

**Practical 13** Develop android applications to demonstrate user interaction with the application using Options Menu, Context Menu and Popup Menu.

## Option Menu

### Xml File

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:id="@+id/rel">
```

### java File

```
package com.example.menu;
```

```
import android.os.Bundle;
import android.app.Activity;
import android.graphics.Color;
import android.view.Menu;
import android.view.MenuItem;
import android.widget.RelativeLayout;
```

```
public class MainActivity extends Activity {
```

```
    @Override
```

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

```
    @Override
```

```
    public boolean onOptionsItemSelected(MenuItem item)
    {
```

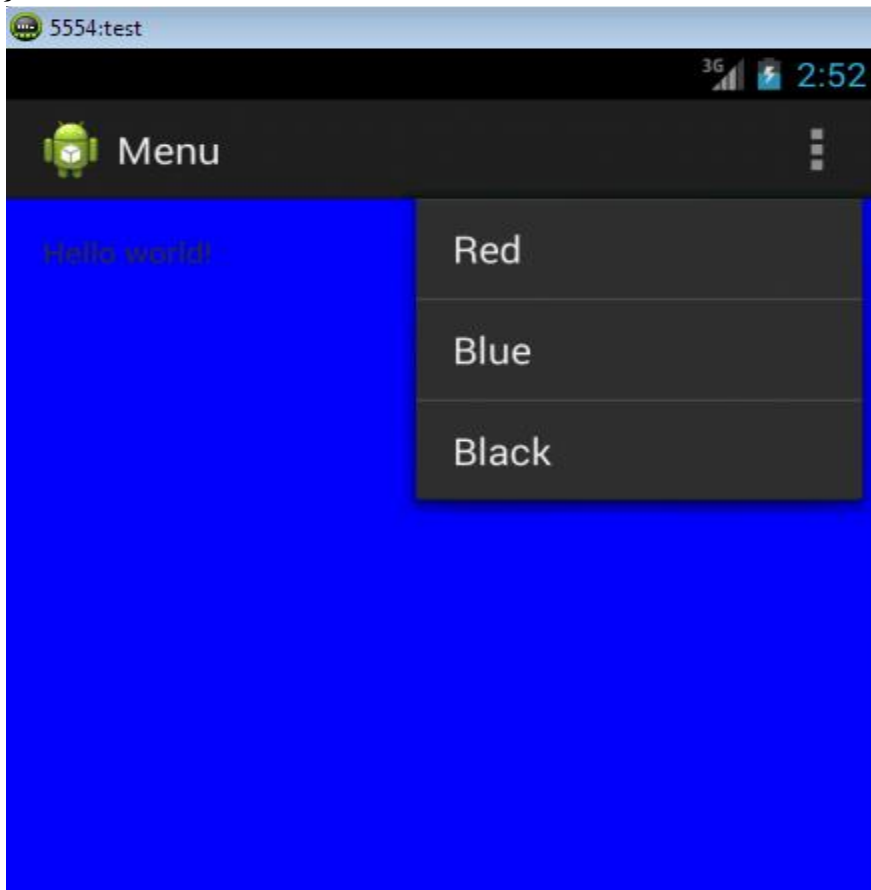
```
        int id=item.getItemId();
        RelativeLayout l=(RelativeLayout)findViewById(R.id.rel);
        if(id==0)
            l.setBackgroundColor(Color.RED);
        else if(id==1)
            l.setBackgroundColor(Color.BLUE);
    }
```

```

        else
            l.setBackgroundColor(Color.BLACK);
        return super.onOptionsItemSelected(item);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu) {
        // Inflate the menu; this adds items to the action bar if it is present.
        // getMenuInflater().inflate(R.menu.main, menu);
        menu.add(menu.NONE,0,1,"Red");
        menu.add(menu.NONE,1,2,"Blue");
        menu.add(menu.NONE,2,3,"Black");
        return true;
    }
}

```



**Context Menu**

```

import android.os.Bundle;
import android.app.Activity;
import android.graphics.Color;
import android.view.ContextMenu;
import android.view.Menu;
import android.view.MenuItem;
import android.view.ContextMenu.ContextMenuInfo;
import android.view.View;
import android.widget.Button;
import android.widget.RelativeLayout;

public class MainActivity extends Activity {
    Button b1;

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

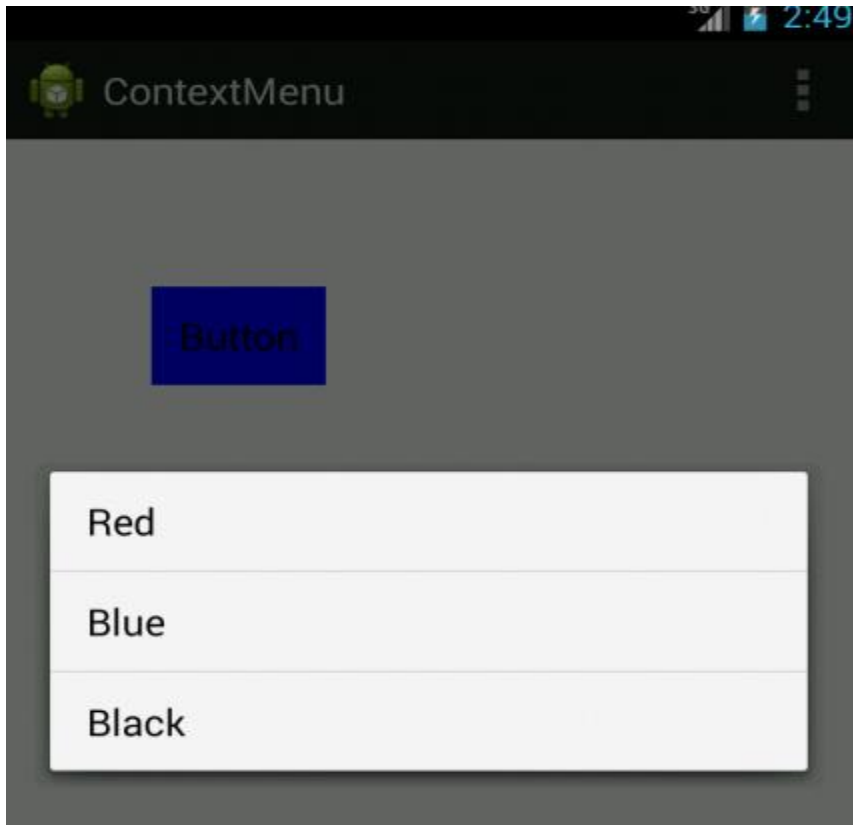
        b1=(Button)findViewById(R.id.button1);
        //b1.setOnCreateContextMenuListener(this);
        registerForContextMenu(b1);
    }

    @Override
    public void onCreateContextMenu(ContextMenu menu, View
v, ContextMenuInfo menuInfo) {
        // Inflate the menu; this adds items to the action bar if it is present.
        super.onCreateContextMenu(menu, v, menuInfo);
        menu.add(menu.NONE,0,1,"Red");
        menu.add(menu.NONE,1,2,"Blue");
        menu.add(menu.NONE,2,3,"Black");
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item)
    {
        int id=item.getItemId();
        if(id==0)
            b1.setBackgroundColor(Color.RED);
        else if(id==1)
            b1.setBackgroundColor(Color.BLUE);
    }
}

```

```
else  
    b1.setBackgroundColor(Color.BLACK);  
return super.onContextItemSelected(item);  
}
```



# Popup Menu

Activity\_main.xml

```
<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
>

    <Button
        android:id="@+id/button1"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_centerHorizontal="true"
        android:text="Button" />

</RelativeLayout>
```

Menu→main.xml

```
<menu xmlns:android="http://schemas.android.com/apk/res/android" >

    <item
        android:id="@+id/java"
        android:title="Java" />

    <item
        android:id="@+id/kotlin"
        android:title="Kotlin" />

    <item
        android:id="@+id/android"
        android:title="Android" />

    <item
        android:id="@+id/react_native"
```

```
android:title="React Native" />
```

```
</menu>
```

## MainActivity.java

```
package com.example.popupmenu1;
```

```
import android.os.Bundle;  
import android.app.Activity;  
import android.view.Menu;  
import android.view.MenuItem;  
import android.view.*;  
import android.widget.Button;  
import android.widget.PopupMenu;  
import android.widget.Toast;
```

```
public class MainActivity extends Activity {  
    Button b1;
```

```
    PopupMenu popupMenu;
```

```
    @Override
```

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

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

```
        // Setting onClick behavior to the button
```

```
        b1.setOnClickListener(new View.OnClickListener() {
```

```
            @Override
```

```
            public void onClick(View v) {
```

```
                // TODO Auto-generated method stub
```

```
                PopupMenu popupMenu = new
```

```
                PopupMenu(MainActivity.this,b1);
```

```

        // Inflating popup menu from popup_menu.xml file
        popupMenu.getMenuInflater().inflate(R.menu.main, popupMenu.getMenu());
        popupMenu.setOnMenuItemClickListener(new
PopupMenu.OnMenuItemClickListener() {
    @Override
    public boolean onMenuItemClick(MenuItem menuItem) {
        // Toast message on menu item clicked
        Toast.makeText(MainActivity.this, "You Clicked " + menuItem.getTitle(),
Toast.LENGTH_SHORT).show();
        return true;
    }
});

    // Showing the popup menu
    popupMenu.show();
}
});
}

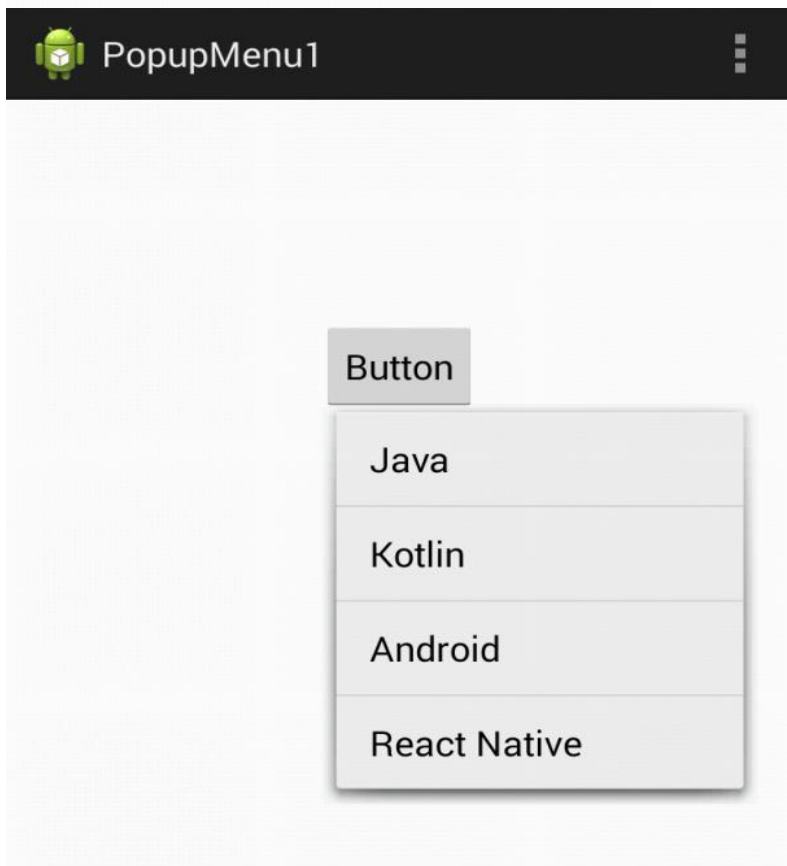
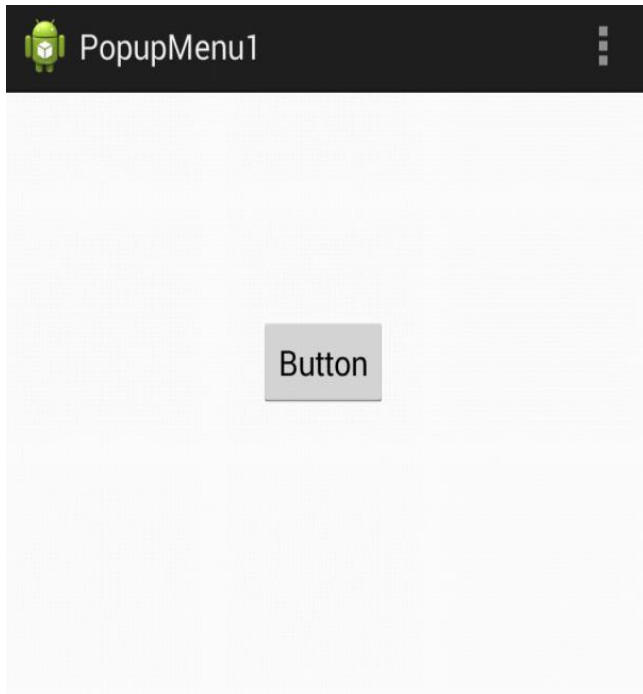
```

```

@Override
public boolean onCreateOptionsMenu(Menu menu) {
    // Inflate the menu; this adds items to the action bar if it is present.
    getMenuInflater().inflate(R.menu.main, menu);
    return true;
}

}

```







PopupMenu1



Button

You Clicked Java