CoCoA-5 - Feature #529

Naive version of resolution and Betti numbers

09 Apr 2014 10:19 - Anna Maria Bigatti

Status:	Closed	**Start date:**	09 Apr 2014
Priority:	High	**Due date:**	
Assignee:	Anna Maria Bigatti	**% Done:**	100%
Category:	CoCoA-4 function to be added	**Estimated time:**	5.00 hours
Target version:	CoCoA-5.1.0 Easter14	**Spent time:**	5.00 hours

Description
Implement a naive version of resolution and Betti numbers while hoping for the (very delicate) optimized **resolution** algorithm implementation.

Related issues:		
Related to CoCoALib - Feature #409: Minimal syzygies (optimized implementation)	**New**	**17 Oct 2013**
Related to CoCoA-5 - Bug #509: SyzOfGens (CoCoA-5) does not have correct shifts	**Closed**	**03 Apr 2014**

History

#1 - 09 Apr 2014 14:54 - Anna Maria Bigatti

- *Assignee set to Anna Maria Bigatti*

- *% Done changed from 0 to 30*

I now have implemented **BettiMatrix** and **BettiDiagram** in CoCoALanguage.
Where should they go? What syntax should they have?
Now the resolution is both naive (i.e. slow) and is not stored internally (not a trivial task).
So calling **Betti....** would recompute the resolution.

#2 - 10 Apr 2014 09:02 - Anna Maria Bigatti

- *Status changed from New to Resolved*

(design, testing, documenting)
Public functions are **PrintRes**, **PrintBettiMatrix** and **PrintBettiDiagram**.
Documented.

#3 - 10 Apr 2014 09:26 - Anna Maria Bigatti

- *% Done changed from 30 to 80*

#4 - 09 May 2014 12:56 - Anna Maria Bigatti

- *Status changed from Resolved to Closed*

- *Priority changed from Normal to High*

- *% Done changed from 80 to 100*

It works, but should be cleaned up.
Mainly we should store the resolutions in the ideal (together with Hilbert, Janet..).
That is another issue (and not trivial).

Closing.