

CoCoA-5 - Feature #673

Error message: I was expecting...

11 Mar 2015 13:10 - John Abbott

Status:	Closed	Start date:	11 Mar 2015
Priority:	Normal	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	enhancing/improving	Estimated time:	1.88 hour
Target version:	CoCoA-5.3.0	Spent time:	1.80 hour
Description			
The generic error message			
ERROR: I was expecting an identifier by found "weights"			
should be improved, e.g. to explain why weights is unsuitable (because it's a keyword).			
Related issues:			
Related to CoCoA-5 - Design #668: Remove keyword "weights"?		Closed	05 Mar 2015
Related to CoCoA-5 - Support #530: Interpreter error message: "for" with miss...		Rejected	09 Apr 2014

History

#1 - 11 Mar 2015 13:14 - John Abbott

- Estimated time set to 3.00 h

The relevant source code is Parser.H:156

The following rule may help identify the "type" of a parser token:

- starts with a letter --> keyword or identifier
- starts with a digit --> number
- starts with double quote --> string (literal)
- otherwise symbol/operator

#2 - 26 Nov 2015 11:10 - John Abbott

The original report did not contain an example of input which produces the unhelpful error message. I think the following illustrates the problem:

```
record[for := 1];
```

Curiously, this input evidently confuses the parser because it produces two very similar error messages -- probably not worth fixing.

#3 - 24 Oct 2019 23:00 - John Abbott

- Status changed from *New* to *Resolved*
- Assignee set to *John Abbott*
- Target version changed from *CoCoA-5.?.?* to *CoCoA-5.3.0*
- % Done changed from *0* to *60*

Not really sure how to do this cleanly, so I have "hacked" the class `Token` in `Lexer.H` (near line 243) by adding a new mem fn `LexemeClass`. The impl is in `Lexer.C` near line 44. This new mem fn is used only in the ctor for `UnexpectedTokenException` in `Parser.H` near line 158.

A quick check suggest that it works acceptably. Here are the tests I tried:

```
record[for := 1];
record[:= 1];
record[1];
record["1"];
record[ <EOF>
```

Not yet CVS-ed. I'll try a few more *ad hoc* tests first.

#4 - 24 Oct 2019 23:11 - John Abbott

CVS-ed. Also CoCoA-5 tests pass :-)

#5 - 25 Oct 2019 15:12 - John Abbott

- Status changed from *Resolved* to *Feedback*
- % Done changed from *60* to *90*

I have tried some more tests. Mostly it seems OK, but it is possible to confuse the parser:

```
record['
record[' '
record[<<
```

Mind you, anyone who types in any of the above is just being a vandal (mmm, me too?)

#6 - 26 Oct 2019 08:47 - Anna Maria Bigatti

John Abbott wrote:

Mind you, anyone who types in any of the above is just being a vandal (mmm, me too?)

Now called "ethical hacker" ;-)

#7 - 13 Feb 2020 16:39 - John Abbott

- *Status changed from Feedback to Closed*
- *% Done changed from 90 to 100*
- *Estimated time changed from 3.00 h to 1.88 h*

Seems OK now. No doubt the school in Vietnam will be an "interesting" proving ground.
Closing.