

Options Menu

XML for main activity

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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"
    tools:context=".MainActivity">

    <TextView
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="100dp"
        android:text="Samyak Maharjan 20BTRSE076"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.497"
        app:layout_constraintStart_toStartOf="parent" />

</androidx.constraintlayout.widget.ConstraintLayout>
```

XML for menu

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:app="http://schemas.android.com/apk/res-auto">
    <item android:id="@+id/item1"
        android:icon="@drawable/ic_icon"
        android:title="Item 1"
        app:showAsAction="ifRoom"/>

    <item android:id="@+id/item2"
        android:title="Item 2"
        app:showAsAction="never"/>

    <item android:id="@+id/item3"
        android:title="Item 3"
        app:showAsAction="never">
        <menu>
            <item android:id="@+id/subitem1"
                android:title="Sub Item 1"/>
        </menu>
    </item>
</menu>
```

```
        <item android:id="@+id/subitem2"
            android:title="Sub Item 2"/>
    </menu>
</item>
</menu>
```

JAVA logic file

```
package com.example.myapplication;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

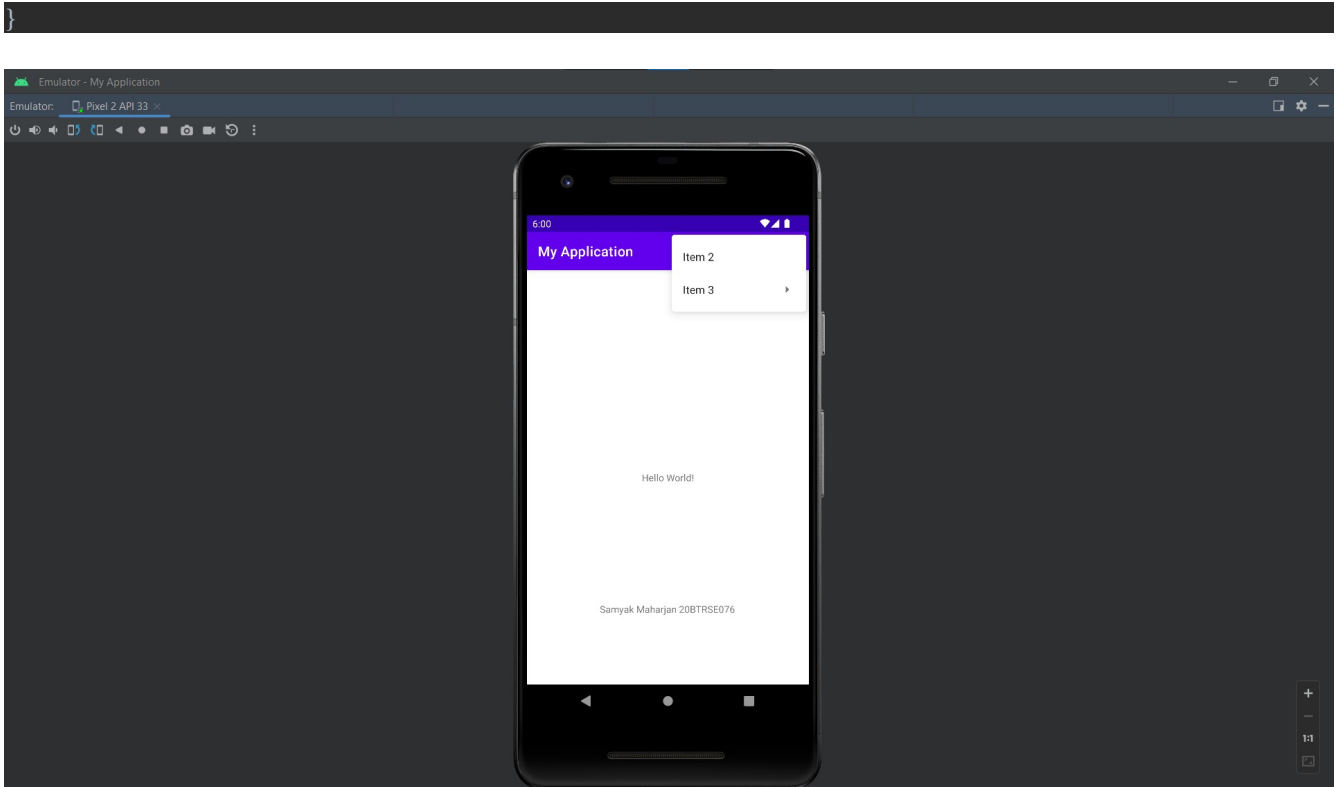
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuInflater;
import android.view.MenuItem;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

    @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.example_menu,menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        switch (item.getItemId()){
            case R.id.item1:
                Toast.makeText(this, "Item 1 selected", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item2:
                Toast.makeText(this, "Item 2 selected", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item3:
                Toast.makeText(this, "Item 3 selected", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.subitem1:
                Toast.makeText(this, "Sub Item 1 selected", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.subitem2:
                Toast.makeText(this, "Sub Item 2 selected", Toast.LENGTH_SHORT).show();
                return true;
            default:
                return super.onOptionsItemSelected(item);
        }
    }
}
```



Context Menu

XML for main activity

```
<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/text_view"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Hello World!"
        android:textSize="30sp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <TextView
        android:id="@+id/textView"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginBottom="100dp"
        android:text="Samyak Maharjan 20BTRSE076"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
```

```
app:layout_constraintHorizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent" />
```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

XML for menu

```
<?xml version="1.0" encoding="utf-8"?>
<menu xmlns:android="http://schemas.android.com/apk/res/android">
    <item
        android:id="@+id/option_1"
        android:title="Option 1"/>
    <item
        android:id="@+id/option_2"
        android:title="Option 2"/>
</menu>
```

JAVA logic file

```
package com.example.myapplication;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.ContextMenu;
import android.view.MenuItem;
import android.view.View;
import android.widget.TextView;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

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

        TextView textview=findViewById(R.id.text_view);

        registerForContextMenu(textview);
    }

    @Override
    public void onCreateContextMenu(ContextMenu menu, View v, ContextMenu.ContextMenuInfo menuInfo) {
        super.onCreateContextMenu(menu, v, menuInfo);

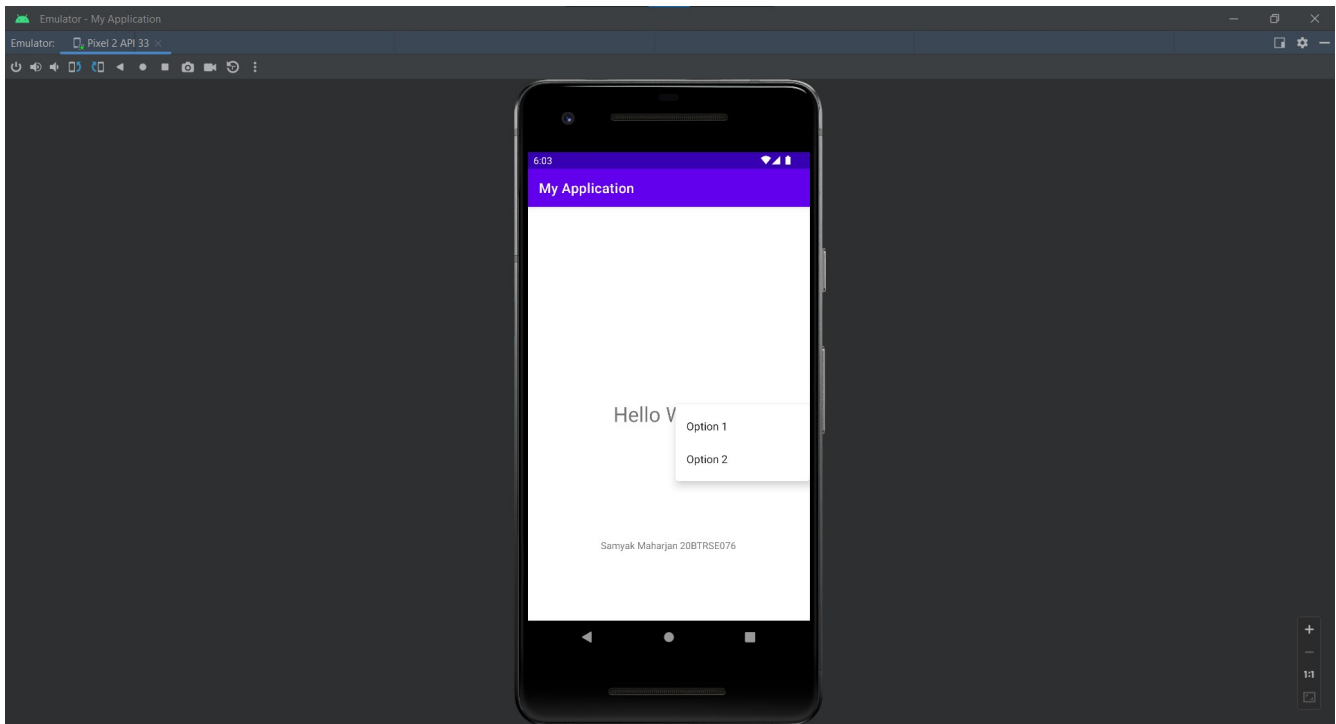
        getMenuInflater().inflate(R.menu.example_menu,menu);
    }

    @Override
    public boolean onOptionsItemSelected(@NonNull MenuItem item) {
        switch (item.getItemId()){
            case R.id.option_1:
                Toast.makeText(this, "Option 1 selected", Toast.LENGTH_SHORT).show();
        }
    }
}
```

```

        return true;
    case R.id.option_2:
        Toast.makeText(this, "Option 2 selected", Toast.LENGTH_SHORT).show();
        return true;
    default:
        return super.onContextItemSelected(item);
    }
}
}

```



Popup menu

XML for main activity

```

<?xml version="1.0" encoding="utf-8"?>
<androidx.constraintlayout.widget.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"
    tools:context=".MainActivity">

    <Button
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Popup"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        android:onClick="showPopup"/>

    <TextView

```

```

android:id="@+id/textView"
android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginBottom="100dp"
android:text="Samyak Maharjan 20BTRSE076"
app:layout_constraintBottom_toBottomOf="parent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent" />

```

```
</androidx.constraintlayout.widget.ConstraintLayout>
```

XML for menu

```

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

    <item
        android:id="@+id/item1"
        android:title="Item 1"/>
    <item
        android:id="@+id/item2"
        android:title="Item 2"/>
    <item
        android:id="@+id/item3"
        android:title="Item 3"/>
    <item
        android:id="@+id/item4"
        android:title="Item 4"/>
</menu>

```

JAVA logic file

```

package com.example.myapplication;

import androidx.appcompat.app.AppCompatActivity;

import android.os.Bundle;
import android.view.MenuItem;
import android.view.View;
import android.widget.PopupMenu;
import android.widget.Toast;

public class MainActivity extends AppCompatActivity implements PopupMenu.OnMenuItemClickListener {

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

    public void showPopup(View v){
        PopupMenu popup=new PopupMenu(this, v);
        popup.setOnMenuItemClickListener(this);
        popup.inflate(R.menu.popup_menu);
    }
}

```

```

        popup.show();
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem menuItem) {
        switch (menuItem.getItemId()){
            case R.id.item1:
                Toast.makeText(this, "Item 1 clicked", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item2:
                Toast.makeText(this, "Item 2 clicked", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item3:
                Toast.makeText(this, "Item 3 clicked", Toast.LENGTH_SHORT).show();
                return true;
            case R.id.item4:
                Toast.makeText(this, "Item 4 clicked", Toast.LENGTH_SHORT).show();
                return true;
            default:
                return false;
        }
    }
}

```

