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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"</pre>
```

android:id="@+id/main"

<TextView

<ImageView

<TextView

<TextView

android:background="#2196F3"
tools:context=".MainActivity">

android:layout_width="match_parent"
android:layout height="match parent"

android:id="@+id/textView2"

android:textStyle="bold"
android:textSize="30sp"

android:id="@+id/imageView2"
android:layout_width="161dp"
android:layout_height="135dp"
android:layout_marginTop="8dp"

android:id="@+id/textView3"

android:textSize="30sp"

android:textAlignment="center"

android:id="@+id/textView4"

android:textSize="28sp"
android:textStyle="normal"

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"

app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"

app:srcCompat="@drawable/bwulogo" />

android:layout_width="wrap_content"
android:layout_height="wrap_content"
android:layout_marginTop="24dp"
android:text="Assighment"
android:textStyle="italic"
android:textColor="@color/white"

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"

app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent" />

app:layout_constraintEnd_toEndOf="@+id/textView2"
app:layout_constraintStart_toStartOf="@+id/textView2"
app:layout_constraintTop_toBottomOf="@+id/textView2"

app:layout_constraintEnd_toEndOf="@+id/imageView2"
app:layout_constraintStart_toStartOf="@+id/imageView2"
app:layout_constraintTop_toBottomOf="@+id/imageView2" />

xmlns:app="http://schemas.android.com/apk/res-auto"
xmlns:tools="http://schemas.android.com/tools"

```
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</pre>
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=".contantviewActivity">
    <TextView
```

```
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</pre>
        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
```

```
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"
```

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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_assighment;
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_assighment;
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);
    }
}
```