

Ex. No. : 01

Date:

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GUI Components

Aim

Develop an application to change the font and color of the text and display toast message when the user presses the button.

Procedure:

1. Open Android Studio and create a new project with an empty activity.
2. Add a TextView to display text and a Button for user interaction.
3. Include a custom font file in the res/font/ folder.
4. Set an OnClickListener for the button to change the font and text color when clicked.
5. Display a toast message to notify the user when the button is pressed.
6. Run the app on an emulator or device to check the functionality

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools">

    <application
        android:allowBackup="true"
        android:dataExtractionRules="@xml/data_extraction_rules"
        android:fullBackupContent="@xml/backup_rules"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.Exp1"
        tools:targetApi="31">
        <activity
            android:name=".MainActivity"
            android:exported="true">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>

</manifest>
```



Activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="center"
    android:padding="20dp">

    <TextView
        android:id="@+id/textView"
        android:text="Hello World!"
        android:textSize="24sp"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"/>

    <Button
        android:id="@+id/button"
        android:text="Change Font and Color"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="30dp"/>

</LinearLayout>
```

MainActivity.kt

```
package com.example.exp1;
import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.widget.TextView;
import android.widget.Button;
import android.graphics.Color;
import android.graphics.Typeface;
import android.view.View;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    TextView textView;
    Button button;

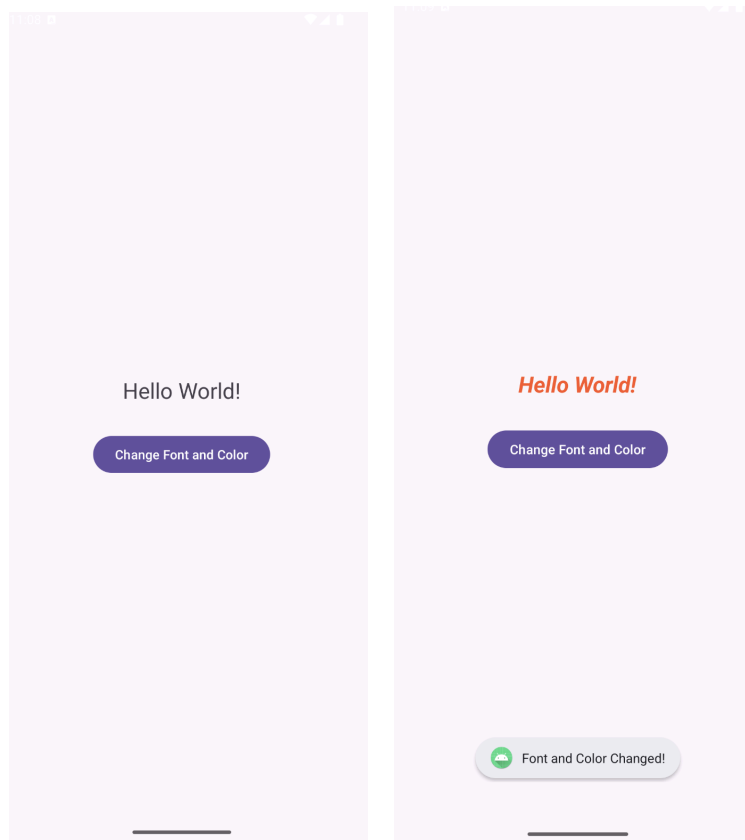
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        textView = findViewById(R.id.textView);
        button = findViewById(R.id.button);

        button.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                textView.setTypeface(null, Typeface.BOLD_ITALIC);
                textView.setTextColor(Color.parseColor("#FF5722"));
                Toast.makeText(MainActivity.this, "Font and Color Changed!",
                    Toast.LENGTH_SHORT).show();
            }
        });
    }
}
```



Output



Result:

The application successfully changes the font and color of the text and displays a toast message when the user presses the button.

