



# 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