# Interview preparations – Topics and resources

* Android
  + App development training - <https://developer.android.com/training/index.html>
  + Android components - <https://developer.android.com/guide/components/fundamentals.html>
  + Android Material design - <https://developer.android.com/design/index.html>
  + Android Security
* Build process – Gradle
  + Tutorial - <https://www.tutorialspoint.com/gradle/index.htm>
* Data structures
  + String, Array
  + Stack, Queue, LinkedList
  + HashTable
  + Tree/Graph
* Algorithms
  + Sorting – Merge Sort, Quick Sort, Insertion sort, Selection Sort
  + Search – Binary Search, BFS, DFS
  + Tree Traversal – In-order, pre-order, post-order
  + Advanced – Balancing tree, MST, Red-Black tree
* Computer science fundamentals
  + Operation system fundamentals
  + Memory management (Heap, Stack etc.,)
  + Process/Threads
  + Book:
* Java
  + Core Java
  + Java Collections framework
  + Book: Effective Java – Joshua Bloch
* Design patterns
  + Architectural patterns – MVP/MVVM/MVC
  + Structural pattern
  + Behavioral pattern – Observer, Abstract
  + Creational pattern – Builder, Singleton, Dependency Injection
* Open source libs
  + HTTP Client – Retrofit
  + DI – Dagger
  + RxJava – Asynchronous handling
* SCM - Git