

Project 4 : Scrollbar Demo App

1.Activity_main.xml:

```
<?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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#2196F3"
    tools:context=".MainActivity">

    <TextView
        android:id="@+id/textView2"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="48dp"
        android:text="BRAINWARE UNIVERSITY"
        android:textAlignment="center"
        android:textColor="@color/white"
        android:textStyle="bold"
        android:textSize="30sp"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

    <ImageView
        android:id="@+id/imageView2"
        android:layout_width="161dp"
        android:layout_height="135dp"
        android:layout_marginTop="8dp"
        app:layout_constraintEnd_toEndOf="@+id/textView2"
        app:layout_constraintStart_toStartOf="@+id/textView2"
        app:layout_constraintTop_toBottomOf="@+id/textView2"
        app:srcCompat="@drawable/bwulogo" />

    <TextView
        android:id="@+id/textView3"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="24dp"
        android:text="Assignment"
        android:textStyle="italic"
        android:textColor="@color/white"
        android:textSize="30sp"
        android:textAlignment="center"
        app:layout_constraintEnd_toEndOf="@+id/imageView2"
        app:layout_constraintStart_toStartOf="@+id/imageView2"
        app:layout_constraintTop_toBottomOf="@+id/imageView2" />

    <TextView
        android:id="@+id/textView4"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="64dp"
        android:fontFamily="sans-serif-medium"
        android:text="NAME: KUNTAL BERA"
        android:textAlignment="center"
        android:textColor="@color/white"
        android:textSize="28sp"
        android:textStyle="normal"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
```

```

        app:layout_constraintTop_toBottomOf="@+id/textView12" />

<TextView
    android:id="@+id/textView5"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="16dp"
    android:text="Student Code: BWU/BCA/22/004"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="20sp"
    android:textStyle="normal"
    android:fontFamily="sans-serif-medium"
    app:layout_constraintEnd_toEndOf="@+id/textView4"
    app:layout_constraintStart_toStartOf="@+id/textView4"
    app:layout_constraintTop_toBottomOf="@+id/textView4" />

<TextView
    android:id="@+id/textView6"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:background="@drawable/nextbutton"
    android:onClick="getContent"
    android:text="Next"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="34sp"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintHorizontal_bias="0.904"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.951" />

<TextView
    android:id="@+id/textView12"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_marginTop="60dp"
    android:text="Android Programming Lab"
    android:textSize="25sp"
    android:textColor="@color/white"
    android:textStyle="bold"
    android:fontFamily="monospace"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout_constraintStart_toStartOf="parent"
    app:layout_constraintTop_toBottomOf="@+id/textView3" />

```

</androidx.constraintlayout.widget.ConstraintLayout>

2.activity_assignment_scroll.xml:

```

<?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:id="@+id/main"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="#3F8A88"
    android:scrollbarSize="20dp"
    tools:context=".constantviewActivity">

    <TextView

```

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        android:id="@+id/textView7"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginTop="48dp"
        android:fontFamily="serif-monospace"
        android:text="Content"
        android:textColor="#F8E436"
        android:textSize="38sp"
        android:textStyle="bold"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintStart_toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent" />

<ScrollView
    android:id="@+id/scrollView3"
    android:layout_width="415dp"
    android:layout_height="622dp"
    android:layout_marginTop="32dp"
    app:layout_constraintTop_toBottomOf="@+id/textView7"
    tools:layout_editor_absoluteX="-4dp">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="vertical">

        <TextView
            android:id="@+id/textView14"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:text="Assignment-1"
            android:onClick="Assighment1"
            android:textSize="30sp"
            android:textColor="@color/white"
            android:textStyle="bold"
            android:textAlignment="center"

            />

        <TextView
            android:id="@+id/textView15"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:scrollbarSize="20dp"
            android:text="Assignment-2"
            android:onClick="Assighment2"
            android:textAlignment="center"
            android:textColor="@color/white"
            android:textSize="30sp"
            android:textStyle="bold"
            android:layout_marginTop="20dp"
            />

        <TextView
            android:id="@+id/textView16"
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:scrollbarSize="20dp"
            android:text="Assignment-3"
            android:onClick="Assighment3"
            android:textAlignment="center"
            android:textColor="@color/white"
            android:textSize="30sp"
            android:textStyle="bold"
            android:layout_marginTop="20dp"
            />

        <TextView

```

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        android:id="@+id/textView17"
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:scrollbarSize="20dp"
        android:text="Assignment-4"
        android:onClick="Assighment4"
        android:textAlignment="center"
        android:textColor="@color/white"
        android:textSize="30sp"
        android:textStyle="bold"
        android:layout_marginTop="20dp"
    />

<TextView
    android:id="@+id/textView18"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-5"
    android:onClick="Assighment5"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView19"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-6"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView20"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-7"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView21"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-8"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"

```

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        android:layout_marginTop="20dp"
    />

<TextView
    android:id="@+id/textView22"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-9"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView24"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-10"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView23"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-11"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView25"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-12"
    android:onClick="Assighment3"
    android:textAlignment="center"
    android:textColor="@color/white"
    android:textSize="30sp"
    android:textStyle="bold"
    android:layout_marginTop="20dp"
/>

<TextView
    android:id="@+id/textView27"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:scrollbarSize="20dp"
    android:text="Assignment-13"
    android:onClick="Assighment3"

```

```

        android:textAlignment="center"
        android:textColor="@color/white"
        android:textSize="30sp"
        android:textStyle="bold"
        android:layout_marginTop="20dp"
    />
</LinearLayout>
</ScrollView>

</androidx.constraintlayout.widget.ConstraintLayout>

```

3. MainActivity.java:

```

package com.example.bwu_assignment;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class MainActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_main);
        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
    }

    public void getcontent(View view){
        Intent intent = new Intent(MainActivity.this, contantviewActivity.class);
        startActivity(intent);
    }
}

```

4. Assignmentscroll.java:

```

package com.example.bwu_assignment;

import android.content.Intent;
import android.os.Bundle;
import android.view.View;

import androidx.activity.EdgeToEdge;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.graphics.Insets;
import androidx.core.view.ViewCompat;
import androidx.core.view.WindowInsetsCompat;

public class contantviewActivity extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity_contantview);
    }
}

```

```

        ViewCompat.setOnApplyWindowInsetsListener(findViewById(R.id.main), (v, insets) -> {
            Insets systemBars = insets.getInsets(WindowInsetsCompat.Type.systemBars());
            v.setPadding(systemBars.left, systemBars.top, systemBars.right, systemBars.bottom);
            return insets;
        });
    }
    public void Assighment1(View view){
        Intent intent = new Intent(contantviewActivity.this, Assigh1Activity.class);
        startActivity(intent);
    }
    public void Assighment2(View view){
        Intent intent = new Intent(contantviewActivity.this, assigh2Activity.class);
        startActivity(intent);
    }
    public void Assighment3(View view){
        Intent intent = new Intent(contantviewActivity.this, assigh3Activity.class);
        startActivity(intent);
    }
    public void Assighment4(View view){
        Intent intent = new Intent(contantviewActivity.this, assigh4Activity.class);
        startActivity(intent);
    }
    public void Assighment5(View view){
        Intent intent = new Intent(contantviewActivity.this, assigh5Activity.class);
        startActivity(intent);
    }
}

```