Example – Options Menu

Primary menus of android (global impact). They can be used for settings, search, delete item etc. There are other 2 menus – Context and Pop-up menu

Options Menu

1. Create a new project - Empty Activity
2. Create a menu resource directory – Right click on res folder → new → Android Resource Directory. Change the resource type to menu in the dropdown list. Click on OK.
3. Create the menu resource file - Right click on menu folder → new → Android Resource File. Give the name as menu_main. Click on OK.
4. Drag menu item from the palette. Set the attributes as follows:
   - android:id: attribute specifies the id of the menu item.
   - android:title: attribute value contains the title of the menu item
   - android:icon: attribute references an icon in the drawable directories
   - android:showAsAction: This attribute indicates how the given item should be portrayed in the menu bar.
     We can choose from any of the flags mentioned below:
     - always - to keep it in the Menu Bar at all times
     - ifRoom - to keep it only if space is available
     - never - this means that the menu item will not be placed in the Menu Bar as an icon. It will only be visible when the menu button is clicked, in the overflow menu.
     - |withText : we can append this to either always or ifRoom, to indicate that the toolbar button to be both the icon and the title, not just the icon. (depends on space)

Id → message

Icon → @drawable/ic_menu_call

Showasaction → always to display in the menu bar; if not set will be available through the overflow menu.

Title → message

5. Similarly add the other items in the menu.

```xml
<item
    android:id="@+id/picture"
    android:icon="@android:drawable/ic_menu_gallery"
    app:showAsAction="always|withText"
    android:title="picture"/>

<item
    android:id="@+id/mode"
    android:icon="@android:drawable/ic_menu_call"
    app:showAsAction="always"
    android:title="mode"/>

<item
    android:id="@+id/about"
    android:icon="@android:drawable/ic_dialog_info"
    app:showAsAction="never|withText"
    android:title="calculator"/>

<item
    android:id="@+id/exit"
    app:showAsAction="never"
    android:title="exit"/>
```

6. menu_main.xml

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

```xml
    xmlns:android="http://schemas.android.com/apk/res/androi
    d">

        <item
            android:id="@+id/message"
            android:icon="@android:drawable/ic_menu_send"
            app:showAsAction="always"
            android:title="message"/>

        <item
            android:id="@+id/picture"
            android:icon="@android:drawable/ic_menu_gallery"
            app:showAsAction="always|withText"
            android:title="picture"/>

        <item
            android:id="@+id/mode"
            android:icon="@android:drawable/ic_menu_call"
            app:showAsAction="always"
            android:title="mode"/>

        <item
            android:id="@+id/about"
            android:icon="@android:drawable/ic_dialog_info"
            app:showAsAction="never"
            android:title="calculator"/>

        <item
            android:id="@+id/exit"
            app:showAsAction="never"
            android:title="exit"/>
    </menu>
```

7. mainActivity.java (*/This class displays the content of menu.xml file and performs event handling on clicking the menu items.*/)

```java
package com.example.examplemenuoptions;

import androidx.appcompat.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.Toast;

import static android.widget.Toast.LENGTH_LONG;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState)
    {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
    }
```

(/* Inflate the menu; this adds items to the menu if it is present. */)

```java
    public boolean onCreateOptionsMenu(Menu menu)
    {
        getMenuInflater().inflate(R.menu.menu_main, menu);
```

(/*MenuInflater class is **used** to instantiate menu XML files into Menu objects. Here, we are inflating the menu by calling the inflate() method of MenuInflater class */)

```java
return true;
    }

    public boolean onOptionsItemSelected(MenuItem item)
```

(/*To perform event handling on menu items, you need to

```
              override onOptionsItemSelected() method of Activity class. */)
       {
           switch (item.getItemId()) {
               case R.id.message:
                   Toast
                        .makeText(
                            getApplicationContext(),
                            "Shows share icon",
                            Toast.LENGTH_SHORT)
                        .show();
                   return true;

               case R.id.picture:
                   Toast
                        .makeText(
                            getApplicationContext(),
                            "Shows image icon",
                            Toast.LENGTH_SHORT)
                        .show();
                   return (true);

               case R.id.mode:
                   Toast
                        .makeText(
                            getApplicationContext(),
                            "Shows call icon",
                            Toast.LENGTH_SHORT)
                        .show();
                   return (true);

               case R.id.about:
                   Toast
                        .makeText(
                            getApplicationContext(),
                            "calculator menu",
```

```java
                    Toast.LENGTH_SHORT)
                .show();
            return (true);

        case R.id.exit:
            finish();
            return (true);
    }
    return (super.onOptionsItemSelected(item));
}
}
```