# Introducing Views

As described above, all visual components in Android descend from the View class and are referred to generically as *Views*. You'll often see Views referred to as *controls* or *widgets* — terms you're probably familiar with if you've done any GUI development.

The ViewGroup class is an extension of View designed to contain multiple Views. Generally, View Groups are either used to construct atomic reusable components (widgets) or to manage the layout of child Views. View Groups that perform the latter function are generally referred to as *layouts*.

Because all visual elements derive from Views, many of the terms above are interchangeable. By convention, a *control* usually refers to an extension of Views that implements relatively simple functionality, while a *widget* generally refers to both compound controls and more complex extensions of Views.

The conventional naming model is shown in Figure 4-1. In practice, you will likely see both *widget* and *control* used interchangeably with *View*.
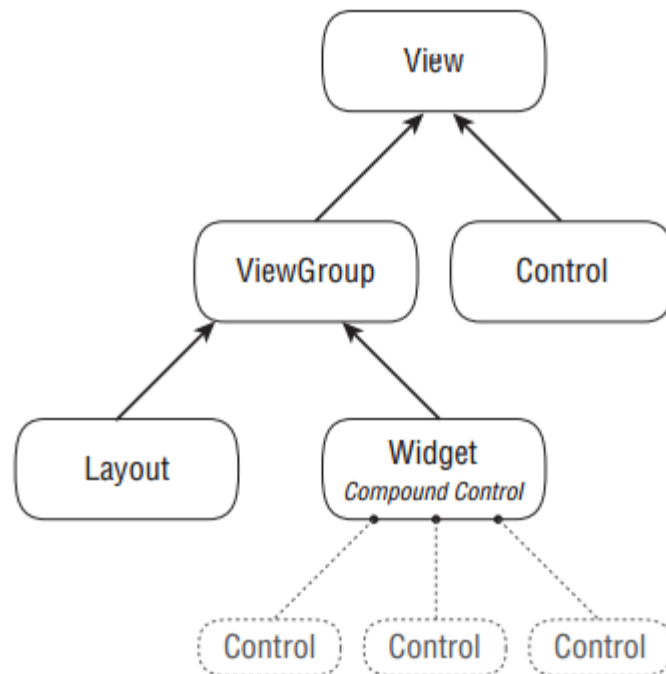
Figure 4-1

You've already been introduced to a layout and two widgets — the LinearLayout, a ListView, and a TextView — when you created the To-Do List example in Chapter 2.

In the following sections, you'll learn how to put together increasingly complex UIs, starting with the Views available in the SDK, before learning how to extend them, build your own compound controls, and create your own custom Views from scratch.