

Menus

Menus are useful for displaying additional options that are not directly visible on the main user interface (UI) of an application. There are two main types of menus in Android:

➤ Options menu:

This menu displays information related to the current activity. In Android, you activate the options menu by pressing the Menu button.

➤ Context menu

This menu displays information related to a particular view on an activity. In Android, you tap and hold a context menu to activate it.

- Main menu is shown on the Action Bar
- Main menu can be textual or iconic
- Menu is created as XML resource file in the menu folder

Menu Methods:

- ***onOptionsItemSelected*** method is used to show the main menu on the activity
- ***onOptionsItemSelected*** method is used to define which menu item has been selected by the user
- you can use ***app namespace*** to show the menu as icons on the Action Bar.

Adding icons at the Action Bar:

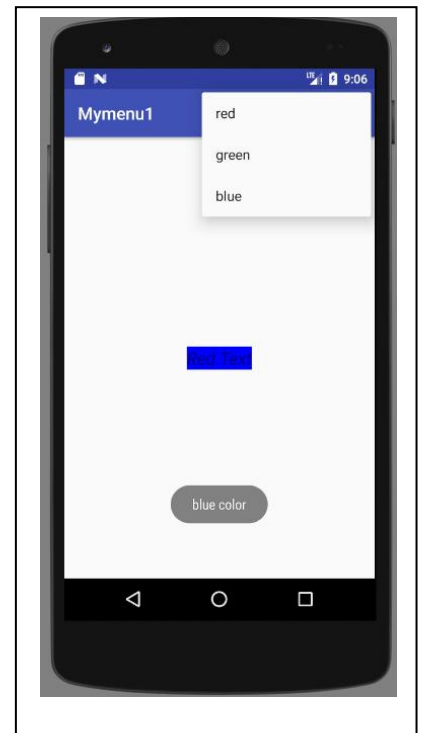
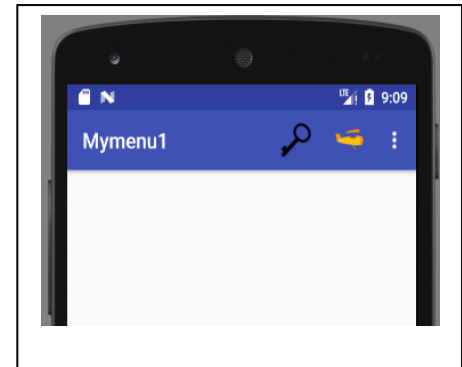
- copy icon images on the drawable folder
- modify the XML menu file as follow:
 - add the ***app namespace*** in the XMLNS element
 - determine the icon image: ***android:icon="@drawable/aircraft"***
 - make the icon visible : ***app:showAsAction="always"***

MenuInflater class:

- This class is used to instantiate menu XML files into Menu objects.
- is an object that is able to create Menu from xml resources (of course only menus resources), that is : construct a new instance of Menu given a menu resource identifier.
- Inflate method : Inflate a menu hierarchy from the specified XML resource

Option Menu:

- create menu folder and xml file:
- right click res folder->new->android resource file-> add menu name-> type:menu: finish.
- Write the following code:



Menu: XML

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:app="http://schemas.android.com/apk/res-auto"
      xmlns:android="http://schemas.android.com/apk/res/android">

    <item android:title="red"
          android:id="@+id/itemred"/>
    <item android:title="green"
          android:id="@+id/itemgreen"/>
    <item android:title="blue"
          android:id="@+id/itemblue"/>
    <item android:title="ic1"
          android:id="@+id/key"
          android:icon="@drawable/key"
          app:showAsAction="always"/>
    <item android:title="ic2"
          android:id="@+id/plane"
          android:icon="@drawable/aircraft"
          app:showAsAction="always"/>

</menu>
```

MainActivity: XML

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.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"
    android:id="@+id/scr"
    tools:context="com.example.itech_mgr.mymenu1.MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Red Text"
        android:textSize="20dp"
        android:id="@+id/redtxt"
        android:textStyle="italic"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintLeft_toLeftOf="parent"
        app:layout_constraintRight_toRightOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

</android.support.constraint.ConstraintLayout>
```

MainActivity: Java

```
package com.example.itech_mgr.mymenu1;

import android.content.Intent;
import android.graphics.Color;
import android.preference.PreferenceScreen;
import android.support.constraint.ConstraintLayout;
```

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```
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.text.Layout;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {
    TextView rtxt;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        MenuInflater inflater = getMenuInflater();
        inflater.inflate(R.menu.mymenu, menu);

        return super.onCreateOptionsMenu(menu);
    }
    @Override
    public boolean onOptionsItemSelected(MenuItem item) {

        switch(item.getItemId()) {
            case R.id.itemred: {
                TextView rtxt=(TextView) findViewById(R.id.redtxt);
                rtxt.setBackgroundColor(Color.RED);
                return true;
            }
            case R.id.itemgreen: {
                Intent i = new Intent(MainActivity.this, Actgreen.class);
                startActivity(i);
                return true;
            }
            case R.id.itemblue: {
                TextView rtxt=(TextView) findViewById(R.id.redtxt);
                Toast.makeText(this, "blue color", Toast.LENGTH_LONG).show();
                rtxt.setBackgroundColor(Color.BLUE);
                return true;
            }
            case R.id.key:
            {
                Toast.makeText(this, "key", Toast.LENGTH_LONG).show();
                return true;
            }
            case R.id.plane:
            {
                Toast.makeText(this, "aircraft", Toast.LENGTH_LONG).show();
                return true;
            }
        }

        return super.onOptionsItemSelected(item);
    }
}
```