



# Application Development

## Lab 2

September 17, 2021

**Objectives:** In this lab, you will learn

- How to work with View and ViewGroup.
- How to arrange views in an Activity, using LinearLayout.
- How to use ScrollView for displaying the scrollable content.
- How to change the visibility of a View .
- How to create and use string and dimension resources.
- How to create a LinearLayout using Android Studio's Layout Editor.

**Instructions:**

<https://developer.android.com/codelabs/kotlin-android-training-linear-layout>

- 1 Create the AboutMe Project
- 2 Change the root layout to use LinearLayout
- 3 Add a TextView using Layout Editor
- 4 Style your TextView
- 5 Add an ImageView
- 6 Add a ScrollView
- 7 Coding Challenge

Inside the ScrollView, add an ImageView above the TextView. When you run the app, this image, unlike the star, scrolls out of view as the text scrolls up.

Hint: The scroll view can only have one child view. You have to wrap the two scrollable views, the ImageView and the TextView, into a LinearLayout.

## 8 Homework

### 8.1 Question 1

Which of the following is a view group?

- (a) EditText
- ☒ (b) ~~LinearLayout~~
- (c) TextView
- (d) Button

### 8.2 Question 2

Which of the following listed view hierarchies is not valid?

- (a) LinearLayout > TextView, TextView, ImageView

(b) ScrollView > LinearLayout > TextView, Button, Button, ScrollView > TextView

~~(c) TextView > TextView, ImageView, ScrollView~~

### 8.3 Question 3

Styles are resources defined in **styles.xml**. Using styles, you can define colors, fonts, text size, and many other characteristics of a view. True or false?

☒ (a) True

(b) False

### 8.4 Question 4

A ScrollView is a view group that can contain any number of views or view groups as its children. True or false?

(a) True

☒ (b) False

### 8.5 Question 5

Which UI element can be used to display images in your app?

(a) TextView

☒ (b) ImageView

(c) Button

(d) ScrollView