

# Using Touch Gestures

This class describes how to write apps that allow users to interact with an app via touch gestures. Android provides a variety of APIs to help you create and detect gestures.

Although your app should not depend on touch gestures for basic behaviors (since the gestures may not be available to all users in all contexts), adding touch-based interaction to your app can greatly increase its usefulness and appeal.

To provide users with a consistent, intuitive experience, your app should follow the accepted Android conventions for touch gestures. The [Gestures design guide](http://developer.android.com/design/patterns/gestures.html) (<http://developer.android.com/design/patterns/gestures.html>) ([/notifications.html](http://developer.android.com/design/patterns/notifications.html)) shows you how to use common gestures in Android apps. Also see the Design Guide for [Touch Feedback](http://developer.android.com/design/style/touch-feedback.html) ([/design/style/touch-feedback.html](http://developer.android.com/design/style/touch-feedback.html)).

## Lessons

### Detecting Common Gestures

Learn how to detect basic touch gestures such as scrolling, flinging, and double-tapping, using [GestureDetector](#).

### Tracking Movement

Learn how to track movement.

### Animating a Scroll Gesture

Learn how to use scrollers ([Scroller](#) or [OverScroller](#)) to produce a scrolling animation in response to a touch event.

### Handling Multi-Touch Gestures

Learn how to detect multi-pointer (finger) gestures.

### Dragging and Scaling

Learn how to implement touch-based dragging and scaling.

### Managing Touch Events in a ViewGroup

Learn how to manage touch events in a [ViewGroup](#) to ensure that touch events are correctly dispatched to their target views.

### DEPENDENCIES AND PREREQUISITES

- Android 1.6 (API Level 4) or higher

### YOU SHOULD ALSO READ

- [Input Events](#) API Guide
- [Sensors Overview](#)
- [Making the View Interactive](#)
- Design Guide for [Gestures](#)
- Design Guide for [Touch Feedback](#)

### TRY IT OUT

[Download the sample](#)

InteractiveChart.zip