

# D: a good compiled language

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# A Classic Quote

*The good news is that in 1995 we will have a good operating system and programming language; the bad news is that they will be Unix and C++.*

**Richard P. Gabriel, 1991**

(<http://naggum.no/worse-is-better.html>)

# D in a single sentence

A language that C++ could have  
been, should have been but will  
never be.

# D in a single link

[http://en.wikipedia.org/wiki/D\\_programming\\_language](http://en.wikipedia.org/wiki/D_programming_language)

I fell in love with the language just by  
reading this page.

I hope you will too.

<http://www.digitalmars.com/d/1.0>

# Why D is cool and worth using

It compiles to machine-code (performance!) and its performance is comparable with C/C++.

<http://shootout.alioth.debian.org>

With features inspired by Ruby and other dynamic languages.

And it's merely two years old!

# Why D is better: 1/4 (C)

Imperative programming: just like good-old C.

**Plus** new datatypes, nested functions et al.

C standard library fully accessible.

**Every** C library linkable on binary level!

# Why D is better: 2/4 (OOP)

- Java-style OOP
  - (single-inheritance, interfaces)
  - Mixins (TemplateMixin)
  - Namespacing: no globals, just modules
- Named includes (imports)

# Why D is better: 3/4 (types)

- arrays, dynamic arrays, hashmaps
- operators and properties
- struct vs. class

Delegates and function literals  
(almost-like-closures)

<http://www.hans-eric.com/2007/09/11/d-doesnt-have-real-closures/>

# Why D is better: 4/4 (modern)

D is a truly modern language:

- Garbage collector (can be turned-off or helped)
  - Exceptions try-catch-finally
  - Scopes (on exit, destructors)
    - unittest {assert}

# Why D sucks

Every language sucks.

It's just a matter of using it long enough:

- Phobos vs. Tango
- non-intuitive Unicode support
  - C-lib bindings
- Lack of real closures (D 2.0!)

Try it out!

Has a low entry-level for seasoned C/C++/Java  
programmer.

So...

If D can use C libraries/APIs and Ruby  
native extension API has a C-API

Can you write Ruby extensions in D?

See you next time! ;)