

CoCoALib - Design #1625

Use new C++ keyword override

25 Oct 2021 19:52 - John Abbott

Status:	Closed	Start date:	25 Oct 2021
Priority:	Normal	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	Safety	Estimated time:	12.50 hours
Target version:	CoCoALib-0.99800	Spent time:	12.55 hours
Description Scott Meyers, in Effective Modern C++, writes in Item 12 that one should use the new C++ keyword override for member function in derived classes which override ones declared in a base class. It does not make the code faster, but does help highlight mistakes (and could be useful if we want to change a function interface). CoCoALib uses inheritance quite a lot, so probably many changes are needed.			
Related issues: Related to CoCoALib - Design #1225: Move to C++14 (skipping C++11) In Progress 06 Sep 2018			

History

#1 - 25 Oct 2021 19:53 - John Abbott

- Related to Design #1225: Move to C++14 (skipping C++11) added

#2 - 25 Oct 2021 19:58 - John Abbott

- % Done changed from 0 to 50

I think I have made most of the changes... quite a mind-numbing experience :-)

I may have found a couple of typos (presumably harmless as everything seemed to work OK beforehand).

There were quite a lot of using commands inside various class declarations; with a comment about avoiding a compiler warning about overloading. I have commented these commands out, and everything compiles fine on my linux box (g++ 7.5.0)
Why were they put in? And when?

@Anna: does your compiler need them?

#3 - 25 Oct 2021 20:01 - John Abbott

In FractionField.C I have found this check-in comment:

```
// Revision 1.32 2014/05/14 15:57:15 bigatti
// -- added "using" for clang with superpedantic flag
```

I suppose this was the cause.

Anna: can you check the current situation?

Maybe comment out the using commands on lines 178 and 179; then try compiling with "superpedantic" flag.

#4 - 29 Oct 2021 09:38 - Anna Maria Bigatti

John Abbott wrote:

In FractionField.C I have found this check-in comment:
[...]

I suppose this was the cause.

Anna: can you check the current situation?

Maybe comment out the using commands on lines 178 and 179; then try compiling with "superpedantic" flag.

this is what I (still) get:

```
Compiling FractionField.o
FractionField.C:178:15: error: ISO C++11 does not allow access declarations; use
      using declarations instead
      RingBase::myNew;
          ^
      using
FractionField.C:179:15: error: ISO C++11 does not allow access declarations; use
      using declarations instead
      RingBase::myAssign;
          ^
      using
2 errors generated.
```

#5 - 30 Oct 2021 19:47 - John Abbott

- Status changed from New to Resolved

- Assignee set to John Abbott

- % Done changed from 50 to 80

I have checked in (and found several errors/inconsistencies while doing so).
All compiles and works fine on my Linux box.

#6 - 04 Feb 2022 21:48 - John Abbott

- Status changed from Resolved to Closed

- % Done changed from 80 to 100

- *Estimated time set to 12.50 h*

No one has howled in the last 3 months, so closing.
Maybe on the next trip to Genoa I can check on Anna's computer.