Nim Compiled, Python-like language

CONCEPTS

> nim c builds a debug binary with checks on. Benchmark and ship with -d:release (or -d:danger).

Nim source app.nim
↓ nim c
Generated C in nimcache
↓ cc + ld
Binary app
↓ nim js
JavaScript app.js

COMPILE AND RUN

`nim c <file.nim>`
Compile with the C backend

`nim c -r <file.nim> <args>`
Compile, then run with args

`nim r <file.nim> <args>`
Compile to nimcache and run

`nim c -d:release <file.nim>`
Optimized release build

`nim c -o:<file> <file.nim>`
Set the output file name

`nim c --outdir:<dir> <file.nim>`
Set the output directory

`nim js <file.nim>`
Compile to JavaScript

CHECKS AND FLAGS

`nim check <file.nim>`
Check syntax and types only

`nim c -d:<symbol> <file.nim>`
Define a symbol

`nim c --mm:<orc|arc|refc> <file.nim>`
Pick memory management

CONFIGURATION

config.nims
NimScript project config

NIMBLE PACKAGES

nimble init
Start a new package (wizard)

nimble build
Build the package binaries

nimble run *<bin> <args>*
Build and run a binary

nimble test
Run tests/t*.nim

nimble install
Install the package in this dir

nimble install *<pkg>*
Install a package

nimble install --depsOnly
Install only dependencies

LOCAL WORKFLOW

> Commit nimble.lock; keep nimble.paths and nimble.develop out of git, they are machine-local.

PACKAGE FILE

mypkg.nimble

```
version     = "0.1.0"
author      = "Jane Doe"
description = "Small tool"
license     = "MIT"
srcDir      = "src"
bin         = @["mytool"]

requires "nim ≥ 2.0.0"
requires "jester ≥ 0.5.0"
```

LANGUAGE BASICS

Variables

```
let x = 1        # immutable
var y = 2        # mutable
const z = 3      # compile time
```

Procs

```
proc add(a, b: int): int =
  a + b

echo add(1, 2)
```