# Layouts

http://developer.android.com/guide/topics/ui/declaring-layout.html

Child views have “layout\_\*” attributes that specify how the containing layout should arrange them (see layoutparams.png)

Universal layout attributes:

layout\_width, layout\_height

wrap\_content, match\_parent

specific values (e.g., 30dp)

LinearLayout

orientation

LinearLayout.LayoutParams:

https://developer.android.com/reference/android/widget/LinearLayout.LayoutParams.html

RelativeLayout

RelativeLayout.LayoutParams:

https://developer.android.com/reference/android/widget/RelativeLayout.LayoutParams.html

GridLayout

rowCount, columnCount

GridLayout.LayoutParams:

https://developer.android.com/reference/android/widget/GridLayout.LayoutParams.html

FrameLayout

Used as placeholder for dynamically created fragments

FrameLayout.LayoutParams:

https://developer.android.com/reference/android/widget/FrameLayout.LayoutParams.html

# Layout Exercises

How would you create the following layouts (widgets and layouts)? [Widgets used are listed below]

Login Fragment

Map Fragment

Main Activity

Person Activity

Map Activity

# Widgets / Atrributes / Events

http://developer.android.com/guide/topics/ui/controls.html

TextView (text labels)

text, textAppearance

.setClickable(boolean) – make clickable

.setOnClickListener(View.OnClickListener)

EditText (text fields)

inputType, ems

.addTextChangedListener(TextWatcher)

Space (blank space)

set layout\_width and layout\_height to specific values (e.g., 30dp)

Button

text

.setOnClickListener(View.OnClickListener)

ImageView (display image)

.setClickable(boolean) – make clickable

.setImageDrawable(IconDrawable) – set icon to display

.setOnClickListener(View.OnClickListener)

Switch (on/off)

.setChecked(boolean) – set check state

.setOnCheckedChangeListener(CompoundButton.OnCheckedChangeListener)

Spinner (dropdown list)

.setAdapter(ArrayAdapter) – specify list values

.setSelection(int) – specify selected item

onItemSelectedListener(AdapterView.OnItemSelectedListener)

SearchView

.setFocusable(boolean) – accept key focus

.setIconified(boolean) – make always visible

.requestFocusFromTouch() – request focus when touched

.setOnQueryTextListener(SearchView.OnQueryTextListener)

ScrollView

Wrap around any view to make it scrollable

RecyclerView

Dynamic lists of items

\* ListView / ExpandableListView