

**"The Resources I used to teach myself Java, Android and create my first published app in the Google Play Store..."**

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		<i>Thank you for your support, it took me many days to make this guide! - Ryan</i>	

Resources to Get Started	Category	Skill Level	Context	Link
1	Eclipse IDE Setup	Beginner	You need what's called an IDE to get started coding Android Apps. IDE is a fancy way of saying "the program you do the coding in", this program helps you code by assisting you with error checking, code suggestions, etc.	<a href="http://developer.android.com/sdk/index.html">http://developer.android.com/sdk/index.html</a>
2	Eclipse IDE Setup	Beginner	Under Window > Preferences > Java > Code Style > Formatter - Import this XML document into Eclipse to automatically format your code to Android specifications.	<a href="https://raw.githubusercontent.com/android/platform_development/master/ide/eclipse/android-formatting.xml">https://raw.githubusercontent.com/android/platform_development/master/ide/eclipse/android-formatting.xml</a>
3	Eclipse IDE Setup	Beginner	While more trivial, import this into Eclipse as well (just below at Organize Imports) to define the appropriate order of your Android app's imports.	<a href="https://raw.githubusercontent.com/android/platform_development/master/ide/eclipse/android-importorder">https://raw.githubusercontent.com/android/platform_development/master/ide/eclipse/android-importorder</a>
4	Eclipse IDE Setup	Beginner	Before you start pounding away code, ensure your development environment is the most efficient. I used this guide to setup Eclipse for fast development.	<a href="http://coding.smashingmagazine.com/2011/11/04/getting-the-best-out-of-eclipse-for-android-development/">http://coding.smashingmagazine.com/2011/11/04/getting-the-best-out-of-eclipse-for-android-development/</a>
5	Design	Beginner	Before creating any apps, go grab Google's official Android icons, stencils, fonts, etc. You're allowed to use these in your apps and you should because they're free!	<a href="http://developer.android.com/design/downloads/index.html">http://developer.android.com/design/downloads/index.html</a>
6	Java Introduction	Beginner	Android is based off Java, so it's a good idea to learn the basics of Java before starting.	<a href="http://mobile.tutsplus.com/tutorials/android/java-tutorial/">http://mobile.tutsplus.com/tutorials/android/java-tutorial/</a>
7	Android Introduction	Beginner	To get started for Android, I suggested reading Google's own Introduction to Android development. It's a great primer and should help you get your footing before branching out into more specific topics.	<a href="http://developer.android.com/training/index.html">http://developer.android.com/training/index.html</a>
8	Android Introduction	Beginner	Take a look around for some of the free and useful Google services which will compliment your app development. I utilize many Webmaster, Startup and Mobile resources.	<a href="https://developers.google.com/products/">https://developers.google.com/products/</a>

Resources by Category	Category	Skill Level	Context	Link
	App Preferences	Beginner	Often you want to prompt the user the first time they run your app, this is exactly how you do that! This guide demonstrates how to use an Android app's preferences to store settings like the first run of the app.	<a href="http://stackoverflow.com/questions/7562786/android-first-run-popup-dialog">http://stackoverflow.com/questions/7562786/android-first-run-popup-dialog</a>
	SQL Databases	Beginner	It's very handy store your app's data in a SQL database, this guide shows you how to set this up. Get on this soon so you don't have to redo your app's storage.	<a href="http://www.reigndesign.com/blog/using-your-own-sqlite-database-in-android-applications/">http://www.reigndesign.com/blog/using-your-own-sqlite-database-in-android-applications/</a>
	Design	Beginner	The Android Design guide by Google is a great place to start for layout design advice. Approach layout design with this in mind: you start with a layout defined by Google and follow the principles outlined in this guide to customize it for your app. Pay attention to the rules in this guide, they ensure your app looks great while also displaying properly on all Android phones.	<a href="http://developer.android.com/design/index.html">http://developer.android.com/design/index.html</a>
	Design	Beginner	Nine patch images are images used by Android to provide flexible graphics that can match any screen size or pixel density. Nine patches are a very easy way to create a flexible layout, you should read this early on.	<a href="http://stackoverflow.com/questions/4517693/how-does-a-9patch-png-work-in-android-apps">http://stackoverflow.com/questions/4517693/how-does-a-9patch-png-work-in-android-apps</a>
	Design	Beginner	When you publish an app, you must own the rights to your graphics. Instead of buying graphics, find free ones like these!	<a href="http://brankic1979.com/icons/">http://brankic1979.com/icons/</a>
	Design	Intermediate	Using the Holo theme is a must. However, old versions of Android don't support Holo. This guide is a must read on how to provide backwards Holo compatibility.	<a href="http://www.chilisapps.com/blog/2012/04/17/support-holo-and-older-themes-in-android/">http://www.chilisapps.com/blog/2012/04/17/support-holo-and-older-themes-in-android/</a>
	Design	Beginner	In Android, given the number of different screen sizes and pixel densities, developing layouts with density independent pixels is very important. Read this to understand what the heck I'm saying.	<a href="http://stackoverflow.com/questions/2025282/difference-of-px-dp-dip-and-sp-in-android">http://stackoverflow.com/questions/2025282/difference-of-px-dp-dip-and-sp-in-android</a>
	Design	Beginner	The software keyboard often screws with your app's layout, this advice can help control the keyboard.	<a href="http://stackoverflow.com/questions/1109022/close-hide-the-android-soft-keyboard">http://stackoverflow.com/questions/1109022/close-hide-the-android-soft-keyboard</a>
	Android Specifics	Beginner	Android has a specific file called the Manifest which determines what permissions your app has, how it interacts with other apps and more. You must understand this, it's fundamental to any Android app.	<a href="http://developer.android.com/guide/topics/manifest/manifest-intro.html">http://developer.android.com/guide/topics/manifest/manifest-intro.html</a>
	Android Specifics	Beginner / Intermediate	Each Android "screen" is a unique Activity, this guide teaches you how to pass data between Activities with Intents. This concept is specific to Android, so you must read carefully with an open mind.	<a href="http://developer.android.com/guide/components/intents-filters.html">http://developer.android.com/guide/components/intents-filters.html</a>
	Android Specifics	Beginner	This demonstrates how to interact with other apps in Android such as opening a URL in the web browser.	<a href="http://stackoverflow.com/questions/2201917/how-can-i-open-a-url-in-androids-web-browser-from-my-application">http://stackoverflow.com/questions/2201917/how-can-i-open-a-url-in-androids-web-browser-from-my-application</a>

	Android Specifics	Beginner	You'll find the software keyboards on Android devices really mess up your layouts from time to time, this is how to fix some common problems.	<a href="http://stackoverflow.com/questions/4207880/android-how-do-i-prevent-the-soft-keyboard-from-pushing-my-view-up">http://stackoverflow.com/questions/4207880/android-how-do-i-prevent-the-soft-keyboard-from-pushing-my-view-up</a>
	Android Specifics	Beginner	The Activity is the life of all Android apps. The Activity is the view or screen you see on your phone, you MUST understand how Activities are created, resumed, destroyed, etc. You will use these events to trigger different aspects of your app's functionality.	<a href="http://developer.android.com/reference/android/app/Activity.html">http://developer.android.com/reference/android/app/Activity.html</a>
	Android Specifics	Intermediate	Android has some quirks about using Threads. For instance, any changes to the UI's views must be done on the main Thread and network operations can't be performed on the main Thread. Get a taste for Threading in Android here.	<a href="http://stackoverflow.com/questions/5161951/android-only-the-original-thread-that-created-a-view-hierarchy-can-touch-its-vi">http://stackoverflow.com/questions/5161951/android-only-the-original-thread-that-created-a-view-hierarchy-can-touch-its-vi</a>
	Android Specifics	Intermediate	How does Android save your Activity (screen) when you leave the app and do something else? This is how.	<a href="http://stackoverflow.com/questions/151777/saving-activity-state-in-android">http://stackoverflow.com/questions/151777/saving-activity-state-in-android</a>
	Tips and Tricks	Intermediate	In Android you often need to get context, as in, where was this code running? This concept is a bit of a mind screw, so read this, implement it and you'll be glad.	<a href="http://stackoverflow.com/questions/2002288/static-way-to-get-context-on-android">http://stackoverflow.com/questions/2002288/static-way-to-get-context-on-android</a>
	Tips and Tricks	Intermediate	Learn how to use the Application class to create a central place for "global" variables in your app and global helper Methods.	<a href="http://stackoverflow.com/questions/708012/android-how-to-declare-global-variables">http://stackoverflow.com/questions/708012/android-how-to-declare-global-variables</a>
	Bug Testing	Intermediate	The Monkey helps you test your app, it wanders through your app and creates random clicks, touches, gestures, etc. Use the Monkey before publishing!	<a href="http://developer.android.com/tools/help/monkey.html">http://developer.android.com/tools/help/monkey.html</a>
	Localization	Intermediate / Advanced	Localization (making an app local to the user) is difficult to understand and master. Android's guide is the best resource, read very carefully, subtle details make major differences here.	<a href="http://developer.android.com/guide/topics/resources/localization.html">http://developer.android.com/guide/topics/resources/localization.html</a>
	Multi-tasking	Advanced	While for most apps Tasks (drawn from the idea of multi-tasking) don't need to be messed with, when it comes to Widget clicks or Notification clicks you MUST understand how Tasks work, this is the best guide for this!	<a href="http://developer.android.com/guide/components/tasks-and-back-stack.html">http://developer.android.com/guide/components/tasks-and-back-stack.html</a>
	Multi-tasking	Advanced	This is a very specific sub-section of the guide above for Tasks, this is a very important part to understand, read this 3 times.	<a href="http://developer.android.com/guide/components/tasks-and-back-stack.html#ManagingTasks">http://developer.android.com/guide/components/tasks-and-back-stack.html#ManagingTasks</a>
	Notifications	Intermediate	Notifications are super important for apps to deliver meaningful alerts to the user. Notifications should be kept simple, read this guide to gain an understanding of notifications and the appropriate style to use.	<a href="http://developer.android.com/guide/topics/ui/notifiers/notifications.html">http://developer.android.com/guide/topics/ui/notifiers/notifications.html</a>
	Widgets	Intermediate	When you want to create homescreen widgets for your app, start here.	<a href="http://www.vogella.com/articles/AndroidWidgets/article.html">http://www.vogella.com/articles/AndroidWidgets/article.html</a>
	Widgets	Intermediate	When creating Widgets there are some very specific settings. Use this guide to setup the size of your widget.	<a href="http://stackoverflow.com/questions/10788068/widget-minwidth-for-having-n-columns">http://stackoverflow.com/questions/10788068/widget-minwidth-for-having-n-columns</a>
	Monetization	Beginner	Before adding ads to your app, read this to understand how to setup the AdMob SDK for use in your app.	<a href="https://developers.google.com/mobile-ads-sdk/docs/">https://developers.google.com/mobile-ads-sdk/docs/</a>
	Monetization	Beginner	Familiarize yourself with this guide at the beginning and end of app development, you must be aware how ads will effect your layouts. After polishing your app, read the introduction first and then follow this to add ads to your app.	<a href="https://developers.google.com/mobile-ads-sdk/docs/admob/fundamentals">https://developers.google.com/mobile-ads-sdk/docs/admob/fundamentals</a>
	Publishing	Intermediate	Keep Checklist in mind while developing, follow Checklist while publishing.	<a href="http://developer.android.com/distribute/googleplay/publish/preparing.html">http://developer.android.com/distribute/googleplay/publish/preparing.html</a>
	Publishing	Intermediate	Before publishing review this for a sense of the "big picture".	<a href="http://developer.android.com/tools/publishing/publishing_overview.html">http://developer.android.com/tools/publishing/publishing_overview.html</a>
	Publishing	Intermediate	Use this to gain confidence that your app is near publishing quality.	<a href="http://developer.android.com/tools/publishing/preparing.html#publishing-intro">http://developer.android.com/tools/publishing/preparing.html#publishing-intro</a>
	Publishing	Intermediate	If you've followed the other publishing links above, your app should have the quality it needs already. Use this link to double-check your apps polish.	<a href="http://developer.android.com/distribute/googleplay/quality/core.html">http://developer.android.com/distribute/googleplay/quality/core.html</a>
	Publishing	Intermediate	Google gives you everything you need to wrap your app in a License, this is free authentication provided by Google and it's not that hard to implement! Add licensing to all of your apps before publishing!	<a href="http://www.droidforums.net/forum/android-app-developers/69899-market-license-easy-implementation-protect-your-apps.html">http://www.droidforums.net/forum/android-app-developers/69899-market-license-easy-implementation-protect-your-apps.html</a>
	Publishing	Intermediate	Learn how to digitally sign your app, don't worry, it's not that hard! At this point you're ready to publish your app!	<a href="http://developer.android.com/tools/publishing/app-signing.html#cert">http://developer.android.com/tools/publishing/app-signing.html#cert</a>
	Publishing	Beginner	When you're done your app for publishing, get working on your graphics for your Play Store page! Graphics are very important to increase your downloads, don't skimp here at all!	<a href="http://support.google.com/googleplay/android-developer/bin/answer.py?hl=en&amp;answer=1078870">http://support.google.com/googleplay/android-developer/bin/answer.py?hl=en&amp;answer=1078870</a>
	Publishing	Beginner	Once done your graphics, come up with a short write-up (<1,000 characters) for your app, stating its key benefits and features, and how it solves user problems, and come here to create your Google Play App profile (publish your app to the store).	<a href="https://play.google.com/apps/publish/v2/">https://play.google.com/apps/publish/v2/</a>
	Publishing	Intermediate	After publishing at the Google Play Store, publish to additional stores like AndroidPit. Note: you may have to make some code changes for your app to be displayed in a 3rd party store.	<a href="http://www.androidpit.com/">http://www.androidpit.com/</a>
	Publishing	Advanced	So, you've published your app, but now you're scared to upgrade it because it's got a database in it? Here's the logic behind doing DB upgrades to a published app in the Play Store.	<a href="http://denverdroid.blogspot.ca/2010/04/how-to-non-destructibly-upgrade-your.html">http://denverdroid.blogspot.ca/2010/04/how-to-non-destructibly-upgrade-your.html</a>