User Guide

The Guava project contains several of Google's core libraries that we rely on in our Java-based projects: collections, caching, primitives support, concurrency libraries, common annotations, string processing, I/O, and so forth. Each of these tools really do get used every day by Googlers, in production services.

But trawling through Javadoc isn't always the most effective way to learn how to make best use of a library. Here, we try to provide readable and pleasant explanations of some of the most popular and most powerful features of Guava.

This wiki is a work in progress, and parts of it may still be under construction.

- Basic utilities: Make using the Java language more pleasant.
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  - [[Ordering|OrderingExplained]]: Guava's powerful "fluent `Comparator`" class.
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- Collections: Guava's extensions to the JDK collections ecosystem. These are some of the most mature and popular parts of Guava.
  - [[Immutable collections|ImmutableCollectionsExplained]], for defensive programming, constant collections, and improved efficiency.
  - [[New collection types|NewCollectionTypesExplained]], for use cases that the JDK collections don't address as well as they could: multisets, multimaps, tables, bidirectional maps, and more.
  - [[Powerful collection utilities|CollectionUtilitiesExplained]], for common operations not provided in `java.util.Collections`.
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- graph-structured data, that is, entities and the relationships between them. Key features include:
  - Graph: a graph whose edges are anonymous entities with no identity or information of their own.
  - ValueGraph: a graph whose edges have associated non-unique values.
  - Network: a graph whose edges are unique objects.
  - Support for graphs that are mutable and immutable, directed and undirected, and several other properties.
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- Concurrency: Powerful, simple abstractions to make it easier to write correct concurrent code.
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- Tips: Getting your application working the way you want it to with Guava.
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  - [[Using Guava in your build|UseGuavaInYourBuild]], with build systems including Maven, Gradle, and more.
  - [[Using ProGuard|UsingProGuardWithGuava]] to avoid bundling parts of Guava you don't use with your JAR.
  - [[Apache Commons equivalents|ApacheCommonCollectionsEquivalents]], helping you translate code from using Apache Commons Collections.
  - [[Compatibility|Compatibility]], details between Guava versions.
  - [[Idea Graveyard|IdeaGraveyard]], feature requests that have been conclusively rejected.
  - [[Friends|FriendsOfGuava]], open-source projects we like and admire.
  - [[HowToContribute|HowToContribute]], how to contribute to Guava.

NOTE: To discuss the contents of this wiki, please just use the guava-discuss mailing list.