D: a good compiled language

Tomasz Stachewicz

Warsaw Ruby Users Group

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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

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 properies

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!;)