

**DATE:****FORM VALIDATION****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:**

- Open Android Studio and import the package
- In activity\_main.xml drag and drop the buttons
- The button needs to perform actions to change the colour, font size and background colour
- Click android virtual device that should control the toolbar
- Design the graphical layout with the textview and buttons
- Run the application
- The version of android and name is displayed
- The theme of the file is also mentioned in a file
- Run the file using the version which is displayed to the users.

**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:supportsRtl="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:**

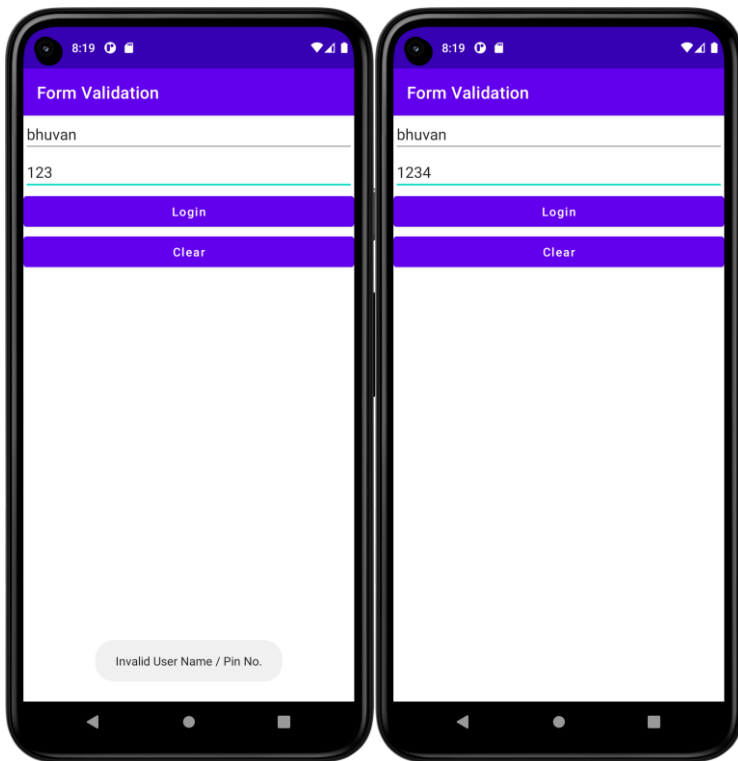
```

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:**