CoCoA-5 - Slug #741

C5 GUI: slow to close

26 Jun 2015 15:09 - John Abbott

Status:	Closed	**Start date:**	26 Jun 2015
Priority:	Low	**Due date:**	
Assignee:	John Abbott	**% Done:**	100%
Category:	GUI	**Estimated time:**	2.75 hours
Target version:	CoCoA-5.2.2	**Spent time:**	2.75 hours

Description

The C5 GUI can be VERY slow to close (while making intensive use of the processor) in some circumstances.

Here is one way to observe the slowness:

```
Fact(100000); --> produces long output
L := 1..20000;
S := sorted(L);  --> takes several seconds, interrupt the computation using "stop" button
```

If you now decide to quit the C5 GUI by selecting "quit" from the "file" menu, it takes several minutes to close the window (blocking the cursor as a coloured wheel on MacOSX).

Related issues:

Related to CoCoA-5 - Bug #1093: GUI: bugs and slugs	**In Progress**	**23 Jul 2017**

History

#1 - 26 Jun 2015 15:10 - John Abbott

- Priority changed from Normal to Low

The window closes quickly if you do not first compute (and print) Fact(100000).

Needs more investigation to discover what exactly is the cause.

Some more experiments:

```
Fact(100000);  -- SLOW
```

```
N:=Fact(100000); -- FAST
```

```
N:=fact(100000);
N;  -- SLOW
```

```
Fact(100000);
1; -- SLOW
```

At this point I am inclined to guess that the presence of a long line of output is what causes the slow closure.

#2 - 30 Jun 2015 15:18 - John Abbott

The GUI is slow to close also after simply computing and printing (x+y+z+1)^99.

JAA think that this confirms that the slowness comes from having a long output line.

#3 - 30 Jun 2015 15:25 - John Abbott

- Status changed from New to In Progress

- % Done changed from 0 to 10

Closing is practically instant if I do first a "Clear output window" and then close the C5 GUI. This suggests that closing the GUI should probably call "clear output window" first, and then close.

I'll have a look at the code to see if this can be added quickly and easily.

Note: on my machine it took 60s of CPU to close the GUI when I had computed and printed factorial(100000)

#4 - 30 Jun 2015 15:44 - John Abbott

Found this C5.C:931

```
    connect(this->clearOutputButton, SIGNAL(clicked()), this, SLOT(clearOutputWindow()));
```

#5 - 01 Jul 2015 15:26 - John Abbott

In file C5.C:1000 there is a function MainWindow::closeEvent

JAA thinks that this is probably the function needing modification.

#6 - 27 Jul 2015 19:11 - John Abbott

- % Done changed from 10 to 50

I've hacked the code to make a call to clearOutputWindow, and it now seems to close much faster (after printing factorial(100000)).

I had to make the mem fn clearOutputWindow public (previously it was private), and add a boolean arg to avoid asking the user for confirmation prior to closing the output window.

It compiles and runs for me. I'll check in soon; with luck we can test it on other platforms before releasing.

#7 - 23 Jul 2017 16:07 - John Abbott

- Status changed from In Progress to Feedback

- Assignee set to John Abbott

- Target version changed from CoCoA-5.?.? to CoCoA-5.2.2

- % Done changed from 50 to 90

#8 - 23 Jul 2017 16:14 - John Abbott

- Related to Bug #1093: GUI: bugs and slugs added

#9 - 13 Nov 2017 15:46 - John Abbott

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

- Estimated time set to 2.75 h

I don't know who else can test this. I hardly ever use the GUI; does anyone else?
Closing.