

**Table of Contents**

Advanced topics ..... 1

## Advanced topics

As this paper is primarily an introduction to the Kotlin language itself, it does not include certain advanced use-cases.

The following is a list of incredibly useful language features and links to their references.

- The standard library
  - Kotlin has a massive standard library, which is best learned through experience. Often, searching for an implementation of a complex utility function will reveal that it already exists in the `stdlib`.
- [Reflection](#)
  - Kotlin has its own advanced reflection system — however, its complexities and gotchas are too great to discuss in an introductory paper.
- [Collections](#)
  - Kotlin has an extensive amount of collection types and a large support library providing operations like `map`, `filter`, and `fold` as extension functions.
- [Coroutines](#) (`suspend` functions)
  - Enables safe, structured, asynchronous programming without much need for synchronization
- [Kotlin/Native](#)
  - Compiles Kotlin to native binaries — this is *very* experimental.
- [Multiplatform projects](#) (Gradle only)
  - Builds projects for multiple platforms (JVM, JS, Native) using a single common project