MICROOH 麦可网

## Android-从程序员到架构师之路

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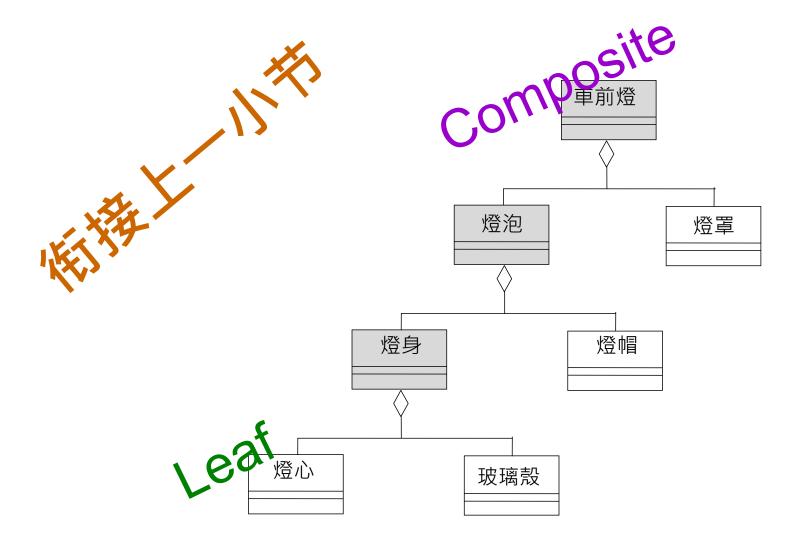
http://www.microoh.com

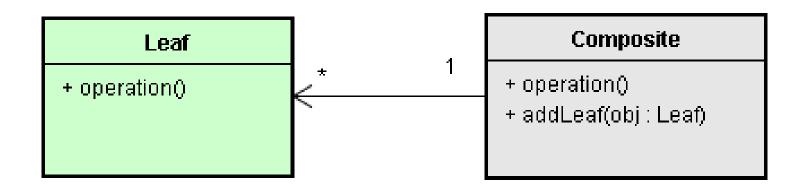
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## 简介设计模式(g)

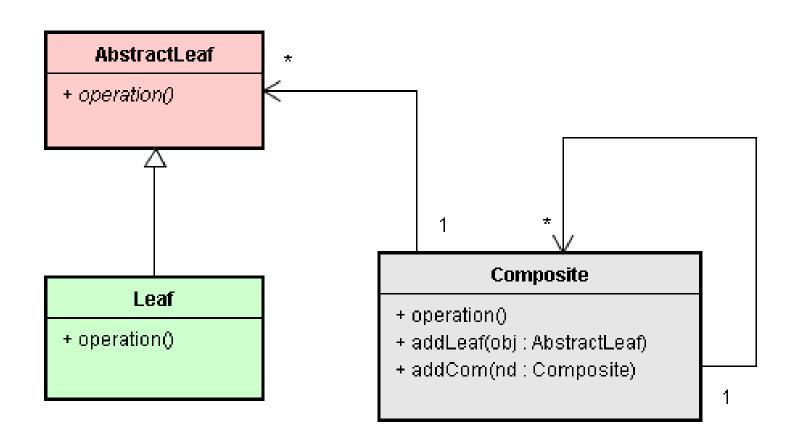
By 高煥堂

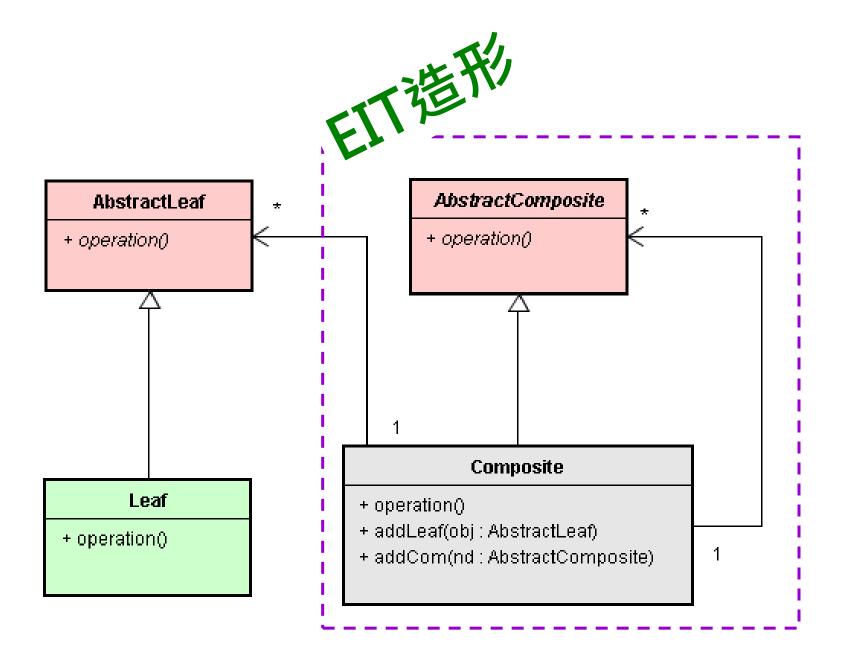
## 12、范例: Android + Composite模式

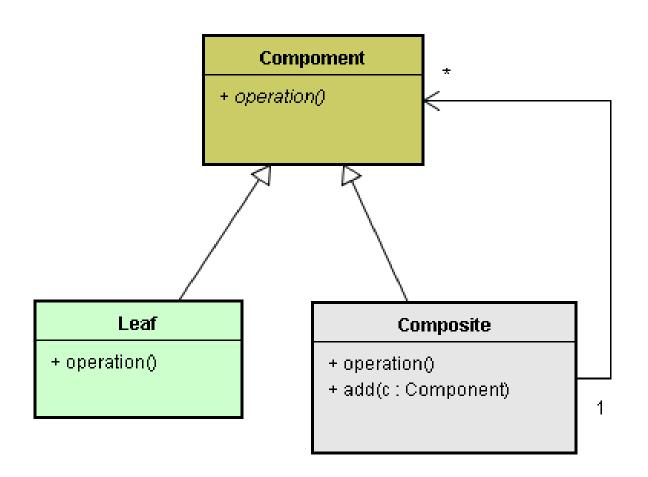




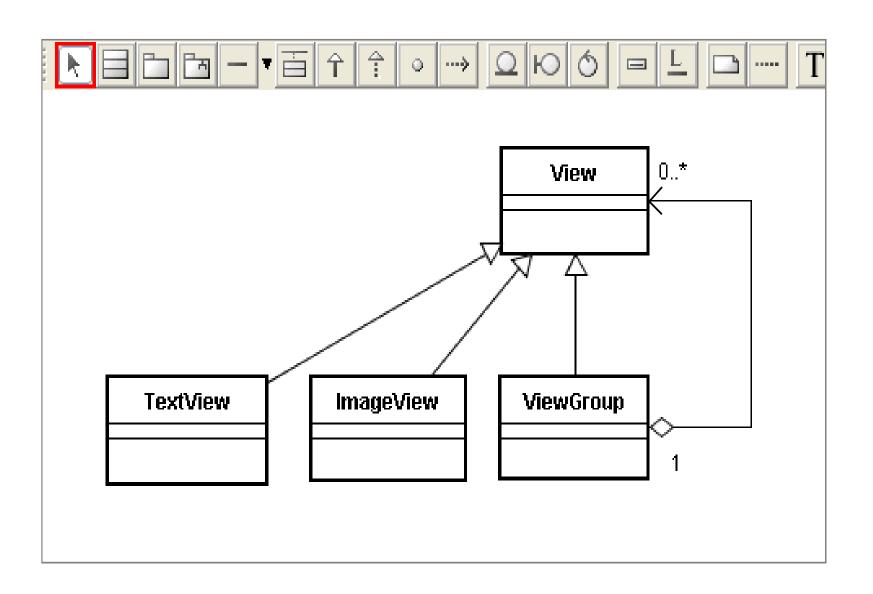
# AbstractLeaf + operation() Leaf Composite + operation() + operation() + addLeaf(obj : AbstractLeaf)



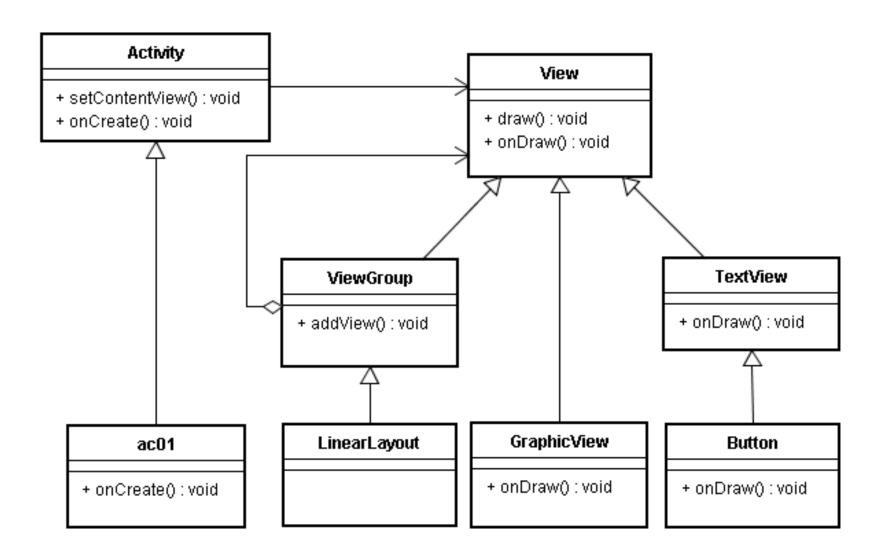




#### View体系含有一个Composite模式:



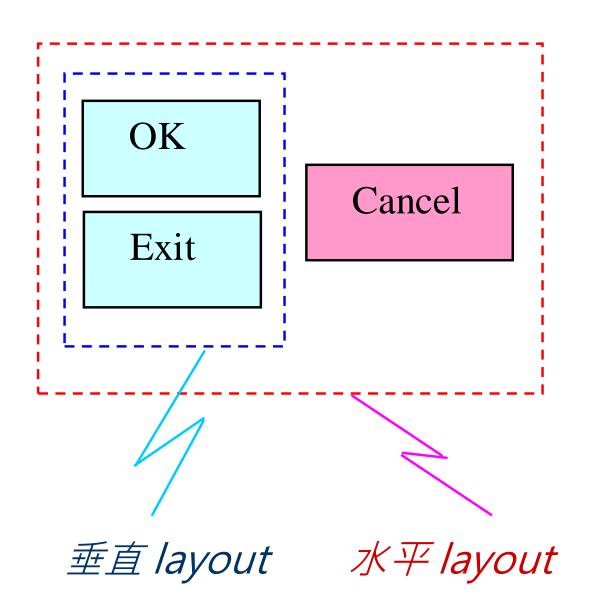
- 在Android平台里,像Button或 ImageButton等屏幕控件皆通称为View。
- 多个View能组合在一起,就会各种排列方式,即称为「布局」(Layout)。
- 这Layout类别就是从ViewGroup父类别衍生出来的。

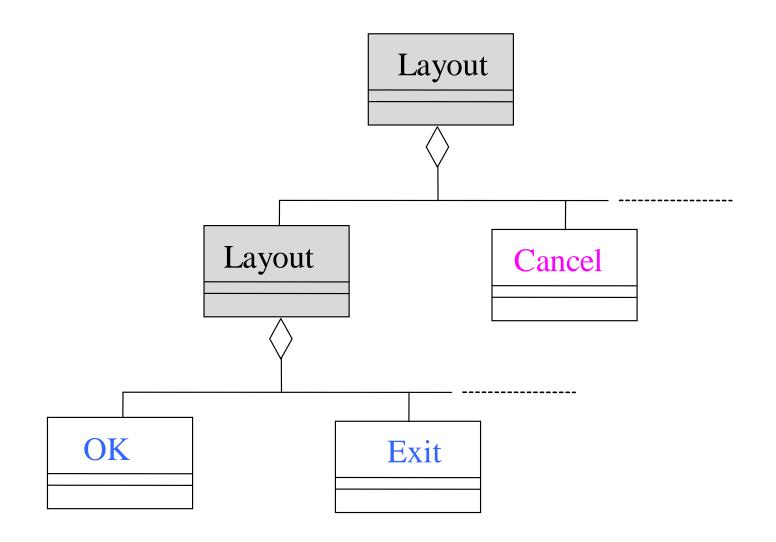


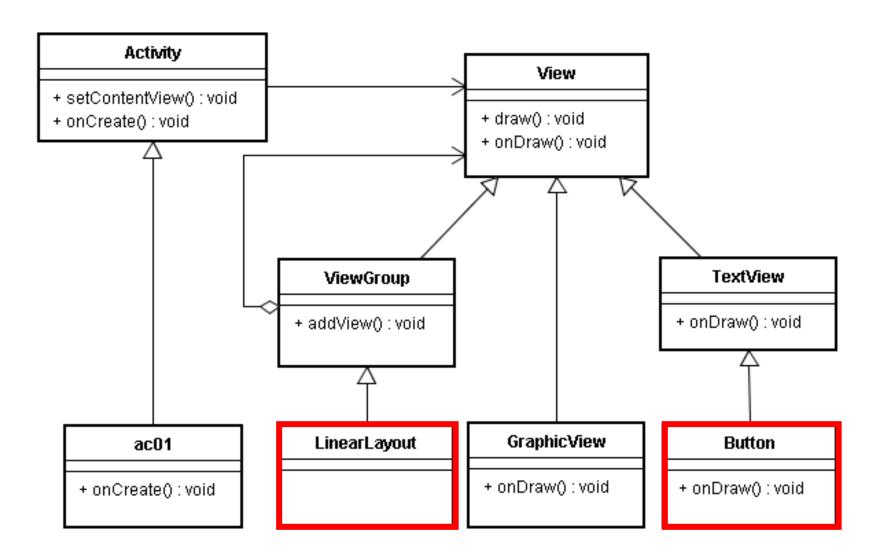
- 最基本的布局方式有二,就是:垂直和水平排列。
- 例如,画面里有三个按钮:



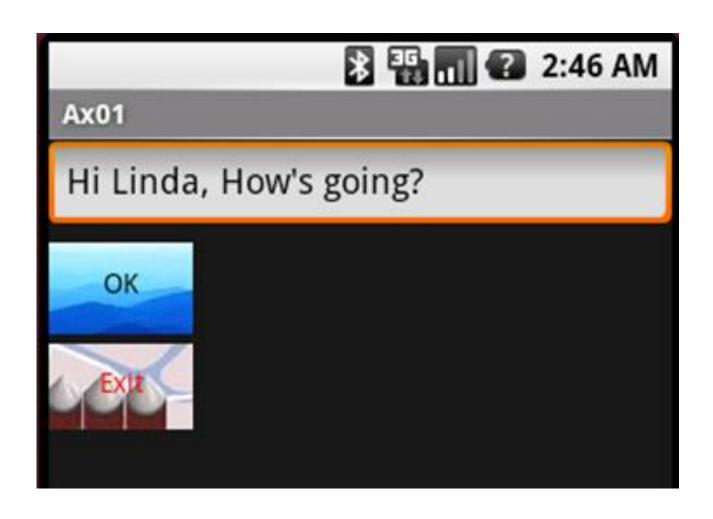
- 其中,把OK和Exit两个按钮看成一组,构成一组垂直型的布局,称为垂直 LinearLayout。
- 然后,把这个垂直LinearLayout与Cancel 按钮看成一组,构成一组水平型的布局, 称为水平LinearLayout。







#### 范例之一

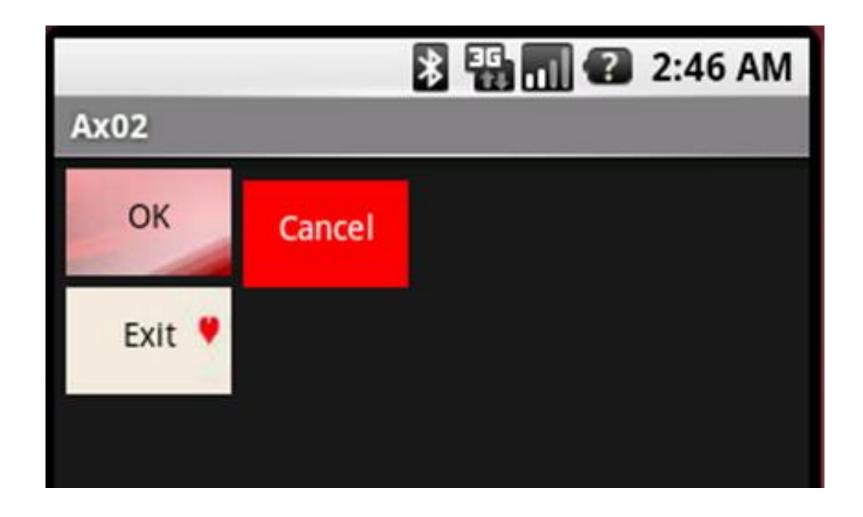


```
// Axc01.java
// .....
public class Ax01 extends Activity implements OnClickListener {
   private final int WC =
   LinearLayout.LayoutParams.WRAP_CONTENT;
   private final int FP = LinearLayout.LayoutParams.FILL_PARENT;
   private Button btn, btn2;
   private EditText et;
   @Override public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
     LinearLayout layout = new LinearLayout(this);
     layout.setOrientation(LinearLayout. VERTICAL);
     et = new EditText(this);
     LinearLayout.LayoutParams param =
         new LinearLayout.LayoutParams(FP, WC);
     layout.addView(et, param);
```

```
btn = new Button(this); btn.setText("OK");
LinearLayout.LayoutParams param2 =
   new LinearLayout.LayoutParams(WC, WC);
param2.topMargin = 5;
btn.setBackgroundResource(R.drawable.ok_blue);
btn.setOnClickListener(this);
layout.addView(btn, param2);
btn2 = new Button(this);
btn2.setTextColor(Color.RED); btn2.setText("Exit");
btn2.setBackgroundResource(R.drawable.exit_gray);
btn2.setOnClickListener(this);
layout.addView(btn2, param2);
setContentView(layout);
```

```
public void onClick(View v) {
    if(v == btn)
        setTitle(et.getText());
    else if(v == btn2)
        finish();
}
```

#### 范例之二



```
// Ax02.java
public class Ax02 extends Activity {
   private final int WC =
   LinearLayout.LayoutParams.WRAP_CONTENT;
  @Override public void onCreate(Bundle icicle) {
    super.onCreate(icicle);
    LinearLayout layout = new LinearLayout(this);
    layout.setOrientation(LinearLayout. VERTICAL);
    LinearLayout.LayoutParams param =
       new LinearLayout.LayoutParams(70, 45);
    param.topMargin = 5;
    Button btn = new Button(this);
    btn.setBackgroundResource(R.drawable.ok);
    btn.setText("OK"); btn.setOnClickListener(listener);
    layout.addView(btn, param);
```

```
Button btn2 = new Button(this);
btn2.setBackgroundResource(R.drawable.heart);
btn2.setText("Exit"); btn2.setOnClickListener(listener2);
layout.addView(btn2, param);
LinearLayout out_layout = new LinearLayout(this);
out_layout.setOrientation(LinearLayout.HORIZONTAL);
LinearLayout.LayoutParams out_param =
    new LinearLayout.LayoutParams(WC, WC);
out_layout.addView(layout, out_param);
Button btn3 = new Button(this);
btn3.setText("Cancel"); btn3.setTextColor(Color.WHITE);
btn3.setBackgroundColor(Color.RED);
btn3.setOnClickListener(listener3);
param.leftMargin = 5;
out_layout.addView(btn3, param);
setContentView(out_layout);
```

```
OnClickListener listener = new OnClickListener(){
public void onClick(View v) {
        setTitle("this is OK button");
 }};
OnClickListener listener2 = new OnClickListener() {
public void onClick(View v) { finish(); }
  };
OnClickListener listener3 = new OnClickListener(){
     public void onClick(View v){ setTitle("this is Cancel button"); }
   };
```

# Thanks...



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