

# Chapter 5 – Android Resources

[ Group 7 ]

## Chapter Objective

- To know what is Android Resources and kinds of resources.
- Understand briefly how each resources works

## What is Android Resources ?

- Resources: bundled to the app, stored in res/directory, can be accessed by code line: `R.<category>.<resourceName>`.
- Content: layouts, values, drawables, raw, styles, design guildelines.

## Layout

### • Definition

- A way to organize Views inside an UI, can be created in XML files in res/layout, nested.

### • Layout XML

- Containers (ViewGroups) contain Views (TextView, ImageView, EditText, Button, ImageButton,...).
- Required: `layout_width`, `layout_height`. Optional: `id` (`findViewById()`).

### • Adaptive: Layout on Android

- Use different layout XMLs in different directories. Eg: tablet: `layout-large`, `layout-xlarge`, Phone: `layout-normal`,...
- To load XML layout: In Activity file, use `onCreate()` with `setContentView()`; Fragment: use `onCreateView()`.

### • Popular Layout classes: `FrameLayout`, `LinearLayout`, `RelativeLayout`, `ViewPager`.

- `FrameLayout`: can contain multiple children, multiple layers, first child will be at the bottom, support child margins, gravity.
- `LinearLayout`: one direction, horizontal or vertical.
- `RelativeLayout`: enables to specify how child views are positioned “relative” to each other.