

CoCoA-5 - Bug #287

--fullCoCoALibError prints too much (Try/UponError)

12 Dec 2012 11:21 - Anna Maria Bigatti

Status:	New	Start date:	12 Dec 2012
Priority:	Normal	Due date:	
Assignee:	Anna Maria Bigatti	% Done:	10%
Category:	Parser/Interpreter	Estimated time:	35.00 hours
Target version:	CoCoA-5.?.?	Spent time:	0.85 hour
Description			
When using the flag <code>--fullCoCoALibError</code> CoCoA-5 prints the full CoCoALib error message.			
It does so even inside the Try command.			
It is not very important because such flag should be used only by CoCoALib developers (or only by me??), but it would be nice to disable that printing.			
Related issues:			
Related to CoCoA-5 - Feature #101: rethrow in Try .. UponError .. EndTry		New	08 Mar 2012

History

#1 - 12 Dec 2012 12:00 - Anna Maria Bigatti

It seems difficult to do because the error is actually dealt with by a proper C++ **try**, whereas printing (the error message) is just a function call. The functions doing the work are in **Interpreter.C**:

- **void TryStatement::implExecute**(RuntimeEnvironment * runtimeEnv)
- **void RuntimeEnvironment::announceCLE**(const ErrorInfo& err)

#2 - 12 Dec 2012 16:06 - John Abbott

Here is a simplistic solution: print all the "stack backtrace" information to a string. If the error is caught somewhere, discard the string. If the error propagates all the way to top level, print the string.

This simplistic solution does not work properly if an error is caught but then rethrown -- unfortunately the CoCoA-5 language does not let the programmer `//rethrow//` an error.

Perhaps the backtrace string should be emptied only if the UponError block is exited cleanly (`//i.e.//` not via another throw)?

In fact, the backtrace may be recorded in a structure other than a string. Anyway, the basic idea is to record it somewhere and then print it out if the exception reaches top-level.

#3 - 01 Aug 2013 07:19 - Anna Maria Bigatti

- Target version changed from CoCoA-5.0.9 to CoCoA-5.1.0 Easter14

#4 - 09 Apr 2014 17:31 - John Abbott

- Target version changed from CoCoA-5.1.0 Easter14 to CoCoA-5.1.1 Seoul14

#5 - 15 Jul 2014 17:36 - Anna Maria Bigatti

- Subject changed from *--fullCoCoALibError prints too much* to *--fullCoCoALibError prints too much (Try/UponError)*
- Target version changed from *CoCoA-5.1.1 Seoul14* to *CoCoA-5.?.?*

#6 - 14 Apr 2016 18:00 - Anna Maria Bigatti

- Assignee set to *Anna Maria Bigatti*
- Target version changed from *CoCoA-5.?.?* to *CoCoA-5.2.0 spring 2017*
- % Done changed from *0* to *10*

Ooops, apparently I released the Mac version of cocoa-5.1.4 with the flag activated.
This means that users computing "gin" will probably get the (innocuous but intrusive) error

```
*****  
***CoCoA ERROR***   ErrCode: CoCoA::ERR::InsuffPrec  
***CoCoA ERROR***   Message: RingTwinFloat: insufficient precision (e.g. error growth impedes further computa  
tion)  
***CoCoA ERROR***   Context: RingTwinFloat arithmetic  
*****
```

#7 - 17 Apr 2016 20:06 - John Abbott

- Estimated time set to *35.00 h*

I still like my proposal in comment 2. How easy it will be to implement is not clear to me.

Anyway the implementation does not need to be especially efficient.

I like the idea of storing the backtrace in a structure somewhere, and then printing only when necessary.

I'm not really sure, but reckon this could take a whole week to sort out: about half time to read and understand the existing interpreter code, and the other half to make the necessary changes.

#8 - 02 Sep 2016 13:54 - John Abbott

- Target version changed from *CoCoA-5.2.0 spring 2017* to *CoCoA-5.?.?*