Android Application that uses GUI components, Font and Colors

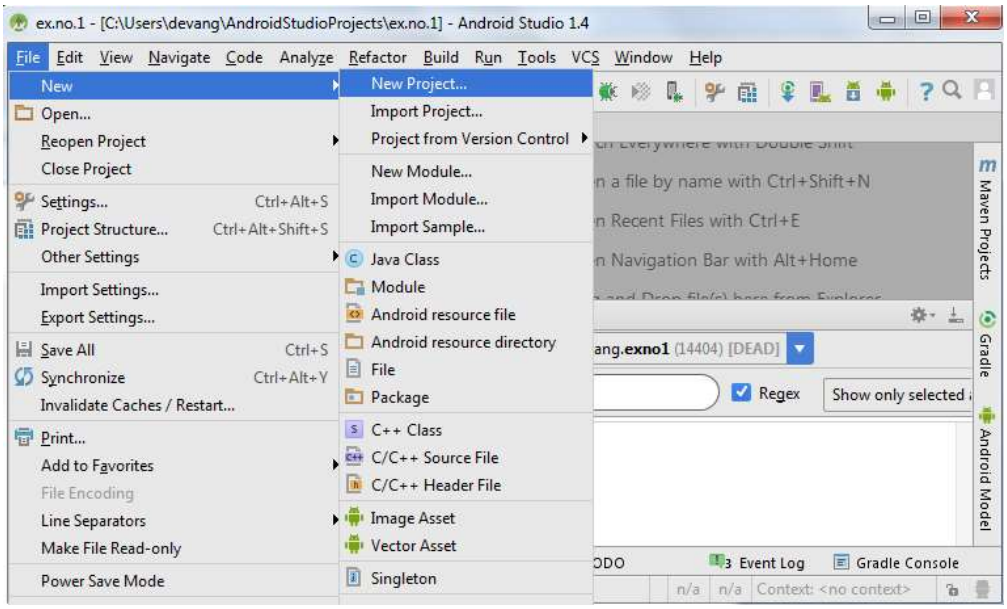
Aim:

To develop a Simple Android Application that uses GUI components, Font and Colors.

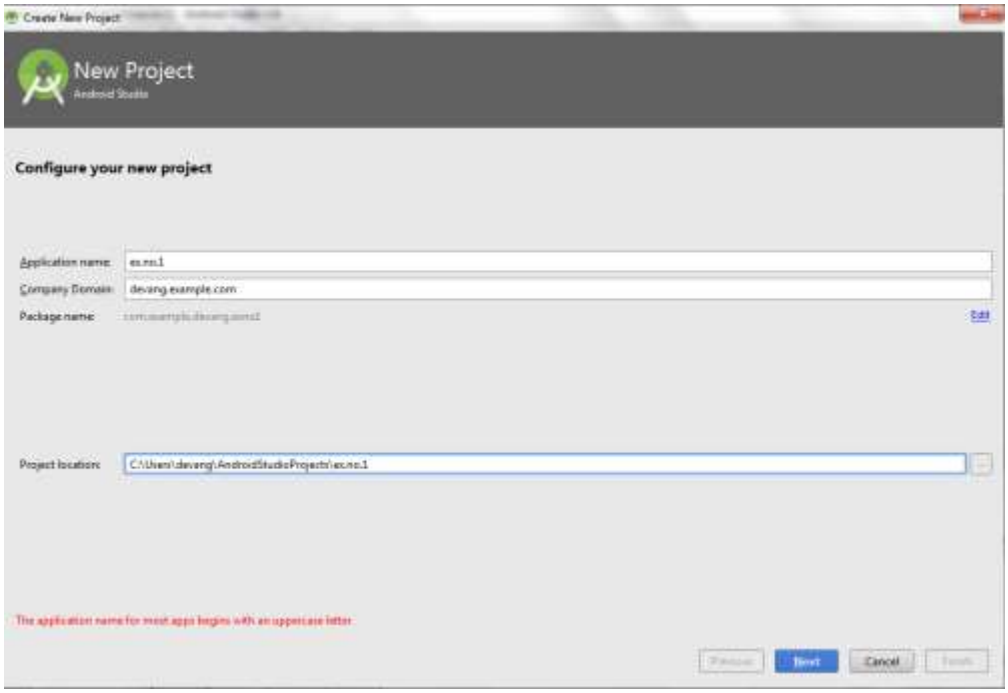
Procedure:

Creating a New project:

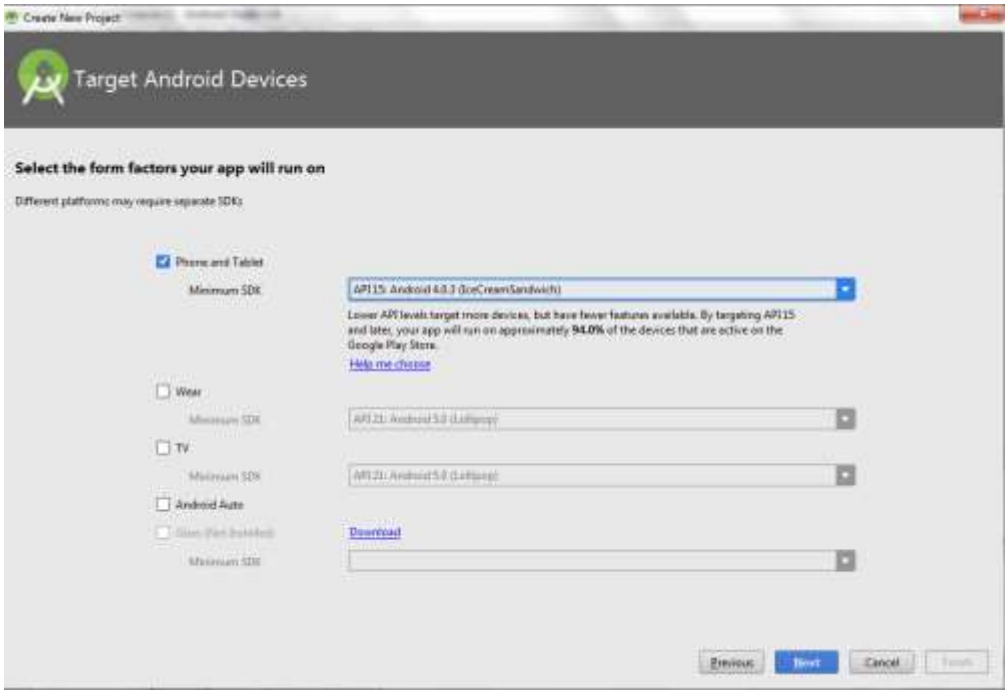
- Open Android Stdio and then click on **File -> New -> New project.**



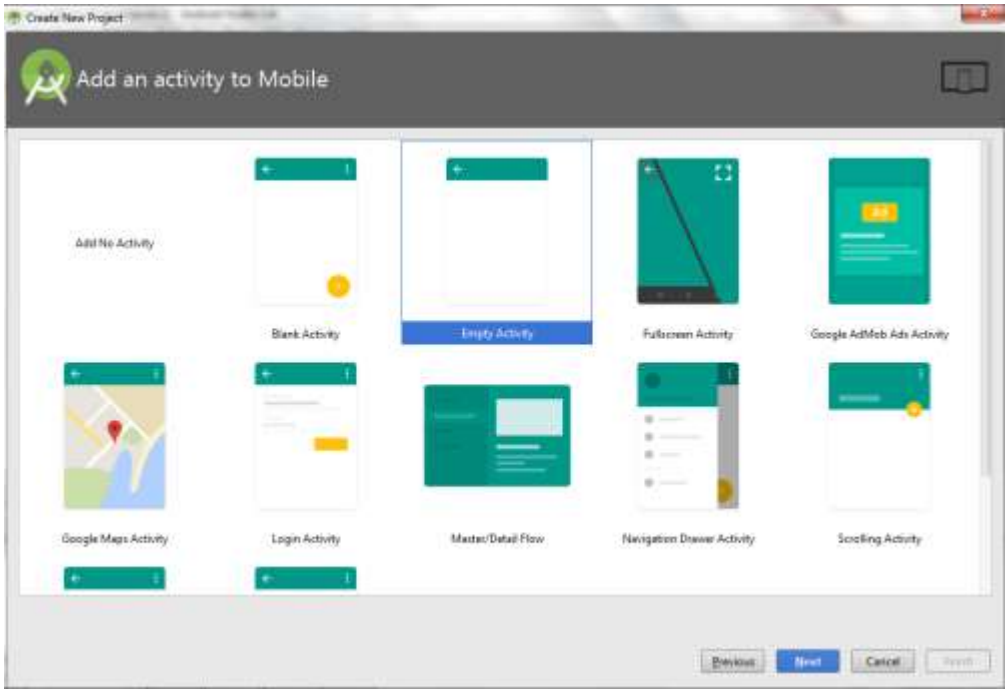
- Then type the Application name as "**ex.no.1"** and click **Next.**



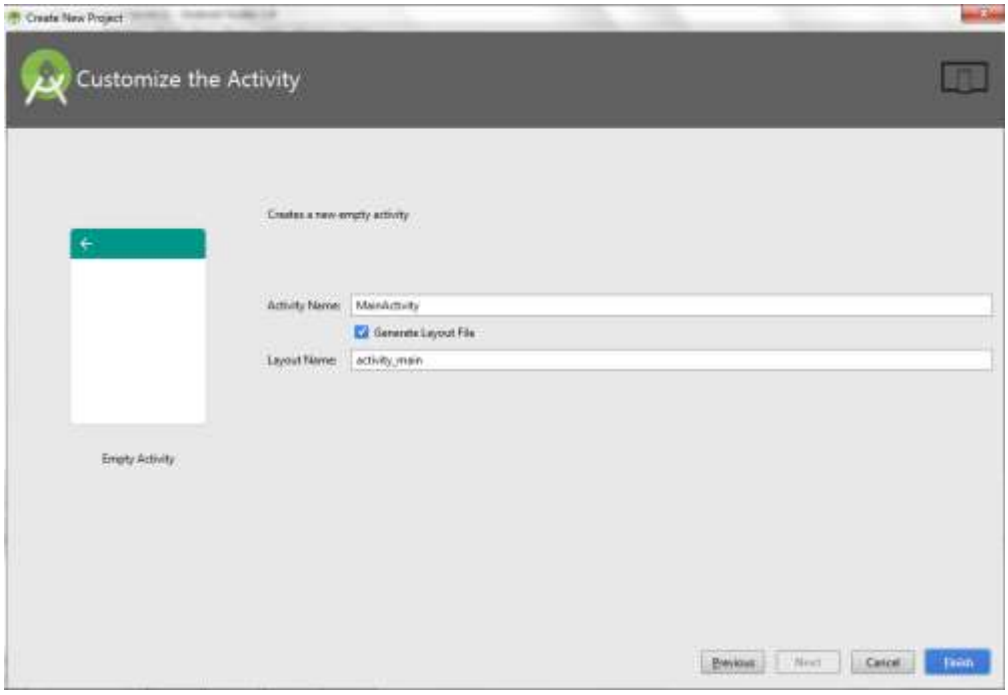
- Then select the **Minimum SDK** as shown below and click **Next**.



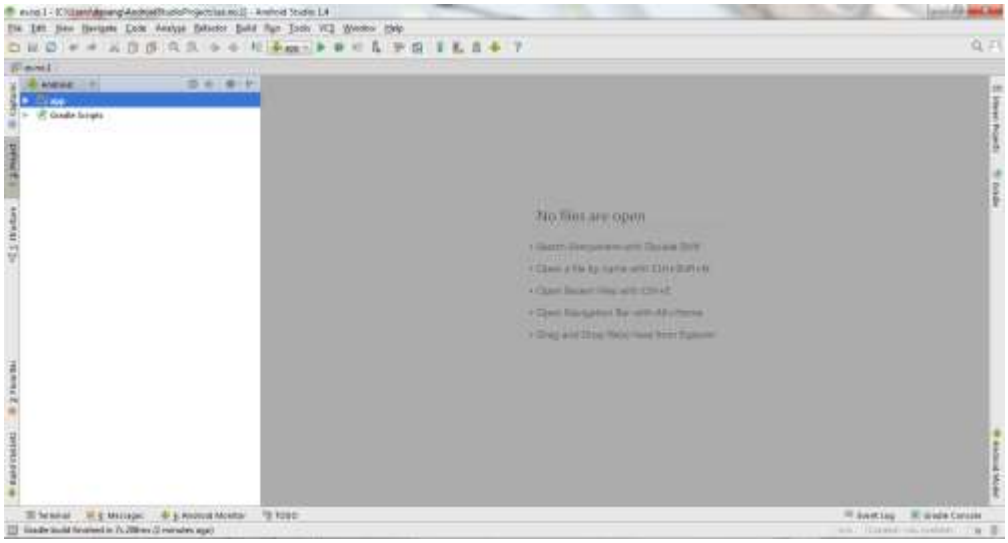
- Then select the **Empty Activity** and click **Next.**



- Finally click F**inish**.

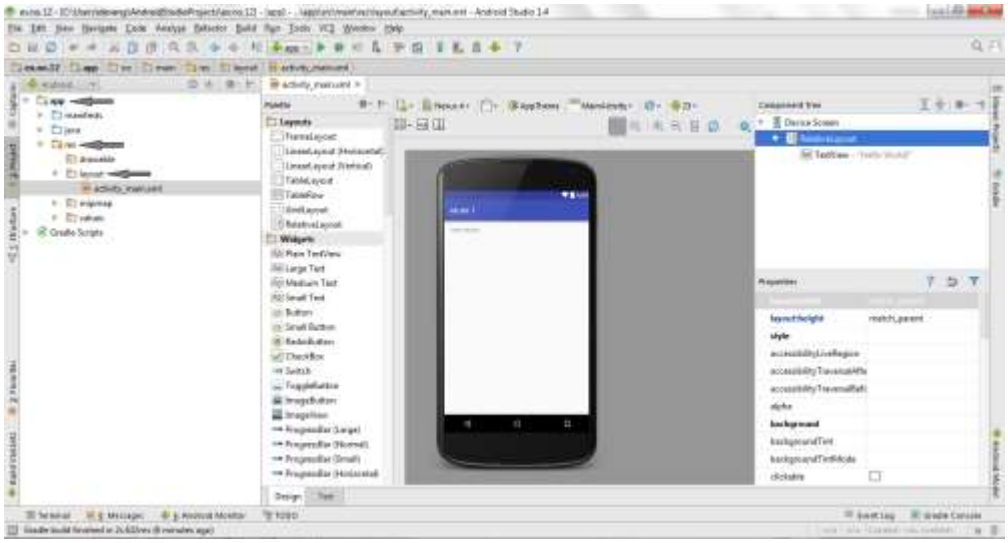


- It will take some time to build and load the project.
- After completion it will look as given below.

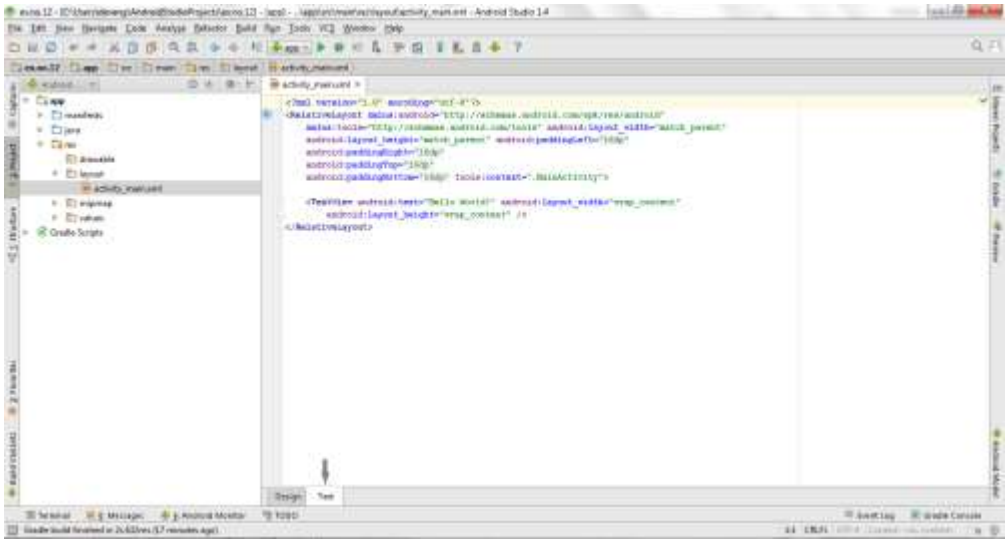


Designing layout for the Android Application:

- Click on **app -> res -> layout -> activity_main.xml.**



- Now click on **Text** as shown below.



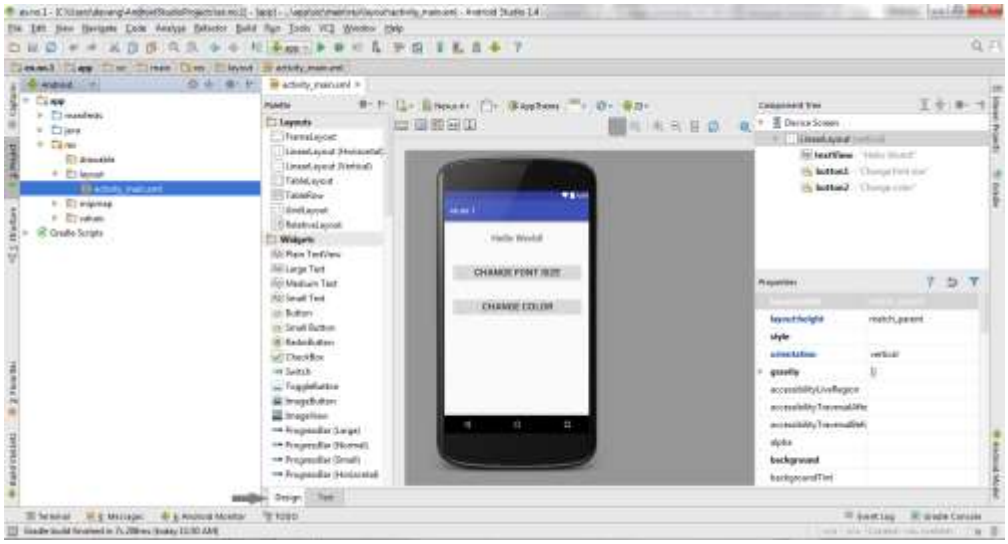
- Then delete the code which is there and type the code as given below.

Code for Activity_main.xml:

```
?
1
2  <?xml version="1.0" encoding="utf-8"?>
3  <LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
4      android:orientation="vertical"
5      android:layout_width="match_parent"
6      android:layout_height="match_parent">
7
8      <TextView
9          android:id="@+id/textView"
10         android:layout_width="match_parent"
11         android:layout_height="wrap_content"
12         android:layout_margin="30dp"
13         android:gravity="center"
14         android:text="Hello World!"
15         android:textSize="25sp"
16         android:textStyle="bold" />
17
18     <Button
19         android:id="@+id/button1"
20         android:layout_width="match_parent"
21         android:layout_height="wrap_content"
22         android:layout_margin="20dp"
23         android:gravity="center"
24         android:text="Change font size"
25         android:textSize="25sp" />
26     <Button
27         android:id="@+id/button2"
28         android:layout_width="match_parent"
29         android:layout_height="wrap_content"
30         android:layout_margin="20dp"
31         android:gravity="center"
32         android:text="Change color"
33         android:textSize="25sp" />
34 </LinearLayout>
35
```

30
31
32
33

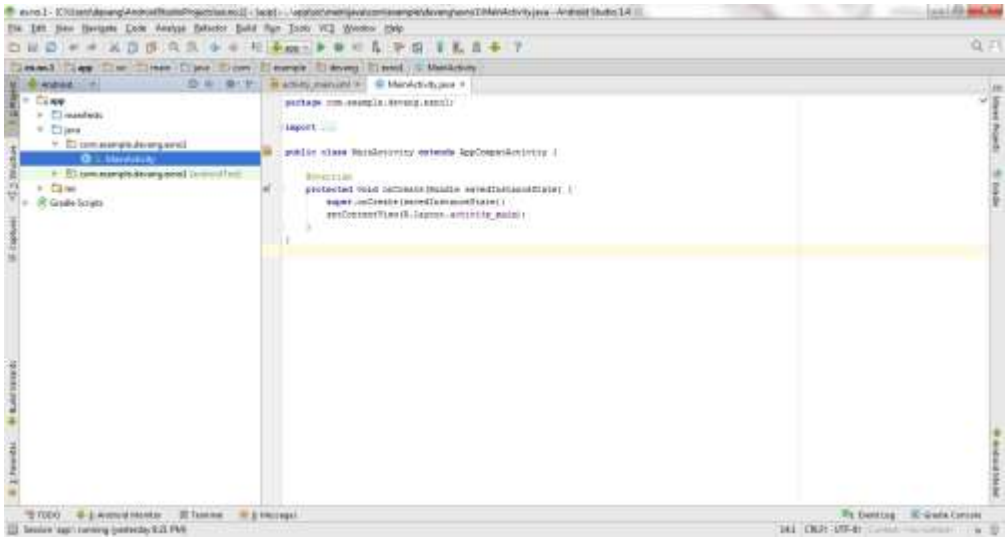
- Now click on Design and your application will look as given below.



- So now the designing part is completed.

Java Coding for the Android Application:

- Click on **app -> java -> com.example.exno1 -> MainActivity.**



- Then delete the code which is there and type the code as given below.

Code for MainActivity.java:

?

```
1 package com.example.exno1;
```

```
2
3 import android.graphics.Color;
4 import android.support.v7.app.AppCompatActivity;
5 import android.os.Bundle;
6 import android.view.View;
7 import android.widget.Button;
8 import android.widget.TextView;
9
10 public class MainActivity extends AppCompatActivity
{
    int ch=1;
    float font=30;
    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        final TextView t= (TextView) findViewById(R.id.textView);
        Button b1= (Button) findViewById(R.id.button1);
        b1.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                t.setTextSize(font);
                font = font + 5;
                if (font == 50)
                    font = 30;
            }
        });
        Button b2= (Button) findViewById(R.id.button2);
        b2.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                switch (ch) {
                    case 1:
                        t.setTextColor(Color.RED);
                        break;
                    case 2:
                        t.setTextColor(Color.GREEN);
                        break;
                    case 3:
                        t.setTextColor(Color.BLUE);
                        break;
                    case 4:
                        t.setTextColor(Color.CYAN);
                        break;
                    case 5:
                        t.setTextColor(Color.YELLOW);
                        break;
                    case 6:
                        t.setTextColor(Color.MAGENTA);
                        break;
                }
                ch++;
                if (ch == 7)
                    ch = 1;
            }
        });
    }
}
51
```

52
53
54
55
56
57
58
59
60

- So now the Coding part is also completed.
- Now run the application to see the output.

Output:

25% 10:53
ex.no.1
Hello World!
CHANGE FONT SIZE
CHANGE COLOR

25% 10:53
ex.no.1
Hello World!
CHANGE FONT SIZE
CHANGE COLOR

25% 10:56
ex.no.1
Hello World!
CHANGE FONT SIZE
CHANGE COLOR

Result:

Thus a Simple Android Application that uses GUI components, Font and Colors is developed and executed successfully.