

[The Best & Most Complete Dart Course - Visualize, Learn and Practice all Dart Language Concepts!](#)

Running Code From Snapshots

- Snapshots are efficient representations of entities allocated on dart VM heap serialized into a simple snapshot file
- Kernel Snapshot
 - o Only contains code that's been parsed into intermediary kernel language
 - o Portable between any CPU architectures-> needs to compile from scratch to work on the CPU the code is being run on
- JIT Snapshot
 - o Includes parsed classes and compiled code generated during a training run
 - o Code runs faster
- AOT Snapshot
 - o Platform-specific dart executable w/ no dart runtime

Dart Packages

- Fields of pubspec.yaml:
 - o Name (mandatory) --> lowercase
 - o Version (mandatory to be hosted on pub.dev site)
 - o Description (mandatory to be posted on pub.dev site)
 - o Homepage, Repository, Issue tracker, Documentation --> unnecessary for private packages
 - o Executables (makes scripts publicly available)
 - o publish_to --> default is pub.dev site, put "none" to prevent publication
 - o Environment (sdk constraint)
 - o Dependencies*
 - o Dev dependencies

Dependencies

- Immediate: the dependency directly on a package (direct)
- Transitive: dependency of a package that depends on other packages
- Regular: packages depended on both in development and production phase
- Dev: only depended on in development phase
- Can express version through caret syntax (mostly used) or regular syntax, dart uses semantic versioning

Package Types

- Hosted packages
 - o From pub.dev or other http servers
- GIT packages
 - o Packages stores on git repository
- Path Packages
 - o Developing multiple packages that are all depended on by another package, that package must depend on the live versions of the other packages
- SDK Packages
 - o SDK's shaped along with packages (flutter only SDK supported currently)

Effective Dart

- Code should be organized + consistent
 - o Consider code objectives
 - o Plan out code before beginning
- Code should be as minimal as possible
 - o Simpler to understand + optimized
- Always test code
 - o Small apps may use manual testing, but this is not feasible for medium to large apps