

# Algorithms Example, List Algorithms, Android Stu

## Algorithms Algorithms Example

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## Algorithms List Algorithms

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# Agenda

## Android Android Studio

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### ● Note

1. Allocation Tracker.
2. Layout Inspector.

### ● Optimize Build Speed

[developer.android.com/studio/build/optimize-your-build](https://developer.android.com/studio/build/optimize-your-build)

### ● Tricks

1. [medium.com/@mmbialas/50-android-studio-tips-tricks-resources-you-should-be-](https://medium.com/@mmbialas/50-android-studio-tips-tricks-resources-you-should-be-)

familiar-with-as-an-android-developer-af86e7cf56d2

2. <https://medium.com/@ayatzkhraisat/no-more-nullpointerexception-with-the-templates-from-android-studio-36a90e804e38>
3. <https://medium.com/mindorks/lets-speed-up-your-gradle-build-6c0e401883e2>
4. <https://proandroiddev.com/various-methods-to-debug-http-traffic-in-the-android-application-8685b9183418>
5. [riggaroo.co.za/custom-file-templates-android-studio/](http://riggaroo.co.za/custom-file-templates-android-studio/)
6. [medium.com/google-developers/about-10-things-you-probably-didn-t-know-you-could-do-in-android-studio-de231071b375](https://medium.com/google-developers/about-10-things-you-probably-didn-t-know-you-could-do-in-android-studio-de231071b375)

## ● File Template

## ● Theme

## ● Plugin

 Parcelable [github.com/mcharmas/android-parcelable-intellij-plugin](https://github.com/mcharmas/android-parcelable-intellij-plugin)

 DataTransferObject [plugins.jetbrains.com/plugin/7834-dto-generator](https://plugins.jetbrains.com/plugin/7834-dto-generator)

 DPICalculator [plugins.jetbrains.com/plugin/7832-android-dpi-calculator](https://plugins.jetbrains.com/plugin/7832-android-dpi-calculator)

 Compress Image [plugins.jetbrains.com/plugin/9788-biu](https://plugins.jetbrains.com/plugin/9788-biu)

 String manipulation [plugins.jetbrains.com/plugin/2162-string-manipulation](https://plugins.jetbrains.com/plugin/2162-string-manipulation)

 GenerateCode Template [plugins.jetbrains.com/plugin/8600-exynap](https://plugins.jetbrains.com/plugin/8600-exynap)

 AndroidDebugBridge [github.com/pbreault/adb-idea](https://github.com/pbreault/adb-idea)

 Builder [plugins.jetbrains.com/plugin/7354-innerbuilder](https://plugins.jetbrains.com/plugin/7354-innerbuilder)

 PermissionDispatcher [github.com/permissions-dispatcher/permissions-dispatcher-plugin](https://github.com/permissions-dispatcher/permissions-dispatcher-plugin)

 JsonToClassKotlin [github.com/wuseal/JsonToKotlinClass](https://github.com/wuseal/JsonToKotlinClass)

📄 ColorManager [github.com/shiraji/color-manager](https://github.com/shiraji/color-manager)

📄 AndroidConnectWifi [github.com/pedrovgs/AndroidWiFiADB](https://github.com/pedrovgs/AndroidWiFiADB)

📄 ShowDeviceScreen [github.com/Genymobile/scrcpy](https://github.com/Genymobile/scrcpy)

📄 ConvertSvgToVector [plugins.jetbrains.com/plugin/8103-svg2vectordrawable](https://plugins.jetbrains.com/plugin/8103-svg2vectordrawable)

📄 FastLibraryTesting [github.com/cesarferreira/dryrun](https://github.com/cesarferreira/dryrun)

📄 CheckStyle [plugins.jetbrains.com/plugin/1065-checkstyle-idea](https://plugins.jetbrains.com/plugin/1065-checkstyle-idea)

📄 SpotBugs [spotbugs.readthedocs.io/en/stable/introduction.html](https://spotbugs.readthedocs.io/en/stable/introduction.html)

📄 SonarQube [www.sonarqube.org](https://www.sonarqube.org)

📄 SolarQube <https://github.com/andyb129/AndroidStudioPluginsNPlay>

📄 SolarLint [plugins.jetbrains.com/plugin/7973-sonarlint](https://plugins.jetbrains.com/plugin/7973-sonarlint)

GitHub - dmytrodanlyk/folding-plugin: Android File Grouping Plugin

GitHub - hsz/idea-gitignore: .ignore support plugin for IntelliJ IDEA

## ● Key Shortcut

📄 View [jeroenmols.com/blog/2018/07/16/androidstudioshortcuts3/](https://jeroenmols.com/blog/2018/07/16/androidstudioshortcuts3/)

📄 Refactoring [jeroenmols.com/blog/2018/04/26/androidstudioshortcuts2/](https://jeroenmols.com/blog/2018/04/26/androidstudioshortcuts2/)

📄 Navigation [jeroenmols.com/blog/2018/02/22/androidstudioshortcuts/](https://jeroenmols.com/blog/2018/02/22/androidstudioshortcuts/)

## 📌 Android **Best Practice**

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### ● Optimize Build Gradle

1. No dynamic version dependencies.
2. Parallel execution.
3. Convert .png -> .webP.
4. Cacheable Task: org.gradle.caching = true (in gradle.properties file)
5. Disable multi APK
6. Update latest Gradle Plugin
7. Sync dependencies version.

8. Enable R8.
9. gradle profiler.

## ● Github Repository

[github.com/futurice/android-best-practices](https://github.com/futurice/android-best-practices)

<https://github.com/MobileTipsters/android-daily-tips>

## ● Articles

1. [android.jlelse.eu/android-development-some-of-the-best-practices-27722c685b6a](https://android.jlelse.eu/android-development-some-of-the-best-practices-27722c685b6a)
2. [medium.com/@cesarmcferreira/building-android-apps-30-things-that-experience-made-me-learn-the-hard-way-313680430bf9](https://medium.com/@cesarmcferreira/building-android-apps-30-things-that-experience-made-me-learn-the-hard-way-313680430bf9)
3. [blog.aritrary.in/what-my-2-years-of-android-development-have-taught-me-the-hard-way-52b495ba5c51](https://blog.aritrary.in/what-my-2-years-of-android-development-have-taught-me-the-hard-way-52b495ba5c51)
4. [blog.mindorks.com/android-development-best-practices-83c94b027fd3](https://blog.mindorks.com/android-development-best-practices-83c94b027fd3)
5. [medium.com/mindorks/android-app-performance-optimization-cdccb422e38e](https://medium.com/mindorks/android-app-performance-optimization-cdccb422e38e)
6. [auth0.com/blog/best-practices-in-android-development/](https://auth0.com/blog/best-practices-in-android-development/)
7. [medium.com/@mrcurious/best-practices-of-socket-io-with-android-9f9cb4eb744e](https://medium.com/@mrcurious/best-practices-of-socket-io-with-android-9f9cb4eb744e)

## 📌 Android Blogs

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## ● Android Blogs

1. [androidweekly.net](https://androidweekly.net)
2. [plus.google.com/communities/105153134372062985968](https://plus.google.com/communities/105153134372062985968)
3. [www.toptal.com/developers/blog](https://www.toptal.com/developers/blog)
4. [medium.com/tag/androiddev](https://medium.com/tag/androiddev)
5. [medium.com/tag/android-app-development](https://medium.com/tag/android-app-development)

## 📌 Android **Coding Covention**

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### ● Manage Dependencies

1. [Manage Android dependencies in gradle - Rahul Vishwakarma - Medium](#)

### ● Commons

1. [blog.mindorks.com/android-code-style-and-guidelines-d5f80453d5c7](http://blog.mindorks.com/android-code-style-and-guidelines-d5f80453d5c7)

### ● Resources

1. [medium.com/google-developer-experts/android-strings-xml-things-to-remember-c155025bb8bb](https://medium.com/google-developer-experts/android-strings-xml-things-to-remember-c155025bb8bb)
2. [medium.com/@june.pravin/dimensions-by-conventions-92b422e2216e](https://medium.com/@june.pravin/dimensions-by-conventions-92b422e2216e)

### ● Organize Sources

1. [guides.codepath.com/android/Organizing-your-Source-Files](https://guides.codepath.com/android/Organizing-your-Source-Files)
2. [medium.com/@BladeCoder/fixing-ugly-java-apis-read-only-generic-varargs-ee2d2e464ac1](https://medium.com/@BladeCoder/fixing-ugly-java-apis-read-only-generic-varargs-ee2d2e464ac1)

## 📌 Android **Common Codes**

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### ● Kotlin

1. [kotlinextensions.com](http://kotlinextensions.com)

## 📌 Android **Developers Followed**

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### ● Android Expert Developers

- [Tweets from @chiuki](#)
- [Tweets from @JakeWharton](#)
- [Tweets from @donnfelker](#)
- [Tweets from @codinginflow](#)
- [Tweets from @kaushikgopal](#)
- [Tweets from @kristinmars](#)
- [Tweets from @crafty](#)
- [Tweets from @retomeier](#)
- [Tweets from @romannurik](#)
- [Tweets from @queencodemonkey](#)
- [Tweets from @riggaroo](#)
- [Tweets from @cyrilmottier](#)

## 📌 Android **Documents**

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### ● Free API

1. <https://github.com/toddmotto/public-apis#food--drink>

## 📌 Android **Interview Preparing**

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### ● Untitled Note

### ● Interview Best Practices

1. [medium.com/always-be-coding/abc-always-be-coding-d5t8051atce2](https://medium.com/always-be-coding/abc-always-be-coding-d5t8051atce2)
2. [writing.pupius.co.uk/whiteboarding-4df873dbba2e#.hf6jn45g1](https://writing.pupius.co.uk/whiteboarding-4df873dbba2e#.hf6jn45g1)
3. [www.coderust.com/blog/2014/04/10/effective-whiteboarding-during-programming-interviews/](https://www.coderust.com/blog/2014/04/10/effective-whiteboarding-during-programming-interviews/)
4. YouTube video (N233T0epWTs)
5. YouTube video (rEJzOhC5ZtQ)
6. YouTube video (aClxtDcdpsQ)
7. YouTube video (YJZCUhxNCv8)

## ● Questions

1. [github.com/MindorksOpenSource/android-interview-questions](https://github.com/MindorksOpenSource/android-interview-questions)
2. <https://github.com/anitaa1990/Android-Cheat-sheet>

## 📖 Android Learning Resources

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### ● How to be a programmer/developer

1. [github.com/jwasham/coding-interview-university](https://github.com/jwasham/coding-interview-university)
2. [github.com/braydie/HowToBeAProgrammer](https://github.com/braydie/HowToBeAProgrammer)
3. [blog.mindorks.com/how-to-be-an-android-expert-a-d-s-002-861bd5754742](https://blog.mindorks.com/how-to-be-an-android-expert-a-d-s-002-861bd5754742)
4. [moducode.com/blog/become-android-developer-fast/](https://moducode.com/blog/become-android-developer-fast/)
5. [A Roadmap To Become A Better Android Developer - MindOrks - Medium](#)
6. [www.devsofandroid.com/2018/06/07/interview-with-wolfram-rittmeyer/](https://www.devsofandroid.com/2018/06/07/interview-with-wolfram-rittmeyer/)

### ● Support Multi Platform & Screen

[developer.android.com/training/basics/supporting-devices/platforms](https://developer.android.com/training/basics/supporting-devices/platforms)

[developer.android.com/training/multiscreen/screensizes](https://developer.android.com/training/multiscreen/screensizes)

### ● App Performance

[blog.mindorks.com/android-app-performance-metrics-a1176334186e](https://blog.mindorks.com/android-app-performance-metrics-a1176334186e)

[medium.com/mindorks/android-app-performance-optimization-cdccb422e38e](https://medium.com/mindorks/android-app-performance-optimization-cdccb422e38e)

## ● RxJava/Kotlin

[medium.com/@itanbp/replacing-tedious-progressbar-using-rxjava-and-pagedlistadapter-in-android-b60534c6f9dd](https://medium.com/@itanbp/replacing-tedious-progressbar-using-rxjava-and-pagedlistadapter-in-android-b60534c6f9dd)

## ● Animations

1. [codinginfinite.com/facebook-shimmer-effect-android-example/](https://codinginfinite.com/facebook-shimmer-effect-android-example/)

## ● CollapsingToolbar

1. [How to animate Collapsing Avatar Toolbar Sample - Sergey B. - Medium](#)

## ● Lifecycle

1. [medium.com/androiddevelopers/the-android-lifecycle-cheat-sheet-part-i-single-activities-e49fd3d202ab](https://medium.com/androiddevelopers/the-android-lifecycle-cheat-sheet-part-i-single-activities-e49fd3d202ab)

## ● Launch Modes

1. [itnext.io/the-android-launchmode-animated-cheatsheet-6657e5dd9b0f](https://itnext.io/the-android-launchmode-animated-cheatsheet-6657e5dd9b0f)

## ● Dependency Injection

1. [medium.com/@iammert/new-android-injector-with-dagger-2-part-1-8baa60152abe](https://medium.com/@iammert/new-android-injector-with-dagger-2-part-1-8baa60152abe)
2. [medium.com/@harivigneshjayapalan/dagger-2-for-android-beginners-introduction-be6580cb3edb?source=-----10-----](https://medium.com/@harivigneshjayapalan/dagger-2-for-android-beginners-introduction-be6580cb3edb?source=-----10-----)



## ● Bottom Navigation View

[android.jlelse.eu/scroll-your-bottom-navigation-view-away-with-10-lines-of-code-346f1ed40e9e](https://android.jlelse.eu/scroll-your-bottom-navigation-view-away-with-10-lines-of-code-346f1ed40e9e)

## ● ViewModel & LiveData

1. [medium.com/androiddevelopers/viewmodels-and-livedata-patterns-antipatterns-21efaef74a54](https://medium.com/androiddevelopers/viewmodels-and-livedata-patterns-antipatterns-21efaef74a54)
2. [medium.com/androiddevelopers/viewmodels-persistence-onsaveinstancestate-restoring-ui-state-and-loaders-fc7cc4a6c090](https://medium.com/androiddevelopers/viewmodels-persistence-onsaveinstancestate-restoring-ui-state-and-loaders-fc7cc4a6c090)

## ● Room Database

1. [medium.com/androiddevelopers/7-pro-tips-for-room-fbadea4bfbd1](https://medium.com/androiddevelopers/7-pro-tips-for-room-fbadea4bfbd1)

## ● Debug

1. [android.jlelse.eu/add-logs-without-using-code-bd49fe9202ca](https://android.jlelse.eu/add-logs-without-using-code-bd49fe9202ca)

## ● Data Structures

1. [android.jlelse.eu/often-ignored-stuff-android-data-structures-ec2efff847ea](https://android.jlelse.eu/often-ignored-stuff-android-data-structures-ec2efff847ea)

## ● App Architecture

1. [proandroiddev.com/mvvm-with-kotlin-android-architecture-components-dagger-2-retrofit-and-rxandroid-1a4ebb38c699](https://proandroiddev.com/mvvm-with-kotlin-android-architecture-components-dagger-2-retrofit-and-rxandroid-1a4ebb38c699)
2. [proandroiddev.com/clean-architecture-on-android-using-feature-modules-mvvm-view-slices-and-kotlin-e9ed18e64d83](https://proandroiddev.com/clean-architecture-on-android-using-feature-modules-mvvm-view-slices-and-kotlin-e9ed18e64d83)
3. [blog.mindorks.com/android-mvp-architecture-extension-with-interactors-and-](https://blog.mindorks.com/android-mvp-architecture-extension-with-interactors-and-)

[repositories-bd4b51972339](#)

4. [medium.com/dream11-tech-blog/dream11-android-application-architecture-303f04b6b5b2](#)

## ● TextSpan

1. [medium.com/androiddevelopers/spantastic-text-styling-with-spans-17b0c16b4568](#)

## ● Themes

1. [medium.com/@pkjvit/https-medium-com-pkjvit-android-multi-theme-night-mode-and-material-design-c186bf9fd678](#)
2. [medium.com/@chrisbanes/appcompat-v23-2-daynight-d10f90c83e94](#)
3. [medium.com/@vinitagrawal91/android-colors-and-multiple-themes-fdfca3f75a15](#)
4. [www.zoftino.com/extracting-color-codes-from-image-using-android-palette-api](#)

## ● Concurrency(Thread/Coroutines)

1. [proandroiddev.com/android-coroutine-recipes-33467a4302e9](#)
2. [kotlinexpertise.com/kotlin-coroutines-concurrency/](#)

## ● Custom View

1. [www.intertech.com/Blog/android-custom-view-tutorial-part-2-custom-attributes-drawing-and-measuring/](#)
2. [stackoverflow.com/questions/6355096/how-to-create-edittext-with-crossx-button-at-end-of-it](#)
3. [medium.com/@mayuri.k18/android-canvas-for-drawing-and-custom-views-e1a3e90d468b](#)

## ● RecyclerView

1. [android.jlelse.eu/easily-adding-nested-recycler-view-in-android-a7e9f7f04047](#)

2. [medium.com/@programmerasi/how-to-implement-load-more-in-recyclerview-3c6358297f4](https://medium.com/@programmerasi/how-to-implement-load-more-in-recyclerview-3c6358297f4)
3. [medium.com/@Bineeshpbabu/multiview-recyclerview-df7e444a9031](https://medium.com/@Bineeshpbabu/multiview-recyclerview-df7e444a9031)
4. [medium.com/@trionkidnapper/recyclerview-more-animations-with-less-code-using-support-library-listadapter-62e65126acdb](https://medium.com/@trionkidnapper/recyclerview-more-animations-with-less-code-using-support-library-listadapter-62e65126acdb)
5. [proandroiddev.com/recyclerview-pro-tips-part-1-8a291594bafc](https://proandroiddev.com/recyclerview-pro-tips-part-1-8a291594bafc)
  1. [proandroiddev.com/diffutil-is-a-must-797502bc1149](https://proandroiddev.com/diffutil-is-a-must-797502bc1149)
6. [medium.com/@suhelchakraborty/reel-search-and-layoutmanager-an-android-journey-e2f925c8410f](https://medium.com/@suhelchakraborty/reel-search-and-layoutmanager-an-android-journey-e2f925c8410f)

## ● Security

1. <https://github.com/ashishb/android-security-awesome>
2. [proandroiddev.com/security-best-practices-symmetric-encryption-with-aes-in-java-and-android-part-2-b3b80e99ad36](https://proandroiddev.com/security-best-practices-symmetric-encryption-with-aes-in-java-and-android-part-2-b3b80e99ad36)
3. [Security Best Practices: Symmetric Encryption with AES in Java and Android](#)
4. [Android applications security – part 2 – Skyrise – Medium](#)
5. [developer.android.com/topic/security/best-practices](https://developer.android.com/topic/security/best-practices)

## ● Resources

1. [blog.aritraroy.in/50-ultimate-resources-to-master-android-development-15165d6bc376](https://blog.aritraroy.in/50-ultimate-resources-to-master-android-development-15165d6bc376)
2. [m.signalnoise.com/my-favorite-people-and-resources-to-learn-android-programming-from-293f249e2b4e](https://m.signalnoise.com/my-favorite-people-and-resources-to-learn-android-programming-from-293f249e2b4e)
3. [github.com/aritraroy/UltimateAndroidReference](https://github.com/aritraroy/UltimateAndroidReference)
4. [medium.com/@pranaypatel/useful-things-for-developers-1-ee6bf0e061](https://medium.com/@pranaypatel/useful-things-for-developers-1-ee6bf0e061)
5. [android.jlelse.eu/mastering-android-development-skills-with-google-48b437137389](https://android.jlelse.eu/mastering-android-development-skills-with-google-48b437137389)
6. [android.jlelse.eu/learning-android-development-in-2018-part-1-83a514f6a205](https://android.jlelse.eu/learning-android-development-in-2018-part-1-83a514f6a205)
7. [android.jlelse.eu/stay-up-to-date-with-android-development-3c769a58f2fa](https://android.jlelse.eu/stay-up-to-date-with-android-development-3c769a58f2fa)
8. [medium.com/@cupertinolabs/best-resources-to-learn-android-programming-at-2018-ec83efbe54a4](https://medium.com/@cupertinolabs/best-resources-to-learn-android-programming-at-2018-ec83efbe54a4)
9. [proandroiddev.com/awesome-list-of-online-tools-for-android-developers-f40af8f46299](https://proandroiddev.com/awesome-list-of-online-tools-for-android-developers-f40af8f46299)

10. [zen-of-programming.com/start-programming/](https://zen-of-programming.com/start-programming/)
11. [www.androidtutorialonline.com/ultimate-android-reference/](https://www.androidtutorialonline.com/ultimate-android-reference/)

## Android **Note**

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### ● Optimize Android Performance

- ArrayMap.
- SparseArray.

### ● RecyclerView

- setHasFixedSize = true IF recyclerview size(width and height) not affected by item size of recyclerview
- use Diff Util with List Adapter

### ● Saving Instance State

UI State (String, Int, Double...): onSaveInstanceState

Complex Data:

- In Memory + Configuration Change: View Model
- Else: Database + SharedPreferences

### ● Coroutines

[proandroiddev.com/coroutines-for-android-6f9b9f966056](https://proandroiddev.com/coroutines-for-android-6f9b9f966056)

- Sharing Content

[YouTube video \(h9TunRURWNU\)](#)

- Search View + Search Configuration + SingleT...

[YouTube video \(9OWmnYPX1uc\)](#)

- Responsive UI

[medium.com/androiddevelopers/building-a-responsive-ui-in-android-7dc7e4efcbb3](https://medium.com/androiddevelopers/building-a-responsive-ui-in-android-7dc7e4efcbb3)

- Layout, Atributes

[medium.com/androiddevelopers/layouts-attributes-and-you-9e5a4b4fe32c](https://medium.com/androiddevelopers/layouts-attributes-and-you-9e5a4b4fe32c)

- Strict Mode

## 📌 Android **Open Source Project**

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- Open Sources

[blog.aritraroy.in/20-awesome-open-source-android-apps-to-boost-your-development-skills-b62832cf0fa4](https://blog.aritraroy.in/20-awesome-open-source-android-apps-to-boost-your-development-skills-b62832cf0fa4)

<https://f-droid.org/packages/org.secuso.privacyfriendlyweather/>

<https://github.com/DroidKaigi/conference-app-2018>

## 📌 Android Project Template

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### ● Untitled Note

## 📌 Android TaskTODO

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### ● Learn Android (Sorted)

1. Handle configuration changes
2. Broadcast receiver
3. Service
4. Task and Back stack
5. REST & HTTP
6. Array map & Sparse Array
7. Architecture Components
8. Debug App
9. Animations
10. Retrofit
11. Glide
12. Gson/Moshi
13. Bitmaps
14. Rxjava
15. Security
16. Custom View
17. Content provider
18. Optimize App Size
19. Thread in Android
20. Handler, Looper. HandlerThread

21. App Performance Metrics
22. Performance patterns
23. Cache Implementation
24. Testing
25. Optimize Network Request
26. Location & Map
27. Sensors, GPS, Acceleration
28. Battery Improvement
29. Proguard
30. Gradle Build Tools
31. Continuous Integration

## ● Personal Project

- MyMovie2019

## 📌 Android **Third Party Libraries**

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### ● Sensor & Gesture

[github.com/nisrulz/sensey](https://github.com/nisrulz/sensey)

### ● PhoneNumberUtil

[github.com/googlei18n/libphonenumber](https://github.com/googlei18n/libphonenumber)

## ● Permission

[github.com/googlesamples/easypermissions](https://github.com/googlesamples/easypermissions)

[github.com/permissions-dispatcher/PermissionsDispatcher](https://github.com/permissions-dispatcher/PermissionsDispatcher)

## ● CropImage

[github.com/Yalantis/uCrop](https://github.com/Yalantis/uCrop)

## ● CodeUtils

[github.com/Blankj/AndroidUtilCode/blob/master/utilcode/README.md](https://github.com/Blankj/AndroidUtilCode/blob/master/utilcode/README.md)

## ● Themes

[github.com/afollestad/aesthetic](https://github.com/afollestad/aesthetic)

## ● Calendar View

1. [github.com/CleverPumpkin/CrunchyCalendar](https://github.com/CleverPumpkin/CrunchyCalendar)
2. [github.com/Applandeo/Material-Calendar-View](https://github.com/Applandeo/Material-Calendar-View)

## ● TapTargetView

[github.com/KeepSafe/TapTargetView](https://github.com/KeepSafe/TapTargetView)



## ● Navigation Drawer

[github.com/mikepenz/MaterialDrawer](https://github.com/mikepenz/MaterialDrawer)

## ● Dialogs

1. [github.com/afollestad/material-dialogs](https://github.com/afollestad/material-dialogs)
2. [github.com/orhanobut/dialogplus](https://github.com/orhanobut/dialogplus)

## ● Media Player

[github.com/google/ExoPlayer](https://github.com/google/ExoPlayer)

## ● RecyclerView

📄 AutoBindingKotlin : [kotlinlang.org/docs/tutorials/android-plugin.html](https://kotlinlang.org/docs/tutorials/android-plugin.html)

📄 FastAdapter : [github.com/mikepenz/FastAdapter](https://github.com/mikepenz/FastAdapter)

📄 Template : [github.com/TakeoffAndroid/RecyclerViewTemplate](https://github.com/TakeoffAndroid/RecyclerViewTemplate)

📄 SwipeAction : [medium.com/default-to-open/introducing-covert-db885b22f36d](https://medium.com/default-to-open/introducing-covert-db885b22f36d)

## ● ImageView

1. [github.com/hdodenhof/CircleImageView](https://github.com/hdodenhof/CircleImageView)
2. [github.com/davemorrissey/subsampling-scale-image-view](https://github.com/davemorrissey/subsampling-scale-image-view)
3. [github.com/chrisbanes/PhotoView](https://github.com/chrisbanes/PhotoView)

## ● Material Components

[github.com/material-components/material-components-android/blob/master/docs/getting-started.md](https://github.com/material-components/material-components-android/blob/master/docs/getting-started.md)

## ● Architecture Components

Live Data, View Model, Lifecycle aware: [developer.android.com/topic/libraries/architecture/adding-components#lifecycle](https://developer.android.com/topic/libraries/architecture/adding-components#lifecycle)

Navigation Component: [developer.android.com/topic/libraries/architecture/adding-components#navigation](https://developer.android.com/topic/libraries/architecture/adding-components#navigation)

Paging Library: [developer.android.com/topic/libraries/architecture/adding-components#paging](https://developer.android.com/topic/libraries/architecture/adding-components#paging)




## ● Animations

1.  Lottie : [github.com/airbnb/lottie-android](https://github.com/airbnb/lottie-android)

 ShimmerAffect : [github.com/team-supercharge/ShimmerLayout](https://github.com/team-supercharge/ShimmerLayout)

1. [medium.com/mindorks/android-design-shimmer-effect-fa7f74c68a93](https://medium.com/mindorks/android-design-shimmer-effect-fa7f74c68a93)

## ● Schedule Tasks

1.  WorkManager : [developer.android.com/topic/libraries/architecture/adding-components#workmanager](https://developer.android.com/topic/libraries/architecture/adding-components#workmanager)
2.  AndroidJob : [github.com/evernote/android-job](https://github.com/evernote/android-job)
3.  AlarmManager : [developer.android.com/training/scheduling/alarms](https://developer.android.com/training/scheduling/alarms)

## ● Charts

[github.com/PhilJay/MPAndroidChart](https://github.com/PhilJay/MPAndroidChart)

## ● Dependency Injection

1. Dagger2 : [github.com/google/dagger](https://github.com/google/dagger)

## ● Debug Tools

1.  Timber : [github.com/JakeWharton/timber](https://github.com/JakeWharton/timber) (Logging)
2.  Database : [github.com/amitshekhariitbhu/Android-Debug-Database](https://github.com/amitshekhariitbhu/Android-Debug-Database)  
(Database)
  1.  MemoryLeak : [github.com/square/leakcanary](https://github.com/square/leakcanary)
3.  Stetho : [github.com/facebook/stetho](https://github.com/facebook/stetho)
4.  CrashReporting : [firebase.google.com/docs/crash/](https://firebase.google.com/docs/crash/)

# Agenda

## ● Local Database

1. SQLite/Room: [developer.android.com/topic/libraries/architecture/adding-components#room](https://developer.android.com/topic/libraries/architecture/adding-components#room)
2. Object Box: [docs.objectbox.io/getting-started](https://docs.objectbox.io/getting-started)

## ● Image Processing

[github.com/wasabeef/glide-transformations](https://github.com/wasabeef/glide-transformations)

## ● Image Loading

📄 Glide [github.com/bumptech/glide](https://github.com/bumptech/glide)

## ● Handle Background Thread

📄 Rxjava [github.com/ReactiveX/RxJava](https://github.com/ReactiveX/RxJava) / <https://github.com/ReactiveX/RxKotlin>

📄 RxAndroid [github.com/ReactiveX/RxAndroid](https://github.com/ReactiveX/RxAndroid)

📄 Coroutines [github.com/Kotlin/kotlinx.coroutines](https://github.com/Kotlin/kotlinx.coroutines)

## ● Networking

📄 Retrofit [square.github.io/retrofit/](https://square.github.io/retrofit/)

📄 ParseJson [github.com/google/gson](https://github.com/google/gson)

📄 ParseJson [github.com/square/moshi](https://github.com/square/moshi)

📄 NetworkChecking : [github.com/pwittchen/ReactiveNetwork/issues](https://github.com/pwittchen/ReactiveNetwork/issues)

## ● Commons

1. [medium.freecodecamp.com/25-new-android-libraries-which-you-definitely-want-to-try-at-the-beginning-of-2017-45878d5408c0](https://medium.freecodecamp.com/25-new-android-libraries-which-you-definitely-want-to-try-at-the-beginning-of-2017-45878d5408c0)
2. [https://github.com/codepath/android\\_guides/wiki/Must-Have-libraries](https://github.com/codepath/android_guides/wiki/Must-Have-libraries)
3. [medium.freecodecamp.com/30-new-android-libraries-released-in-the-spring-of-2017-which-deserve-your-attention-faea359a1915](https://medium.freecodecamp.com/30-new-android-libraries-released-in-the-spring-of-2017-which-deserve-your-attention-faea359a1915)
4. [blog.mindorks.com/awesome-android-open-source-libraries-56a008c776c0](https://blog.mindorks.com/awesome-android-open-source-libraries-56a008c776c0)
5. [github.com/wasabeef/awesome-android-ui](https://github.com/wasabeef/awesome-android-ui)
6. [github.com/lightSky/Awesome-MaterialDesign](https://github.com/lightSky/Awesome-MaterialDesign)
7. [medium.com/@iagofucolo/android-retrospective-2017-libs-and-repositories-c0a2b4069d8a](https://medium.com/@iagofucolo/android-retrospective-2017-libs-and-repositories-c0a2b4069d8a)

8. [proandroiddev.com/25-new-android-libraries-and-projects-to-check-at-the-beginning-of-2018-ba3b422bbbb4](https://proandroiddev.com/25-new-android-libraries-and-projects-to-check-at-the-beginning-of-2018-ba3b422bbbb4)
9. [www.kunshtech.com/Blog/Post/2018/9/27/awesome-android-libraries-that-developers-should-checkout-in-2018](https://www.kunshtech.com/Blog/Post/2018/9/27/awesome-android-libraries-that-developers-should-checkout-in-2018)

## 📌 Android Videos

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### ● Animations

[YouTube video \(N\\_x7SV3l3P0\)](#) 16:04

### ● Coroutines

<https://www.youtube.com/watch?v=a3agLJQ6vt8&list=PLQ176FUlylUbVvFMqDc2jhxS-t562uytr&index=40> 8:08

### ● Architecture

1. [YouTube video \(JSpDZJzndbQ\)](#)

### ● Performance Patterns

[YouTube video \(qk5F6Bxqhr4\)](#)

### ● Development Patterns

[YouTube video \(hi5R0gg9tdA\)](#)

## ● Testing Patterns

YouTube video (W8LJfkTKik)

## ● Videos

AndroidDeveloper [www.youtube.com/channel/UCVHFbqXqoYvEWM1Ddxl0QDg](https://www.youtube.com/channel/UCVHFbqXqoYvEWM1Ddxl0QDg)

DroidconKaigi2018 Droidcon Kaigi 2018

DroidconSF [www.youtube.com/channel/UCKubKoe1CBw\\_-n\\_GXetEQbg](https://www.youtube.com/channel/UCKubKoe1CBw_-n_GXetEQbg)

Mindork [www.youtube.com/channel/UCocBChVv7HPx0g5SbnOUv7w](https://www.youtube.com/channel/UCocBChVv7HPx0g5SbnOUv7w)

AndroidMakers [www.youtube.com/channel/UCkatLlah5welpN23LqMgdTg](https://www.youtube.com/channel/UCkatLlah5welpN23LqMgdTg)

AndroidDialogs [www.youtube.com/channel/UCMEEmNnHT69aZuaOrE-dF6ug](https://www.youtube.com/channel/UCMEEmNnHT69aZuaOrE-dF6ug)

DroidconNYC [www.youtube.com/channel/UCSLXy31j2Z0sdDeeAX5JpPw](https://www.youtube.com/channel/UCSLXy31j2Z0sdDeeAX5JpPw)

DroidconBerlin [www.youtube.com/channel/UCF4O2pQ8vBV8YmSAWb5QRPw](https://www.youtube.com/channel/UCF4O2pQ8vBV8YmSAWb5QRPw)

CodingInFlow [www.youtube.com/channel/UC\\_Fh8kvtkVPkeihBs42jGcA](https://www.youtube.com/channel/UC_Fh8kvtkVPkeihBs42jGcA)

Andev360 [360andev.com/session-recordings/](https://360andev.com/session-recordings/)

DroidconLodon [skillsmatter.com](https://skillsmatter.com)

## 📖 Android Vocabulary

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## ● Vocabularies

[developers.google.com/android/for-all/vocab-words/](https://developers.google.com/android/for-all/vocab-words/)

## 📖 Books Career

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## ● Untitled Note

## 📖 Books **Programming**

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### ● Commons

1. [github.com/EbookFoundation/free-programming-books/blob/master/free-programming-books.md](https://github.com/EbookFoundation/free-programming-books/blob/master/free-programming-books.md)
2. [gist.github.com/augbog/d65f6600188fece854cb341734c5fd12](https://gist.github.com/augbog/d65f6600188fece854cb341734c5fd12)
3. [github.com/cassiodias/influential-cs-books](https://github.com/cassiodias/influential-cs-books)
4. [www.dev-books.com](http://www.dev-books.com)
5. [dev.to/bosepchuk/29-must-read-programming-books-2n45](https://dev.to/bosepchuk/29-must-read-programming-books-2n45)
6. [goalkicker.com](https://goalkicker.com)

## 📖 Books **Progress**

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### ● The Pragmatic Programmer

Using Test Harnesses

### ● Head First Design Pattern

Allowing the subclasses to decide - page 121

### ● Code Complete

Logical cohesion - page 170

## Books **Soft Skill**

---

### ● **Untitled Note**

## Design Pattern **Pattern Example**

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### ● **Singleton**

1. Lazy Initialize:
2. Eager:
3. Synchronized getInstance method

## Design Pattern **Pattern List**

---

### ● **Creational Pattern**

1. Singleton ★
2. Factory Method/Abstract Factory ★
3. Builder
4. Prototype



## ● Behavioral Pattern

1. Observe
2. Command
3. Strategy
4. State
5. Template Method
6. Visitor
7. Interpreter
8. Iterator
9. Mediator
10. Memento

## ● Struture Pattern

1. Adapter
2. Facade
3. Bridge
4. Composite
5. Decorator
6. Flyweight
7. Proxy

## 📌 Git    **Common Commands**

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### ● discard change in working tree

```
git checkout --<file_name>
```

### ● unstage file

```
git reset HEAD <file_name>
```

git reset --<file\_name>

## ● undo commit

git reset --hard master => move Head point to master branch

git reset --hard HEAD^ => HEAD back to previous commit

git reset --hard HEAD~3 => HEAD back to 3 commit

## ● Git Cheat Sheet



[rubygarage.org/blog/most-basic-git-commands-with-examples](http://rubygarage.org/blog/most-basic-git-commands-with-examples)

## 📌 Kotlin/Java Coding Convention

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## ● Untitled Note

## 📌 Kotlin/Java Documents

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## ● Java Videos

[www.edx.org/course/software-construction-java-mitx-6-005-1x](http://www.edx.org/course/software-construction-java-mitx-6-005-1x)

[see.stanford.edu/Course/CS106A](http://see.stanford.edu/Course/CS106A)

## ● Function

1. [kotlinexpertise.com/coping-with-kotlins-scope-functions/](https://kotlinexpertise.com/coping-with-kotlins-scope-functions/)
2. [medium.com/@desaismital/understanding-suspending-functions-in-kotlin-3aae4bfd9991](https://medium.com/@desaismital/understanding-suspending-functions-in-kotlin-3aae4bfd9991)

## ● Kotlin Learning Resources

1. [github.com/KotlinBy/awesome-kotlin](https://github.com/KotlinBy/awesome-kotlin)
2. [kotlin.link](https://kotlin.link)
3. [superkotlin.com/resources-learn-kotlin/](https://superkotlin.com/resources-learn-kotlin/)

## 📖 Learn English **Resources**

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### ● How to learn English

[www.facebook.com/photo.php?fbid=1685947168363063&set=a.1392164454408004&type=3&theater](https://www.facebook.com/photo.php?fbid=1685947168363063&set=a.1392164454408004&type=3&theater)

[www.facebook.com/trantrinhthuongSE/videos/1672218003069313/](https://www.facebook.com/trantrinhthuongSE/videos/1672218003069313/) 46: 24

## 📖 Learn English **Tasks**

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### ● Learn Spoken ( 20 mins)

- Watch master spoken english

### ● Listening (20 mins)

- Friends movie
- English videos

## ● Learn vocabulary (20 mins)

- [memrise.com](https://www.memrise.com) - review and 30 words

## 📌 MyGoal **English**

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### ● Research How to Learn English (20 min)

- Watch Video About How to Learn English.

### ● Practice Listening (20 min)

- Listen to English Video like Movies, Youtube...

### ● Learn Vocabulary (20min)

- 30 new words per day

## 📌 MyGoal **Programming**

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### ● Most Popular Android Library

1. Glide
2. Retrofit
3. OkHttp
4. Gson/Moshi

5. [ThreeTenABP](#)
6. [Timber](#)
7. RxJava/RxKotlin
8. Realm

## ● Android

- Live Data, View Model. ★
- Saving State. ★
- Room Database. ★
- Navigation Component. ★
- Lifecycle Aware. ★
- Work Manager. ★
- Content Provider.
- Service.
- Array Map, Sparse Array.
- Performance Metrics.
- Caching Implementation.
- Optimize network request.
- Sensors, Motion, GPS.
- Location, Map.
- Custom View.
- Garbage Collection Android.

## ● Programming Language (OOP)

- Collections
- Generics
- Random Numbers

- Date and Time API
- Number Format
- Regular Expressions
- 

-

Annotation

- Concurrency (Thread/)

## ● Source Control (GIT)

- Add, Commit, Push.
- Checkout.
- Clone.
- Revisions.
- Branching.
- Merging.
- Git cherrypick
- Conflicts.
- Git rebase.
- Git stash.
- Git commit amend.
- Git blame.

## ● Structure Code

- Read Book Code Complete.
- Read Working with Legacy Code

## ● Database

- Install & Setup
- Database Schema
- Data Type
- Key/Constraint
- Relationship.
- Query/Insert/Update/Delete/Join.
- Indexes.
- Migrations.
- Security.
- TodoList App Android (SQLite)

## ● Algorithm & Data Structure

- Book Data Structure & Algorithm In Java

## ● Testing

- Test Driven Development.

## ● Methodologies

- Waterfall
- Scrum

## ● Build And Deploy App

- Gradle
- Google Play (App Bundle, Dynamic Feature..)

MyProject **Untitled**

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- **Untitled Note**

Special Note **Untitled**

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- **Untitled Note**

TaskManagement **Task List**

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- **Learn Database (1 hour)**

SQL Database + Android Project

○ **Read Books (30 mins)** Jan 15, 2019 at 12:20 AM - 12:50 AM

Task Priority: **Important**

- Code Complete

○ **Learn Programming Language (Ja...** 14 - Jan 15, 2019

Task Priority: **Important**



○ Learn Design Pattern (... Jan 14, 2019 at 10:10 PM - 11:10 PM

Task Priority: **Important**

Head First Design Pattern

○ Learn Git (30 mins) Jan 14, 2019 at 9:35 PM - 10:05 PM

Task Priority: **Important**

Ebook Git Essential 2.

○ Learn Android (2 hours) Jan 14, 2019 at 8:30 PM - 9:30 PM

Task Priority: **Important**

- Project Movie2019 (1 hour or 1h30)
- Learn Android Framework (1hour or 30 mins)

○ Learn English (1 hour) Jan 14, 2019 at 7:00 PM - 8:00 PM

Task Priority: **Important**

- Review and learn new word by context, sentence.
- Listening English videos.

📌 TaskManagement **Task Priority**

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● Important

📌 Important

## TaskManagement **Task Todo**

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### ● Daily

- ☐ [Learn English](#)
- ☐ [My Android Project](#)
- ☐ [Learn Git](#)
- ☐ [Learn Design Pattern](#)
- ☐ [Learn Algorithms](#)
- ☐ [Read Books](#)
- ☐ [Learn Android Frameworks](#)

## TimeManagement **Tools**

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### ● TimeProgramming

1. [wakatime.com/features](https://wakatime.com/features)