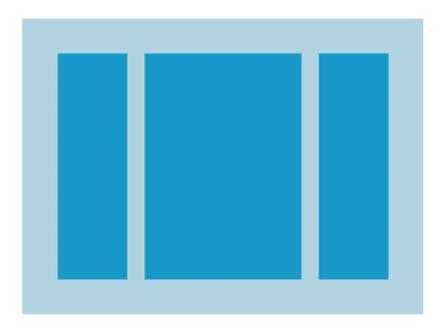
### **Android Developers**

# Linear Layout

LinearLayout (https://developer.android.com/reference/android/widget/LinearLayout.html) is a view group that aligns all children in a single direction, vertically or horizontally. You can specify the layout direction with the android:orientation

(https://developer.android.com/reference/android/widget/LinearLayout.html#attr\_android:orientation) attribute.



All children of a LinearLayout (https://developer.android.com/reference/android/widget/LinearLayout.html) are stacked one after the other, so a vertical list will only have one child per row, no matter how wide they are, and a horizontal list will only be one row high (the height of the tallest child, plus padding). A LinearLayout (https://developer.android.com/reference/android/widget/LinearLayout.html) respects margins between children and the gravity (right, center, or left alignment) of each child.

## **Layout Weight**

#### LinearLayout

(https://developer.android.com/reference/android/widget/LinearLayout
.html) also supports assigning a weight to individual children with
the android:layout\_weight

(https://developer.android.com/reference/android/widget/LinearLayout.LayoutParam s.html#attr\_android:layout\_weight) attribute. This attribute assigns an "importance" value to a view in terms of how much space it should occupy on the screen. A larger weight value allows it to expand to fill any remaining space in the parent view. Child views can specify a weight value, and then any remaining space in the view group is

#### **Equally weighted children**

To create a linear layout in which each child uses the same amount of space on the screen, set the android:layout\_height

(https://developer.android.com/reference/android/view/ViewGroup.LayoutParams.html#attr\_android:layout\_height) of each view to "0dp" (for a vertical layout) or the android:layout\_width

(https://developer.android.com/reference/android/view/ViewGroup.LayoutParams.html#attr\_and roid:layout\_width) of each view to "0dp" (for a horizontal layout). Then set the

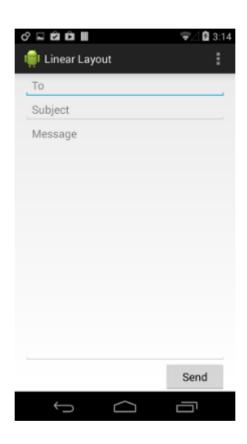
assigned to children in the proportion of their declared weight. Default weight is zero.

android:layout\_weight
(https://developer.android.com/reference/android/widget/LinearLayout.LayoutParams.html#attr\_android:layout\_weight) of each view to "1".

For example, if there are three text fields and two of them declare a weight of 1, while the other is given no weight, the third text field

without weight will not grow and will only occupy the area required by its content. The other two will expand equally to fill the space remaining after all three fields are measured. If the third field is then given a weight of 2 (instead of 0), then it is now declared more important than both the others, so it gets half the total remaining space, while the first two share the rest equally.

### Example



```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"</pre>
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingLeft="16dp"
    android:paddingRight="16dp"
    android:orientation="vertical" >
    <EditText
        android:layout_width="match_parent"
        android: layout_height="wrap_content"
        android:hint="@string/to" />
    <EditText
        android:layout_width="match_parent"
        android: layout_height="wrap_content"
        android:hint="@string/subject" />
    <EditText
```

```
android:layout_width="match_parent"
android:layout_height="0dp"
android:layout_weight="1"
android:gravity="top"
android:hint="@string/message" />
<Button
android:layout_width="100dp"
android:layout_height="wrap_content"
android:layout_gravity="right"
android:text="@string/send" />
</LinearLayout>
```

For details about the attributes available to each child view of a LinearLayout

(https://developer.android.com/reference/android/widget/LinearLayout.html), See LinearLayout.LayoutParams (https://developer.android.com/reference/android/widget/LinearLayout.LayoutParams.html).