# Project 1: How to Change the Color of the Button

Open Eclipse Editor

File => New => Android Project Give the project Name as “ProjButtonColor”

Select 2.1 avd

Package Name : com.pbc.cpbc

**Main.xml [red color code you have to either by adding or by placing two buttons and and a TextView]**

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

<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/android"

android:orientation="vertical"

android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent">

<Button

android:layout\_height="wrap\_content"

android:layout\_width="fill\_parent"

android:text="@string/button1\_label"

android:onClick="randomizeColor"/>

<Button

android:layout\_height="wrap\_content"

android:layout\_width="fill\_parent"

android:text="@string/button2\_label"

android:onClick="randomizeColor"/>

<TextView

android:layout\_height="fill\_parent"

android:layout\_width="fill\_parent"

android:textSize="48px"

android:gravity="center\_horizontal"

android:text=" click on the button to see the color change "/>

</LinearLayout>

**Activity.java [red color code you have to type in your class]**

import android.app.Activity;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import java.util.Random;

public class YOURCLASSNAME extends Activity {

// All the standard colors EXCEPT black (in which case you couldn't see the button)

private int[] mColorChoices =

{ Color.BLUE, Color.CYAN,

Color.DKGRAY, Color.GRAY, Color.GREEN,

Color.LTGRAY, Color.MAGENTA, Color.RED,

Color.WHITE, Color.YELLOW };

/\*\* Initializes the app when it is first created. \*/

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.main);

}

/\*\* Randomly changes the bg color of the button that was pressed.

\* The layout file (main.xml) designates this method as the event handler for both buttons.

\*/

public void randomizeColor(View button) {

Random generator = new Random();

int index = generator.nextInt(mColorChoices.length);

button.setBackgroundColor(mColorChoices[index]);

}

}

Execute the project and click on the button and see the color change of the button

Finally close the project

# Project 2: How to Change the Color of the Background

File => New => Android Project Give the project Name as “ProjBGColor”

Select 2.1 avd

Package Name : com.pbgc.cpbgc

**Main.xml [red color code you have to either by adding or by placing two buttons and and a TextView]**

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

<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/android"

android:orientation="vertical"

android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent">

<Button

android:layout\_height="wrap\_content"

android:layout\_width="fill\_parent"

android:text="@string/button1\_label"

android:onClick="randomizeColor"/>

<Button

android:layout\_height="wrap\_content"

android:layout\_width="fill\_parent"

android:text="@string/button2\_label"

android:onClick="randomizeColor"/>

<TextView

android:layout\_height="fill\_parent"

android:layout\_width="fill\_parent"

android:textSize="48px"

android:gravity="center\_horizontal"

android:text="click on the button to see the color change "/>

</LinearLayout>

**Activity.java [red color code you have to type in your class]**

import android.app.Activity;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.TextView;

import java.util.Random;

public class YOURCLASSNAME extends Activity {

// All the standard colors

private int[] mColorChoices =

{ Color.BLACK, Color.BLUE, Color.CYAN,

Color.DKGRAY, Color.GRAY, Color.GREEN,

Color.LTGRAY, Color.MAGENTA, Color.RED,

Color.WHITE, Color.YELLOW };

private TextView mTextRegion;

/\*\* Initializes the app when it is first created. \*/

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.main);

mTextRegion = (TextView)findViewById(R.id.text\_region);

}

/\*\* Randomly changes the bg color of the TextView.

\* The layout file (main.xml) designates this method as the event handler for both buttons.

\*/

public void randomizeColor(View button) {

Random generator = new Random();

int index = generator.nextInt(mColorChoices.length);

mTextRegion.setBackgroundColor(mColorChoices[index]);

}

}

Execute the project and click on the button and see the color change of the button

Finally close the project

Have you find the difference between both the projects.

# Project 3: How to Change the Color of the Button [Hybrid]

File => New => Android Project Give the project Name as “ProjHyButtonColor”

Select 2.1 avd

Package Name : com.phbc.cphbc

**Main.xml [red color code you have to either by adding or by placing two buttons and and a TextView]**

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

<LinearLayout

xmlns:android="http://schemas.android.com/apk/res/android"

android:orientation="vertical"

android:layout\_width="fill\_parent"

android:layout\_height="fill\_parent">

<Button

android:id="@+id/color\_button"

android:layout\_height="wrap\_content"

android:layout\_width="fill\_parent"

android:text="Press"/>

<TextView

android:id="@+id/color\_region"

android:layout\_height="fill\_parent"

android:layout\_width="fill\_parent"/>

</LinearLayout>

**Activity.java [red color code you have to type in your class]**

import android.app.Activity;

import android.graphics.Color;

import android.os.Bundle;

import android.view.View;

import android.widget.TextView;

import android.view.View.OnClickListener;

import java.util.Random;

public class BasicsExercises4 extends Activity {

private View mColorRegion;

private int[] mColorChoices =

{ Color.BLACK, Color.BLUE, Color.CYAN,

Color.DKGRAY, Color.GRAY, Color.GREEN,

Color.LTGRAY, Color.MAGENTA, Color.RED,

Color.WHITE, Color.YELLOW };

/\*\* Initializes the app when it is first created. \*/

@Override

public void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.main);

mColorRegion = findViewById(R.id.color\_region);

Button colorButton =

(Button)findViewById(R.id.color\_button);

colorButton.setOnClickListener(new ColorRandomizer());

}

/\*\* Sets the color of the color region. \*/

private void setRegionColor(int color) {

mColorRegion.setBackgroundColor(color);

}

private class ColorRandomizer implements OnClickListener {

/\*\* Calls back to the outer class to set the color of View at the bottom. \*/

public void onClick(View clickedButton) {

Random generator = new Random();

int index = generator.nextInt(mColorChoices.length);

setRegionColor(mColorChoices[index]);

}

}

}

Execute the project and click on the button and see the color change of the button

Finally close the project

# Work to be completed

1. Develop an app which will take three inputs

|  |  |
| --- | --- |
| Loan Amount | EditText |
| Interest | EditText |
| No of Years | EditText |

Calculate the Total amount by calculating the interest compounded annually

**Example**

Loan Amount : 10000

Interest : 8%

No of Years : 2

Final Result will be: 11644

**How it is calculated**

**First year**

(10000\*8)/100 = 800

So Amount After First Year : 10000 + 800 = 10800

**Second Year**

(10800\*8)/100 = 864

So Amount After Second Year: 10800+864 = 11644