
Subject: Re: C++ FQA

Posted by [mdelfede](#) on Fri, 09 Nov 2007 12:41:56 GMT

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luzr wrote on Fri, 09 November 2007 08:51

Well, but that is useful feature and this is one of things I like with C++ - the "default" mode is "safe", but you can always do dirty things when you need them.

no, here I don't agree.... such things make virtually impossible write 'safe' libraries. A 'const' should be a 'const', not a 'maybe const'.... as 'private' should be so, not a maybe one. I've seen constructs like that :

```
#define private public
#include "alib.h"
```

just to overcome a private class declaration and access the low-level stuffs inside it.... Then, when library changes, people (maybe also people that hasn't nothing to do with such a hack) starts wondering why his program that up to the day before worked like a charm just crash. IMHO that has nothing to do with commercial-grade applications.

Quote:

In other words, you can also say that a well written library can do what it needs

well, a well written lib should do what the coder will, **not** what the user is missing. Before using C++ hacks to overcome libs limitations, you have 3 solutions :

- 1) Patch the sources, if you have them
- 2) Ask the original programmer to enhance the lib
- 3) Just find another lib that suit your needs

Quote:

Actually, interestingly it seems like I am the only one here who in fact likes C++ as it is (except some quite small issues and the standard library, which IMO only looks like a good design).

Well, I agree that C++ **is** useful and **is** the only widespread system-wide programming language. But I really can't say that is a good language. Besides static memory management, which I prefer against a gc approach (I like to code what I want, not what the compiler want...), it contains really too many caveats due mostly (but not all) because of compatibility issues.

It is :

- slow compiling
- not modular at all
- object model is missing too many useful stuffs (properties, delegates, a true rtti system, just among all)
- operator overloading is just awful, as is missing rvalue-lvalue different behaviour
- missing high-level types (strings, arrays.....)
- cumbersome templates
- no binary objects specifications... in particular with respect to name mangling
- this damn'd preprocessor that does what he wants

Just an example about this... on a really poorly written code :

```
#define a_type mytype
#define an_include </my/include/dir/a_type/mytype.hxx>
#define another_include "/my/include/dir/a_type/mytype.hxx"
#include an_include
#include another_include
```

That has the wonderful (sigh) result of :

```
#include </my/include/dir/mytype/mytype.hxx>
#include "/my/include/dir/a_type/mytype.hxx"
```

I stumbled about such a problem and it tooks half a day to understand that inside <> you have macro substitution, but inside "" not.... and I'm still not sure that it isn't a compiler behaviour.

IMHO, what we needs is a new system wide language, that maybe resembles to C++, but gets rid of all caveats and introduces the missing things. C++ is a language that, in order to be able to compile 1980's code is just becoming a monster and still missing what a modern oo language should have.

Ciao

Max
