Android Advance Lesson 2 Tablayout and ViewPager

Outline

I. **Introduction to Viewpager**

II. **Introduction to TabLayout**
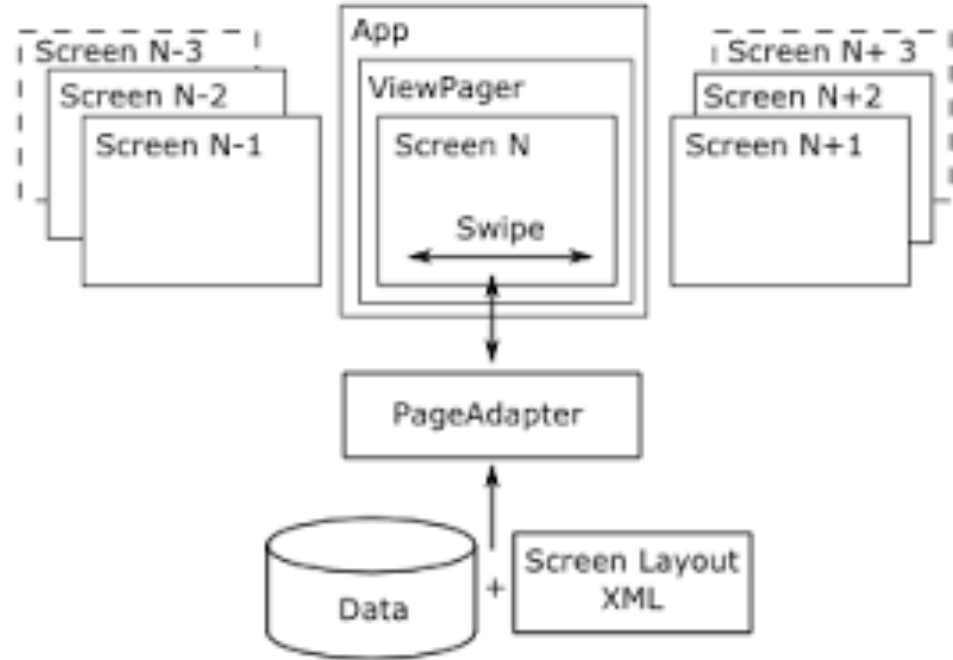
I. Introduction to Viewpager

1. What is ViewPager?

- Layout manager that allows the user to flip left and right through pages of data. You supply an implementation of a <u>PagerAdapter</u> to generate the pages that the view shows.
- ViewPager is most often used in conjunction with <u>Fragment</u>, which is a convenient way to supply and manage the lifecycle of each page.
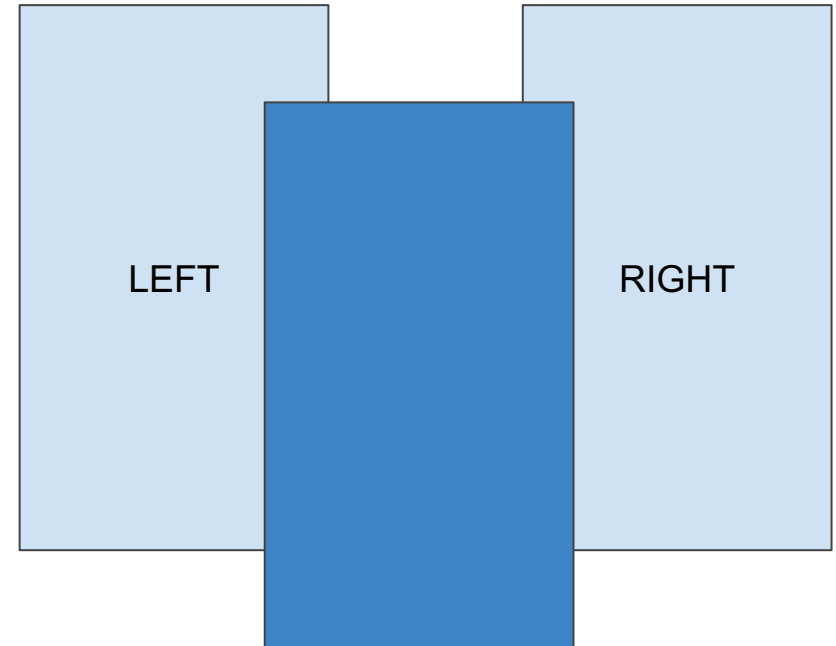
2. Design for ViewPager

➢ ViewPager

➢ PageAdapter

➢ PageTransformer

2. Design for ViewPager

➢ Two virtual page: Right and Left

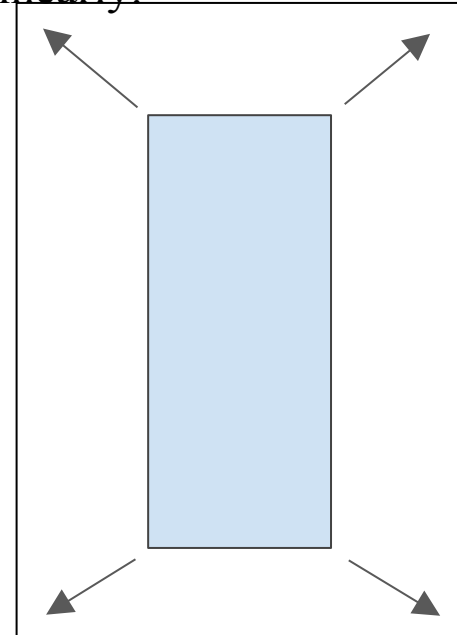➢ Swipe to virtual page upon to set it back.

LEFT

RIGHT

3. Pager Adapter

➢ Fragment pager adapter

➢ Instantiate a fragment when showing it.

4. Page Transformer

➢ While it is instantiated, transforming with PageTransformer.

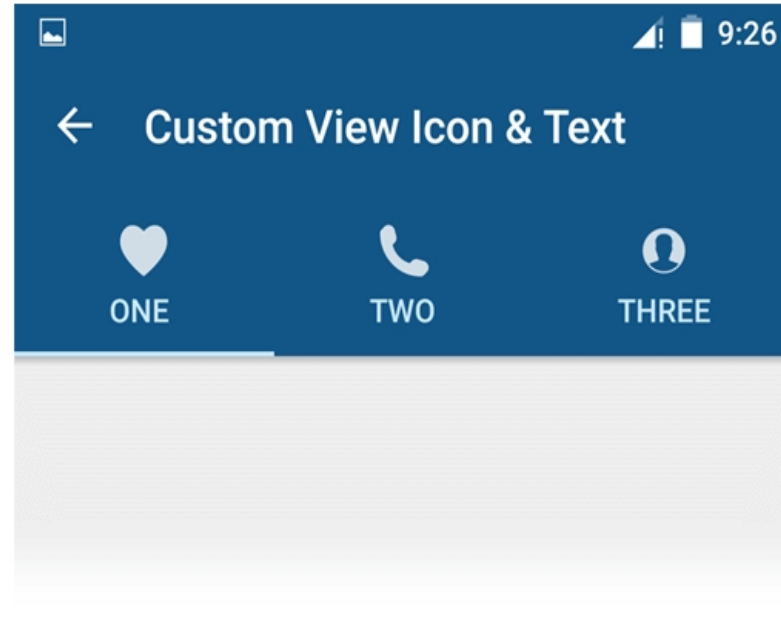➢ Depth animation fades the page out, and scales it down linearly.

II. Introduction to TabLayout
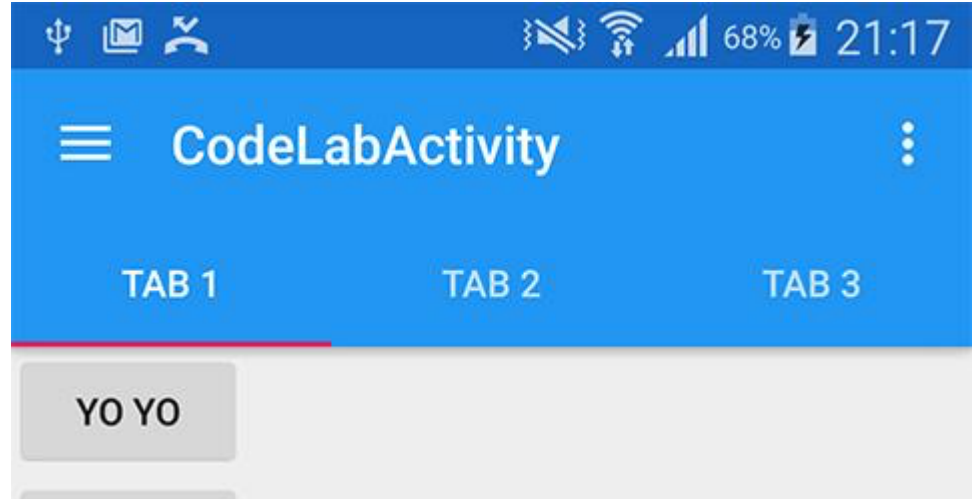
1. What is TabLayout?

➢ TabLayout provides a **horizontal** layout to **display tabs**.

2. TabLayout and ViewPager

```xml
<android.support.v4.view.ViewPager

    android:layout_width="match_parent"

    android:layout_height="match_parent">

    <android.support.design.widget.TabLayout

        android:layout_width="match_parent"

        android:layout_height="wrap_content"

        android:layout_gravity="top" />

</android.support.v4.view.ViewPager>
```

3. Attributes of TabLayout

tabBackground	@drawable/image	Background applied to the tabs
tabGravity	center, fill	Gravity of the tabs
tabIndicatorColor	@color/blue	Color of the tab indicator line
tabIndicatorHeight	@dimen/tabh	Height of the tab indicator line
tabMaxWidth	@dimen/tabmaxw	Maximum width of the tab
tabMode	fixed, scrollable	Small number of fixed tabs or scrolling list
tabTextColor	@color/blue	Color of the text on the tab

4. Sample

https://github.com/DoanVanToan/TabLayoutViewPager

Q&A

Exercise

- Apply the knowledge above create Project like bellow: