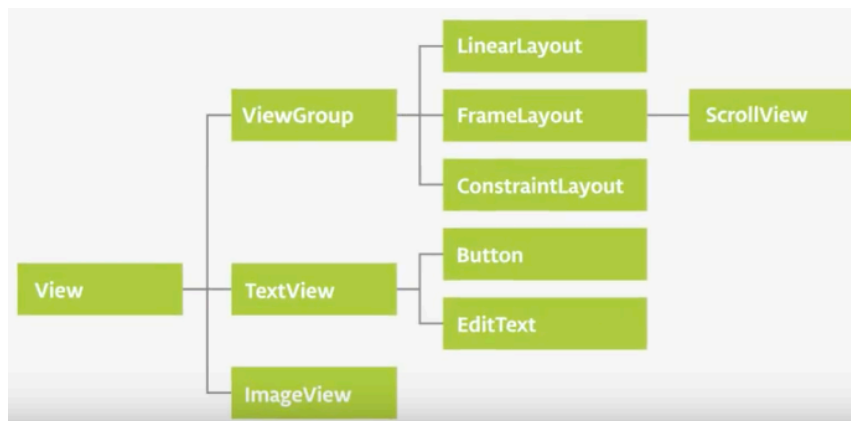


Lesson 2: Layouts

View Groups & View Hierarchy

All the visual elements that make up a screen are views and they are all children of the view class.



Density Independent Pixel (dp)

- On 160 dpi screen, 1dp == 1 pixel
- On 480 dpi screen, 1dp == 3 pixels

Data Binding

Every time we search for a view with `findViewById` after it has been created or re-created, android has to traverse the view hierarchy to find it at runtime.

For a large or deep view hierarchy this can take enough time that it can slow down the app for the user.

This is why we will use Databinding

Constraint Layout

Constraint

A connection or alignment to another UI element, to the parent layout, or to an invisible guideline.

Advantages

- You can make it responsive to screens and resolutions
- Usually flatter view hierarchy
- Optimized for laying out its views
- Free-form - place views anywhere, and the editor helps add constraints