2CEIT5PE5: MOBILE APPLICATION DEVELOPMENT

Practical: 2

Submitted By: AMIT GOSWAMI Enrollment number: 21012021003



Department of Computer Engineering/Information Technology

Study:

TextView and its properties, Toast Message, Snackbar Message, Android in-built resources like color, Activity Life Cycle, Log Message in logcat, Properties of Layout ConstraintLayout, Generate id of TextView

AIM:

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>.

Code:

MainActivity

```
package com.example.mad_practical_2_21012021003

import androidx.appcompat.app.AppCompatActivity
import android.os.Bundle
import android.util.Log
import android.view.View
import android.widget.Toast
import androidx.constraintlayout.widget.ConstraintLayout
import com.google.android.material.snackbar.Snackbar

class MainActivity: AppCompatActivity() {
  val TAG = "MainActivity"
  override fun onCreate(savedInstanceState: Bundle?) {
    super.onCreate(savedInstanceState)
    setContentView(R.layout.activity_main)
```

```
showMessage("onCreate method is called")
}
fun showMessage(msg:String){
  Log.i(TAG, msg)
  Toast.makeText(this, msg, Toast.LENGTH SHORT).show()
  val v: ConstraintLayout? = findViewById(R.id.myConstraintLayout)
  if (v!=null)
    Snackbar.make(
       findViewById(R.id.myConstraintLayout),msg,Snackbar.LENGTH_SHORT
    ).show()
}
override fun onStart() {
  super.onStart()
  showMessage("onStart method is called")
}
override fun onResume() {
  super.onResume()
  showMessage("onResume method is called")
}
override fun onPause() {
  super.onPause()
  showMessage("onPause method is called")
}
override fun onStop() {
  super.onStop()
```

```
showMessage("onStop method is called")
}

override fun onDestroy() {
    super.onDestroy()
    showMessage("onDestroy method is called")
}

override fun onRestart() {
    super.onRestart()
    showMessage("onRestart method is called")
}
```

activity_main.xml

```
android:layout_height="wrap_content"
android:text=" Hello World!"
android:textColor="@android:color/holo_red_dark"
android:textSize="30sp"
android:textStyle="bold|italic"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />
```

 $<\!\!/ and roidx. constraint layout. widget. Constraint Layout \!\!>$

```
2023-07-28 08:46:50.624 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onCreate method is called
2023-07-28 08:46:50.780 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onStart method is called
2023-07-28 08:46:50.798 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onResume method is called
2023-07-28 08:47:17.626 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onPause method is called
2023-07-28 08:47:17.740 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onStop method is called
2023-07-28 08:47:23.362 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onRestart method is called
2023-07-28 08:47:23.411 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onStart method is called
2023-07-28 08:47:23.477 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onResume method is called
2023-07-28 08:47:34.704 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003 I onPause method is called
2023-07-28 08:47:34.810 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003
                                                                                               I onStop method is called
2023-07-28 08:47:34.864 10600-10600 MainActivity
                                                           com...e.mad_practical_2_21012021003
                                                                                               I onDestroy method is called
```

