Week2:Develop an application that uses GUI components to display a “Hello World” message and change its color and font size.

JAVA FILE:MainActivity.java

package com.example.hello;

import androidx.appcompat.app.AppCompatActivity;

import android.annotation.SuppressLint;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.TextView;

public class MainActivity extends AppCompatActivity {

float font =24;

int i=1;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

final TextView t1=(TextView) findViewById(R.id.textView);

Button b1 = (Button) findViewById(R.id.button1);

b1.setOnClickListener(new View.OnClickListener() {

public void onClick(View view) { t1.setTextSize(font);

font=font+4; if(font==40) font=20;

}

});

Button b2 = (Button) findViewById(R.id.button2); b2.setOnClickListener(new View.OnClickListener() {

public void onClick(View view) {

switch(i)

{

case 1: t1.setTextColor(Color.parseColor("#0000FF")); break;

case 2: t1.setTextColor(Color.parseColor("#00FF00")); break;

case 3: t1.setTextColor(Color.parseColor("#FF0000")); break;

case 4: t1.setTextColor(Color.parseColor("#800000")); break;

}

i++;

if(i==5)

i=1;

}

});

}

}

XML FILE: activity\_main.xml

<?xml version="1.0" encoding="utf-8"?>

<androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity">

<TextView

android:id="@+id/textView"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Hello World!"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent" />

<Button

android:id="@+id/button1"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="change Font"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

app:layout\_constraintHorizontal\_bias="0.24"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.746" />

<Button

android:id="@+id/button2"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:text="Change Color"

app:layout\_constraintBottom\_toBottomOf="parent"

app:layout\_constraintEnd\_toEndOf="parent"

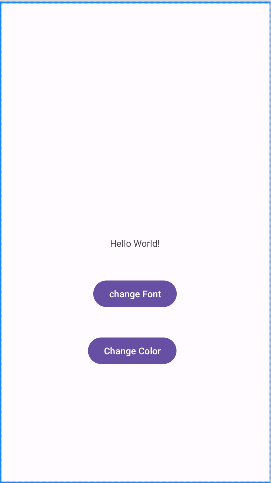
app:layout\_constraintHorizontal\_bias="0.765"

app:layout\_constraintStart\_toStartOf="parent"

app:layout\_constraintTop\_toTopOf="parent"

app:layout\_constraintVertical\_bias="0.736" />

</androidx.constraintlayout.widget.ConstraintLayout>



Week3: Develop an application that receives user’s name, contact and city and displays the same using Layout Managers and Event Listeners.

Method1: with in the same Activity

JAVA File:

MainActivity.java

package com.example.week2;  
  
import androidx.appcompat.app.AppCompatActivity;  
  
import android.os.Bundle;  
import android.view.View;  
import android.widget.Button;  
import android.widget.EditText;  
import android.widget.TextView;  
import android.widget.Toast;  
  
public class MainActivity extends AppCompatActivity {  
 EditText e1,e2,e3;  
 Button b;  
 String name,email,ph\_no;  
 TextView result;  
  
 @Override  
 protected void onCreate(Bundle savedInstanceState) {  
 super.onCreate(savedInstanceState);  
 setContentView(R.layout.*activity\_main*);  
  
 e1= (EditText) findViewById(R.id.*editTextText*);  
 e2= (EditText) findViewById(R.id.*editTextTextEmailAddress*);  
 e3=(EditText)findViewById(R.id.*editTextPhone*);  
 b= (Button) findViewById(R.id.*button*);  
*// result = (TextView) findViewById(R.id.textView2);* b.setOnClickListener(new View.OnClickListener() {  
 @Override  
 public void onClick(View v) {  
  
 *//Getting the Values from Views(Edittext)* name=e1.getText().toString();  
 email=e2.getText().toString();  
 ph\_no=e3.getText().toString();  
  
  
 result=(TextView)findViewById(R.id.*textView2*);  
 result.setText("name="+name+"\nEmail"+email+"\nPhone no="+ph\_no);  
  
  
 *//Toast.makeText(getApplicationContext(),name,Toast.LENGTH\_SHORT).show();  
 //Toast.makeText(getApplicationContext(),email,Toast.LENGTH\_SHORT).show();  
 //Toast.makeText(getApplicationContext(),ph\_no,Toast.LENGTH\_SHORT).show();* }  
 });  
 }  
}

XML File: activity\_main.xml

*<?*xml version="1.0" encoding="utf-8"*?>*<androidx.constraintlayout.widget.ConstraintLayout 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:layout\_width="match\_parent"  
 android:layout\_height="match\_parent"  
 tools:context=".MainActivity">  
  
 <EditText  
 android:id="@+id/editTextText"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="30"  
 android:inputType="text"  
 android:hint="Enter the Name"  
 android:textAlignment="center"  
 android:textSize="30sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.437"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.138" />  
  
 <EditText  
 android:id="@+id/editTextTextEmailAddress"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="textEmailAddress"  
 android:hint="Enter the Email Address"  
 android:textAlignment="center"  
 android:textSize="30sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.437"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.234" />  
  
 <EditText  
 android:id="@+id/editTextPhone"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:ems="10"  
 android:inputType="phone"  
 android:hint="Enter the Phone Number"  
 android:textAlignment="center"  
 android:textSize="30sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.437"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.345" />  
  
 <TextView  
 android:id="@+id/textView"  
 android:layout\_width="345dp"  
 android:layout\_height="73dp"  
 android:text="Enter the Details"  
 android:textAlignment="center"  
 android:textSize="30sp"  
 android:textAllCaps="true"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.407"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.057" />  
  
 <Button  
 android:id="@+id/button"  
 android:layout\_width="wrap\_content"  
 android:layout\_height="wrap\_content"  
 android:text="Save"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent" />  
  
 <TextView  
 android:id="@+id/textView2"  
 android:layout\_width="388dp"  
 android:layout\_height="200dp"  
 android:text=""  
 android:textSize="30sp"  
 app:layout\_constraintBottom\_toBottomOf="parent"  
 app:layout\_constraintEnd\_toEndOf="parent"  
 app:layout\_constraintHorizontal\_bias="0.695"  
 app:layout\_constraintStart\_toStartOf="parent"  
 app:layout\_constraintTop\_toTopOf="parent"  
 app:layout\_constraintVertical\_bias="0.877" />  
  
  
</androidx.constraintlayout.widget.ConstraintLayout>

