contain exactly 4 digits",
Toast.LENGTH_SHORT).show()

        } else {

            val intent = Intent(this, MainActivity2::class.java)

            intent.putExtra("username", username)

            intent.putExtra("id", id)

            startActivity(intent)

        }

    }

}

```

MainActivity2.kt:

```

package com.example.validation

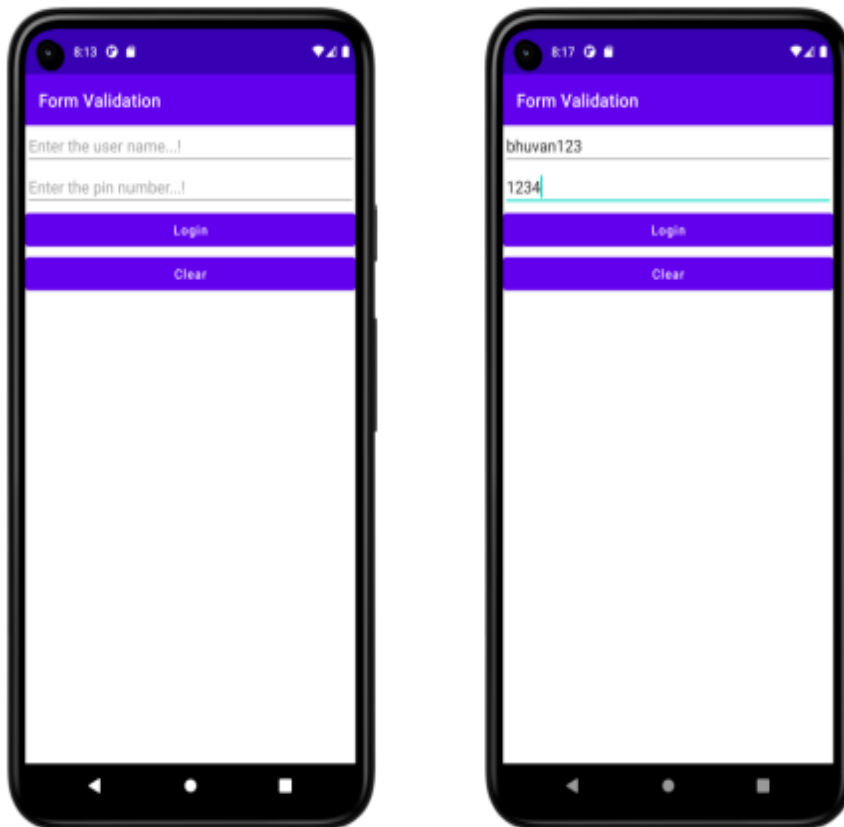
import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.widget.TextView

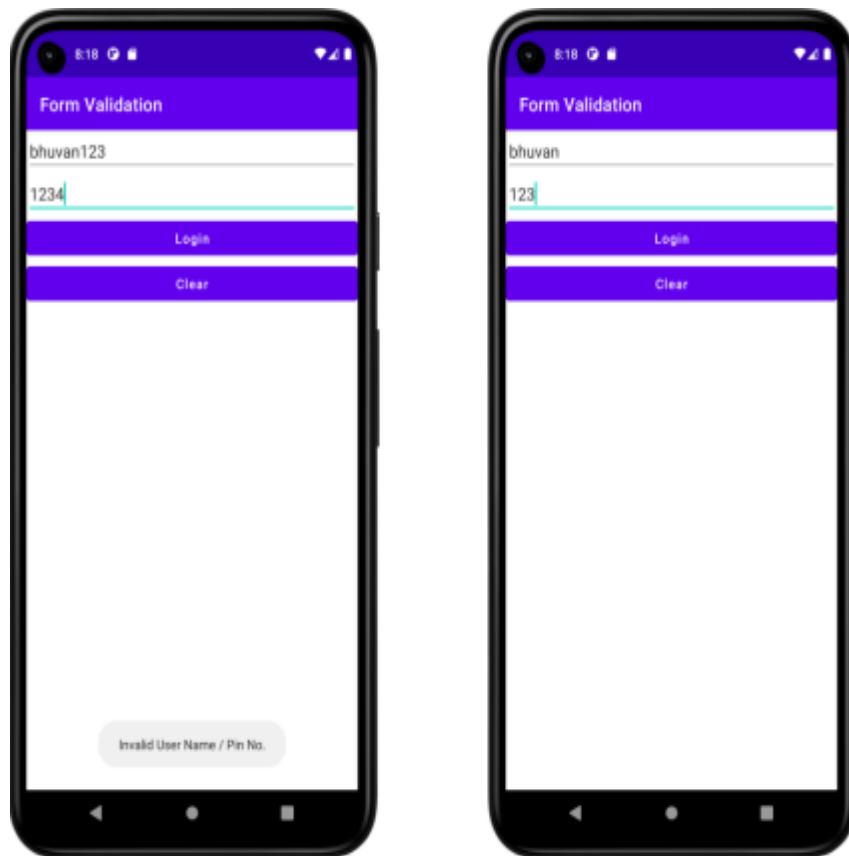
class MainActivity2 : AppCompatActivity() {

```

```
override fun onCreate(savedInstanceState: Bundle?) {  
    super.onCreate(savedInstanceState)  
    setContentView(R.layout.activity_main2)  
    val textViewResult = findViewById<TextView>(R.id.textViewResult)  
    val username = intent.getStringExtra("username")  
    val id = intent.getStringExtra("id")  
    textViewResult.text = "Username: $username\nID: $id"  
    textViewResult.visibility = TextView.VISIBLE  
}  
}
```

OUTPUT:-





RESULT:-

Thus to design an android activity with two text boxes where the user can enter (username and ID) and a button is implemented and executed successfully.