CoCoALib - Design #1628

Unused variables, params, data members

03 Nov 2021 17:59 - John Abbott

In Progress	Start date:	03 Nov 2021	
Normal	Due date:		
	% Done:	10%	
Tidying	Estimated time:	0.00 hour	
CoCoALib-0.99880	Spent time:	1.40 hour	
	Normal	Normal Due date: % Done: Tidying Estimated time:	Normal Due date: % Done: 10% Tidying Estimated time: 0.00 hour

Anna reports that clang issues warning about unused data-members (in MatrixFpNonRed). The data-members are used when debugging is active, but not otherwise. How best to implement this (and keep good readability)?

History

#1 - 03 Nov 2021 18:01 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

clang is probably correct to report that the data-members are unused. Their presence makes objects of this class needlessly large.

How to express this neatly in the source code? Note that several places need to be modified.

#2 - 03 Nov 2021 18:03 - John Abbott

The KISS solution would be to use the CoCoA_DEBUG macro. I'm not keen to use macros (esp. to make #ifdef blocks of code).

#3 - 03 Nov 2021 18:55 - John Abbott

I have just implemented the KISS approach: namely 2 #ifdef blocks. Everything compiles, & all tests pass (both with and without debugging).

I now think that this KISS approach is OK for the current situation. But if we encounter future similar situations then maybe a "more sophisticated" approach is warranted.

There are some suggestions at https://stackoverflow.com/guestions/1486904/how-do-i-best-silence-a-warning-about-unused-variables

#4 - 05 Nov 2021 15:54 - John Abbott

- Target version changed from CoCoALib-0.99800 to CoCoALib-0.99850

I tried changing CoCoA_ASSERT so that it expanded to (void)sizeof(cond), **BUT** this worked badly because some assertions needed fns which are included only if CoCoA_DEBUG is defined (the include was inside an ifdef block). So I reverted to the old solution: namely empty.

Anna suggest maybe a macro something like *IF_DEBUG(code) which expands to nothing when debugging is off, and otherwise expands to code.

We shall postpone this issue to next version.

#5 - 08 Mar 2023 19:55 - John Abbott

- Target version changed from CoCoALib-0.99850 to CoCoALib-0.99880

#6 - 11 Mar 2023 12:29 - John Abbott

Several functions have an unused parameter CheckForTimeout. It would be nice to activate the time-out for these fns. Can we do this for the upcoming release?