1.3 Text and scrolling views

Contents

- TextView
- ScrollView

TextView

TextView for text

- <u>TextView</u> is View subclass for single and multi-line text
- EditText is TextView subclass with editable text
- Controlled with layout attributes
- Set text:
 - Statically from string resource in XML
 - Dynamically from Java code and any source

Formatting text in string resource

- Use and <i> HTML tags for bold and italics
- All other HTML tags are ignored
- String resources: one unbroken line = one paragraph
- \n starts a new a line or paragraph
- Escape apostrophes and quotes with backslash (\", \')
- Escape any non-ASCII characters with backslash (\)

Creating TextView in XML

```
<TextView android:id="@+id/textview"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:text="@string/my_story"/>
```

Common TextView attributes

```
android:text—text to display
android:textColor—color of text
android:textAppearance—predefined style or theme
android:textSize—text size in sp
android:textStyle—normal, bold, italic, or bold|italic
android:typeface—normal, sans, serif, or monospace
android: lineSpacingExtra—extra space between lines in sp
```

Formatting active web links

```
<string name="article_text">... www.rockument.com ...</string>
<TextView
  android:id="@+id/article"
   android:layout width="wrap content"
   android:layout height="wrap content"
  android:autoLink="web"
  android:text="@string/article_text"/>
```

autoLink values:"web", "email", "phone", "map", "all"

Don't use HTML for a web link in free-form text

Creating TextView in Java code

```
TextView myTextview = new TextView(this);
myTextView.setWidth(LayoutParams.MATCH PARENT);
myTextView.setHeight(LayoutParams.WRAP CONTENT);
myTextView.setMinLines(3);
myTextView.setText(R.string.my story);
myTextView.append(userComment);
```

ScrollView

What about large amounts of text?

- News stories, articles, etc...
- To scroll a TextView, embed it in a <u>ScrollView</u>
- Only one View element (usually TextView) allowed in a ScrollView
- To scroll multiple elements, use one ViewGroup (such as LinearLayout) within the ScrollView

ScrollView for scrolling content

- <u>ScrollView</u> is a subclass of <u>FrameLayout</u>
- Holds all content in memory
- Not good for long texts, complex layouts
- Do not nest multiple scrolling views
- Use <u>HorizontalScrollView</u> for horizontal scrolling
- Use a <u>RecyclerView</u> for lists

ScrollView layout with one TextView

```
android:layout width="wrap content"
android:layout height="wrap content"
android:layout below="@id/article subheations and article subheations are also and article subheations are also article subheations are also also are also also are a
<TextView
                      android:layout width="wrap content"
                      android:layout_height="wrap_content"
                        .../>
```

<ScrollView

</ScrollView>



ScrollView layout with a view group

```
<ScrollView ...</pre>
   <LinearLayout
       android:layout_width="match_parent"
       android:layout height="wrap content"
       android:orientation="vertical">
       <TextView
           android:id="@+id/article subheading"
           .../>
       <TextView
           android:id="@+id/article" ... />
   </LinearLayout>
</ScrollView>
```



ScrollView with image and button

```
<ScrollView...>
                                    One child of ScrollView
    <LinearLayout...>
                                    which can be a layout
         <ImageView.../>
                                      Children of the layout
         <Button.../>
         <TextView.../>
    </LinearLayout>
</ScrollView>
```

Learn more

Developer Documentation:

- <u>TextView</u>
- <u>ScrollView</u> and <u>HorizontalScrollView</u>
- String Resources

Other:

- Android Developers Blog: <u>Linkify your Text!</u>
- Codepath: <u>Working with a TextView</u>

What's Next?

- Concept Chapter: <u>1.3 Text and scrolling views</u>
- Practical: <u>1.3 Text and scrolling views</u>