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``Project 4 : ScrollBar Demo App``
1. Activity main.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"
    tools:context=".MainActivity">
    <TextView
        android:layout_width="328dp"
        android:layout_height="82dp"
        android:fontFamily="sans-serif-smallcaps"
        android:gravity="center"
        android:textStyle="bold"
        android:text="BWU Assignments"
        android:textSize="36dp"
        app:layout constraintBottom toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout_constraintHorizontal_bias="0.409"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent"
        app:layout constraintVertical bias="0.049" />
    <TextView
        android:layout width="328dp"
        android:layout height="82dp"
        android:fontFamily="sans-serif-smallcaps"
        android:gravity="center"
        android:text="LAB"
        android:textSize="36dp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout constraintEnd toEndOf="parent"
        app:layout constraintHorizontal bias="0.409"
        app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout_constraintVertical_bias="0.175" />
    <TextView
        android:layout width="328dp"
        android:layout_height="82dp"
        android:fontFamily="sans-serif-smallcaps"
        android:gravity="center"
        android:text="Manish Giri"
        android:textSize="36dp"
        android:textStyle="bold"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout constraintHorizontal bias="0.409"
        app:layout_constraintStart_toStartOf="parent"
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app:layout_constraintTop_toTopOf="parent"
    app:layout constraintVertical bias="0.302" />
<TextView
    android:layout width="328dp"
    android:layout height="82dp"
    android:fontFamily="sans-serif-smallcaps"
    android:gravity="center"
    android:text="BWU/BCA/22/006"
    android:textSize="36dp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintHorizontal bias="0.409"
    app:layout constraintStart toStartOf="parent"
    app:layout_constraintTop_toTopOf="parent"
    app:layout_constraintVertical_bias="0.428" />
<TextView
   android:layout width="328dp"
    android:layout_height="82dp"
    android:fontFamily="sans-serif-smallcaps"
    android:gravity="center"
    android:text="Sec - A"
   android:textSize="36dp"
    android:textStyle="bold"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintHorizontal bias="0.409"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintVertical bias="0.554" />
<TextView
    android:layout width="328dp"
    android:layout height="82dp"
    android:fontFamily="sans-serif-smallcaps"
    android:gravity="center"
    android:text="Group - 1"
    android:textSize="36dp"
    android:textStyle="bold"
    app:layout constraintBottom toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
    app:layout constraintHorizontal bias="0.409"
    app:layout constraintStart toStartOf="parent"
    app:layout constraintTop toTopOf="parent"
    app:layout constraintVertical bias="0.691" />
<Button
    android:layout_width="195dp"
    android:layout_height="82dp"
    android:id="@+id/NextActivity"
    android:fontFamily="sans-serif-smallcaps"
    android:gravity="center"
    android:text="Next"
   android:textSize="40dp"
    android:textStyle="bold"
    android:onClick="nextActivity"
    app:layout_constraintBottom_toBottomOf="parent"
    app:layout_constraintEnd_toEndOf="parent"
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app:layout_constraintStart_toStartOf="parent"
        app:layout constraintTop toTopOf="parent"
        app:layout constraintVertical bias="0.855" />
</androidx.constraintlayout.widget.ConstraintLayout>
2. activity assignment prompt.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"
    tools:context=".AssignmentPrompt">
    <ScrollView
        android:layout_width="409dp"
        android:layout_height="729dp"
        android:layout_marginStart="1dp"
        android:layout marginTop="1dp"
        android:layout marginEnd="1dp"
        android:layout_marginBottom="1dp"
        app:layout_constraintBottom_toBottomOf="parent"
        app:layout_constraintEnd_toEndOf="parent"
        app:layout constraintStart toStartOf="parent"
        app:layout_constraintTop_toTopOf="parent">
        <LinearLayout
            android:layout width="match parent"
            android:layout height="wrap content"
            android:orientation="vertical">
            <TextView
                android:layout width="match parent"
                android:layout height="match parent"
                android:fontFamily="sans-serif-smallcaps"
                android:gravity="center"
                android:onClick="simpleForm"
                android:text="Menu Bar"
                android:textColor="@color/white"
                android:textSize="32dp"
                android:textStyle="bold" />
            <Space
                android:layout_width="match_parent"
                android:layout_height="26dp" />
            <TextView
                android:id="@+id/assignment1"
                android:layout width="match parent"
                android:layout height="match parent"
                android:gravity="left"
                android:onClick="simpleForm"
                android:text="Assignment 1 : \nCreate a Form app."
                android:textColor="@color/white"
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android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout width="match parent"
    android:layout height="26dp" />
<TextView
    android:id="@+id/assignment2"
    android:layout width="match parent"
    android:layout height="match parent"
    android:gravity="left"
    android:onClick="lifeCycle"
    android:text="Assignment 2 : \nAndroid Life Cycle."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout_width="match_parent"
    android:layout_height="26dp" />
<TextView
    android:id="@+id/assignment3"
    android:layout width="match parent"
    android:layout_height="match_parent"
    android:gravity="left"
    android:text="Assignment 3 : \nMulti Activity Calculator."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout_width="match_parent"
    android:layout height="26dp" />
<TextView
    android:id="@+id/assignment4"
    android:layout_width="match_parent"
    android:layout height="match parent"
    android:gravity="left"
    android:text="Assignment 4 : \nSimpla Image Gallery."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout_width="match_parent"
    android:layout_height="26dp" />
<TextView
    android:id="@+id/assignment5"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="left"
    android:text="Assignment 5 : \nScrollbar functionality."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
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<Space
    android:layout width="match parent"
    android:layout height="26dp" />
<TextView
    android:id="@+id/assignment6"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="left"
    android:text="Assignment 6 : \nnull."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout_width="match_parent"
    android:layout_height="26dp" />
<TextView
    android:id="@+id/assignment7"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="left"
    android:text="Assignment 7 : \nnull."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout_width="match_parent"
    android:layout height="26dp" />
<TextView
    android:id="@+id/assignment8"
    android:layout width="match parent"
    android:layout height="match parent"
    android:gravity="left"
    android:text="Assignment 8 : \nnull."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout width="match parent"
    android:layout height="26dp" />
<TextView
    android:id="@+id/assignment9"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:gravity="left"
    android:text="Assignment 9 : \nnull."
    android:textColor="@color/white"
    android:textSize="32dp"
    android:textStyle="bold" />
<Space
    android:layout_width="match_parent"
    android:layout height="26dp" />
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<TextView
                android:id="@+id/assignment10"
                android:layout width="match parent"
                android:layout height="match parent"
                android:gravity="left"
                android:text="Assignment 10 : \nnull."
                android:textColor="@color/white"
                android:textSize="32dp"
                android:textStyle="bold" />
            <Space
                android:layout_width="match_parent"
                android:layout_height="26dp" />
            <TextView
                android:id="@+id/assignment11"
                android:layout_width="match_parent"
                android:layout_height="match_parent"
                android:gravity="left"
                android:text="Assignment 11 : \nnull."
                android:textColor="@color/white"
                android:textSize="32dp"
                android:textStyle="bold" />
            <Space
                android:layout_width="match_parent"
                android:layout_height="26dp" />
        </LinearLayout>
    </ScrollView>
</androidx.constraintlayout.widget.ConstraintLayout>
3. MainActivity.java :
package com.example.assignmenthub;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.Button;
import android.widget.Toast;
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;
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});
    }
    public void nextActivity(View v){
        Button next = findViewById(R.id.NextActivity);
        Intent assignmentPrompt = new Intent(this, AssignmentPrompt.class);
        startActivity(assignmentPrompt);
        Toast.makeText(this, "Welcome Sir..",Toast.LENGTH_LONG).show();
    }
}
4. AssignmentPrompt.java:
package com.example.assignmenthub;
import android.content.Intent;
import android.os.Bundle;
import android.view.View;
import android.widget.TextView;
import android.widget.Toast;
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 AssignmentPrompt extends AppCompatActivity {
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        EdgeToEdge.enable(this);
        setContentView(R.layout.activity assignment prompt);
        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 simpleForm(View v){
        Intent simpleForm = new Intent(this, SimpleForm.class);
        startActivity(simpleForm);
        Toast.makeText(this, "Assignment 1", Toast.LENGTH_LONG).show();
    }
    public void lifeCycle(View v){
        Intent lifeCycle = new Intent(this, LifeCycle.class);
        startActivity(lifeCycle);
        Toast.makeText(this, "Assignment 2", Toast.LENGTH_SHORT).show();
    }
}
```