# Developing Android Applications

You can develop Android applications with the same high-quality tools you use to develop Java applications. The Android core libraries provide the functionality needed to build some amazingly rich mobile applications, and the Android development tools make running, debugging, and testing your applications a snap.

This section explains the ins and outs of developing Android applications. It outlines the philosophy behind the system and then describes each of the key subsystems in detail. After reading this section, you'll have the knowledge and confidence to begin writing that real-world Android app you have in mind.

Before reading this section you should read theGetting Started Guide, which helps you get up and running with the Android SDK and shows you how to build a basic app. This section builds on the information in the Getting Started section.

Here's the content you'll find in this section:

**Implementing a UI**
: Explains how to construct and interact with user interfaces for Android applications. After reading this page you'll have a solid understanding of how Android layouts are built, how they operate at runtime, and how you can make them pretty.

**Building Blocks**
: Detailed descriptions of Android components. Covers the ins and outs of the components summarized in Anatomy of an Android App, plus more. This section goes into detail on each of the key Android components (Intents, Activities, Views, and events.)

**Storing and Retrieving Data**
: How to read and write data to the various storage mechanisms provided by Android, and to network services. There are several different ways to read and write data from an Android application, each aimed at different needs. This page describes them all and explains how to pick the right one for your needs.

**Security Model**
: Gaining access to secure system resources and features, and declaring permissions to control access to your own secure features. Permissions control whether a given application is able to access piece of functionality provided by another application (for example, which applications can dial the phone). This page describes how permissions work and how to request permissions as well as define your own.

**Resources and i18n**
: Detailed descriptions of Android's application-resource management system, including how it's used for internationalization and localization. "Resources" are application assets (such as images, localized strings, and XML layouts) that need to be resolved at runtime. This page describes how Android resolves which resource to load from a selection of them, as well as how to create and use resources.