2CEIT5PE18: MOBILE APPLICATION DEVELOPMENT

Practical: 2

AIM:- Create Android Application to demonstrate functions of Activity Life Cycle and Basic UI.

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Practical-2

Create Activity to display "Hello World" in <u>TextView</u> in the center of Activity screen with yellow (android:background="#FFFF00") layout background of Activity. <u>TextView</u> properties should be Holo Blue color (android:textColor=@android:color/holo_blue_bright), 27sp font size (android:textSize="27sp") and make text style bold and italic (android:textStyle="bold|italic"). After creating Activity, demonstrate functions of <u>Activity Life Cycle</u> by using <u>Log</u> message, <u>Toast</u> message & <u>Snackbar</u> message. All methods of Activity life cycle should be printed in <u>Logcat</u>.

```
Activity main.xml:
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.ConstraintLayout</p>
  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:id="@+id/main"
  android:layout width="match parent"
  android:layout height="match parent"
  android:background="#ffff00"
  tools:context=".MainActivity">
  <TextView
    android:id="@+id/textView2"
    android:layout width="wrap content"
    android:layout height="wrap content"
    android:text="Hello World"
    android:textColor="@android:color/holo blue light"
    android:textSize="27sp"
    android:textStyle="bold|italic"
    app:layout constraintBottom toBottomOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toTopOf="parent" />
  <TextView
    android:id="@+id/textView1"
    android:layout width="412dp"
    android:layout height="48dp"
    android:background="#7131E3"
    android:text="MAD-Practical1"
    android:textSize="30dp"
    android:textStyle="bold"
    android:textColor="#FBFBFB"
    android:paddingTop="7dp"
```

android:paddingLeft="40dp"

```
android:layout marginTop="0dp"
    app:layout constraintBottom toTopOf="@+id/textView2"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintEnd toEndOf="parent"
    app:layout constraintHorizontal bias="0.0"
    app:layout constraintVertical bias="0.0"
    />
</androidx.constraintlayout.widget.ConstraintLayout>
   MainActivity.kt
package com.example.madprac 2
import android.nfc.Tag
import android.os.Bundle
import android.util.Log
import androidx.activity.enableEdgeToEdge
import android.widget.Toast
import com.google.android.material.snackbar.Snackbar
import androidx.appcompat.app.AppCompatActivity
import androidx.core.view.ViewCompat
import androidx.core.view.WindowInsetsCompat
class MainActivity : AppCompatActivity() {
  val TAG = "MainActivity"
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    enableEdgeToEdge()
    setContentView(R.layout.activity main)
    ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main)) { v, insets ->
      val systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars())
      v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom)
      insets
    showMessage("onCreate function has been called.")
```

Toast.makeText(this, msg, Toast.LENGTH SHORT).show()

fun showMessage(msg: String){

Log.i(TAG,msg)

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```
fun showMessage2(msg: String){
  Log.i(TAG,msg)
  Snackbar.make(findViewById(R.id.main), msg, Snackbar.LENGTH SHORT).show()
override fun onStart() {
  super.onStart()
  showMessage2("onStart function has been called.")
override fun onPause() {
  super.onPause()
  showMessage("onPause function has been called.")
override fun onRestart() {
  super.onRestart()
  showMessage("onRestart function has been called")
override fun onDestroy() {
  super.onDestroy()
  showMessage("onDestroy function has been called")
override fun onResume() {
  super.onResume()
  showMessage("onResume function has been called")
override fun onStop() {
  super.onStop()
  showMessage("onStop function has been called")
```

}

Output:

