Android Note

I. Layout: Gồm các loại layout sau

- Framelayout , LinearLayout, RelativeLayout, TableLayout, GridLayout, ConstraintLayout

1. Framelayout: Luôn giữ các view bên trong ở góc trái màn hình và không thể thay đổi location hiển thị, Các view được thiết lập sau sẽ đè lên các View thiết lập trước.

<FrameLayout xmlns:android="http://schemas.android.com/apk/res/android"

xmlns:tools="http://schemas.android.com/tools"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent"

tools:context=".MainActivity" >

<TextView

android:id="@+id/textView"

android:layout\_width="300dp"

android:layout\_height="300dp"

android:background="@color/colorAccent"

android:text="TextView" />

<TextView

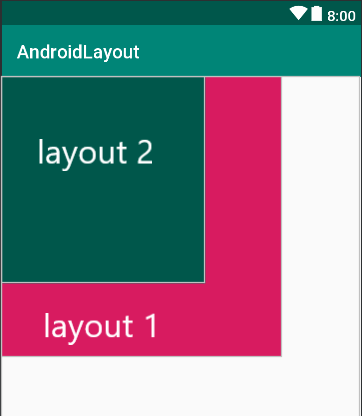
android:id="@+id/textView2"

android:layout\_width="218dp"

android:layout\_height="221dp"

android:background="@color/colorPrimaryDark" />

</FrameLayout>



2. LinearLayout: Bố trí các view theo chiều ngang hoặc chiều dọc, mặc định sẽ là chiều ngang.

Orientation = Vertical : Các view bên trong sẽ được sắp xếp theo chiều dọc.

Orientation = Horizontal: Các view bên trong sẽ được sắp xếp theo chiều ngang.

<LinearLayout

xmlns:android1="http://schemas.android.com/apk/res/android"

android1:layout\_width="match\_parent"

android1:layout\_height="match\_parent"

android1:orientation="horizontal" >

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:text="1"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textAlignment="center"

android1:textStyle="bold"

android1:background="@color/colorAccent" />

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:text="1"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textAlignment="center"

android1:textStyle="bold"

android1:background="@color/colorPrimary" />

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:text="3"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textAlignment="center"

android1:textStyle="bold"

android1:background="#8c0520" />

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:background="#efcd21"

android1:text="4"

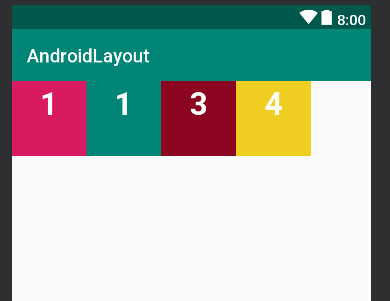
android1:textAlignment="center"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textStyle="bold" />

</LinearLayout>



3. RelativeLayout: Vị trí của mỗi view bên trong sẽ được xác định so với view khác hoặc so với thành phần cha của nó thông qua ID.

<RelativeLayout xmlns:android="http://schemas.android.com/apk/res/android"

android:layout\_width="match\_parent"

android:layout\_height="match\_parent">

<TextView

android:layout\_width="150dp"

android:layout\_height="50dp"

android:text="1"

android:textColor="#fff"

android:id="@+id/hop1"

android:textSize="10pt"

android:textAlignment="center"

android:background="@color/colorAccent" />

<TextView

android:layout\_width="150dp"

android:layout\_height="50dp"

android:text="2"

android:textColor="#fff"

android:id="@+id/hop2"

android:textSize="10pt"

android:textAlignment="center"

android:layout\_toRightOf="@+id/hop1"

android:background="@color/colorPrimary" />

<TextView

android:layout\_width="150dp"

android:layout\_height="50dp"

android:text="3"

android:textColor="#fff"

android:id="@+id/hop3"

android:background="#8e0917"

android:textSize="10pt"

android:textAlignment="center"

android:layout\_below="@+id/hop1" />

<TextView

android:layout\_width="150dp"

android:layout\_height="50dp"

android:text="4"

android:textColor="#fff"

android:id="@+id/hop4"

android:textSize="10pt"

android:textAlignment="center"

android:background="#edcb25"

android:layout\_below="@+id/hop2"

android:layout\_toRightOf="@+id/hop3" />

</RelativeLayout>

4. TableLayout: Các view bên trong được xếp theo dạng table. Mỗi row là 1 TableRow , bên trong TableRow sẽ chứa các View.

<TableLayout android:layout\_height="match\_parent"

android:layout\_width="match\_parent"

xmlns:android="http://schemas.android.com/apk/res/android">

<TableRow>

<TextView

android:text="TableLayout Example"

android:background="#c98282"

android:gravity="center"/>

</TableRow>

<TableRow>

<Button android:text="B1 B1" />

<Button android:text="B2"/>

</TableRow>

<TableRow>

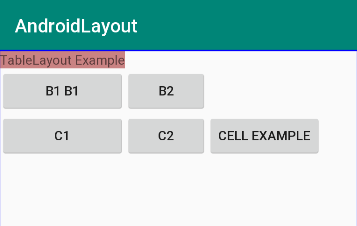
<Button android:text="C1" />

<Button android:text="C2" />

<Button android:text="Cell example" />

</TableRow>

</TableLayout>



5. GridLayout: Layout dạng lưới với số dòng và số cột ta quy định. Mỗi View bên trong sẽ nằm ở mỗi ô trong lưới này.

<GridLayout

xmlns:android1="http://schemas.android.com/apk/res/android"

android1:layout\_width="match\_parent"

android1:layout\_height="match\_parent"

android1:columnCount="2"

android1:rowCount="2"

>

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:text="1"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textAlignment="center"

android1:textStyle="bold"

android1:background="@color/colorAccent" />

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:text="2"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textAlignment="center"

android1:textStyle="bold"

android1:background="@color/colorPrimary" />

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:text="3"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textAlignment="center"

android1:textStyle="bold"

android1:background="#8c0520" />

<TextView

android1:layout\_width="80dp"

android1:layout\_height="80dp"

android1:background="#efcd21"

android1:text="4"

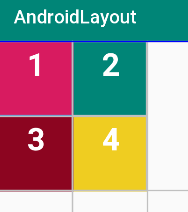
android1:textAlignment="center"

android1:textColor="#fff"

android1:textSize="15pt"

android1:textStyle="bold" />

</GridLayout>



6. ConstraintLayout:

II. Tips sử dụng Android studio:

1. Show white spaces : File -> Setting -> Editor -> General -> Appearance -> Show whitespaces