



What You Need to Begin

Because Android applications run within the Dalvik virtual machine, you can write them on any platform that supports the developer tools. This currently includes the following:

- Microsoft Windows (XP or Vista)
- Mac OS X 10.4.8 or later (Intel chips only)
- Linux

To get started, you'll need to download and install the following:

- The Android SDK
- Java Development Kit (JDK) 5 or 6

You can download the latest JDK from Sun at

<http://java.sun.com/javase/downloads/index.jsp>

If you already have a JDK installed, make sure that it meets the version requirements listed above, and note that the Java runtime environment (JRE) is not sufficient.

Downloading and Installing the SDK

The Android SDK is completely open. There's no cost to download and use the API, and Google doesn't charge to allow distribution of your finished programs. You can download the latest version of the SDK for your development platform from the Android development home page at <http://code.google.com/android/download.html>

Unless otherwise noted, the version of the Android SDK used for writing this book was version 1.0 r1.

The SDK is presented as a ZIP file containing the API libraries, developer tools, documentation, and several sample applications and API demos that highlight the use of particular API features. Install it by unzipping the SDK into a new folder. (Take note of this location, as you'll need it later.)

The examples and step-by-step instructions provided are targeted at developers using Eclipse with the Android Developer Tool (ADT) plug-in. Neither is required, though — you can use any text editor or Java IDE you're comfortable with and use the developer tools in the SDK to compile, test, and debug the code snippets and sample applications.

If you're planning to use them, the next sections explain how to set up Eclipse and the ADT plug-in as your Android development environment. Later in the chapter, we'll also take a closer look at the developer tools that come with the SDK, so if you'd prefer to develop without using Eclipse or the ADT plugin, you'll particularly want to check that out.

The examples included in the SDK are well documented and are an excellent source for full, working examples of applications written for Android. Once you've finished setting up your development environment, it's worth going through them.