CoCoA-5 - Design #868

Der, Bin: why the capital letter?

17 Apr 2016 19:59 - John Abbott

Status:	Closed	**Start date:**	17 Apr 2016
Priority:	Normal	**Due date:**	
Assignee:	Anna Maria Bigatti	**% Done:**	100%
Category:	Renaming	**Estimated time:**	2.01 hours
Target version:	CoCoA-5.2.0 spring 2017	**Spent time:**	2.15 hours

Description			
In CoCoA-5 the function for computing formal derivatives is Der; why does der not exist?			

Related issues:			
Related to CoCoA-5 - Design #939: Rename Fact to factorial?		**Closed**	**10 Oct 2016**
Related to CoCoA-5 - Support #940: Check all fns in packages work even withou...		**Closed**	**10 Oct 2016**

History

#1 - 17 Apr 2016 20:00 - John Abbott

I understand we want to keep Der for backward compatibility.

Since we have deg, den, det why not also der?

#2 - 18 Apr 2016 12:38 - Anna Maria Bigatti

- Subject changed from Der: why the capital letter? to Der, Bin: why the capital letter?

It is also the case for bin.
In CoCoALib they are called deriv and binomial, so the lower-case name is different (even though not given as a hint in the error).
Maybe we should change the name in CoCoALib as well? I cannot see ambiguities here

Another case is Fact which is called factorial, but that there is indeed an ambiguity with factor.

#3 - 10 Oct 2016 14:41 - Anna Maria Bigatti

- Status changed from New to Feedback

- % Done changed from 0 to 80

- Estimated time set to 1.00 h

Should we change deriv into der in CoCoALib?

#4 - 10 Oct 2016 15:21 - John Abbott

- Related to Design #939: Rename Fact to factorial? added

#5 - 10 Oct 2016 15:38 - John Abbott

My preference is for **deriv** in both CoCoALib and CoCoA-5, but that is not backward compatible :-/
I think deriv is clearer than der (or Der).

I also have a mild preference for **binomial** over **bin**; maybe **binom** is also a candidate.
One reason I do not like bin so much is that it is an english word (meaning something like "cestino").

Any change to these names is naturally not backward compatible; so if we do change them (as I hope we do),
it would be good to make a definite improvement (ideally beyond simply replacing a capital by a small one).

#6 - 10 Oct 2016 16:05 - Anna Maria Bigatti

No need to do any change: the official names are indeed binomial and deriv as in cocoalib.
I'd rather keep Bin and Der working smoothly for some more time.

#7 - 10 Oct 2016 16:51 - John Abbott

By "smoothly" do you mean that it should not yet be moved to obsolete.cpkg5?

We could even move Bin to obsolete.cpkg5, perhaps with the "obsolescent" print command being activated only after a certain date:

```
define Bin(n,r)
  if date() > 20171231 then println "***WARNING*** Bin is obsolescent, please use binomial instead" endif
  return binomial(n,r)
enddefine
```

In any case, I think we should make sure that all existing packages use the "correct", "modern" names.

#8 - 10 Oct 2016 17:01 - Anna Maria Bigatti

John Abbott wrote:

> By "smoothly" do you mean that it should not yet be moved to obsolete.cpkg5?

Yes, that's what I meant

> In any case, I think we should make sure that all existing packages use the "correct", "modern" names.

Every so often we should run the tests without the BackwardCompatible package. (I thought you have done it a few times)

#9 - 10 Oct 2016 17:53 - John Abbott

Anna Maria Bigatti wrote:

> Every so often we should run the tests without the BackwardCompatible package. (I thought you have done it a few times)

Unfortunately you are right that we **should** do it; maybe I had even done it some time ago (I don't recall now).
After my next check in, it will be mostly OK. There is a problem with the "backward" syntax: **Ideal(xy,z)** gives an error that the fn Ideal cannot be found. What to do? The simplest is just to update all such calls...

I think there is no other way: with the * in place, or as **ideal(***[xy,z]***)**.

#10 - 10 Oct 2016 21:04 - John Abbott

- Related to Support #940: Check all fns in packages work even without BackwardCompatible.cpkg5 added

#11 - 27 Apr 2017 17:15 - John Abbott

Can we move Der and Bin to obsolescent.cpkg5?

#12 - 27 Apr 2017 17:43 - Anna Maria Bigatti

John Abbott wrote:

> Can we move Der and Bin to obsolescent.cpkg5?

yes.

#13 - 27 Apr 2017 18:05 - Anna Maria Bigatti

- Assignee set to Anna Maria Bigatti

- % Done changed from 80 to 90

done, tested.

#14 - 28 Apr 2017 09:24 - Anna Maria Bigatti

- Status changed from Feedback to Closed

- % Done changed from 90 to 100

- Estimated time changed from 1.00 h to 2.01 h