

CoCoA-5 - Design #1334

sylvester or SylvesterMat?

08 Oct 2019 21:25 - John Abbott

Status:	Closed	Start date:	08 Oct 2019
Priority:	Normal	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	Renaming	Estimated time:	2.77 hours
Target version:	CoCoA-5.3.0	Spent time:	2.85 hours
Description CoCoA-5 has a function called sylvester ; should it not be called SylvesterMat ?			

History

#1 - 10 Oct 2019 15:53 - Anna Maria Bigatti

- Status changed from New to In Progress

- % Done changed from 0 to 10

I vote for SylvesterMat

#2 - 10 Oct 2019 16:10 - John Abbott

This fn should be in CoCoALib!

Move it there and change its name; and put sylvester into obsolescent. Change the doc too!

#3 - 10 Oct 2019 17:27 - Anna Maria Bigatti

John Abbott wrote:

This fn should be in CoCoALib!

Move it there and change its name; and put sylvester into obsolescent. Change the doc too!

There is some commented out code in MatrixSpecial.C

#4 - 11 Oct 2019 11:57 - John Abbott

- Assignee set to John Abbott

- % Done changed from 10 to 60

I have now made the impl in C++; more or less a straight copy of the CoCoA-5 code.

It seems to work (on 2 simple examples).

Still have to make tests, and update doc.

#5 - 11 Oct 2019 12:01 - John Abbott

What should SylvesterMat do if one of the args is 0?
An error must be signalled, but how?
Currently the error is from deg which says that a non-zero ringelem is required.
Should the error actually be thrown by SylvesterMat?

#6 - 11 Oct 2019 12:06 - John Abbott

Not really related: there is a function **jacobian** which returns the jacobian matrix. Should it be called **JacobianMat**?

#7 - 11 Oct 2019 15:03 - John Abbott

- Status changed from *In Progress* to *Resolved*
- % Done changed from 60 to 80

I have changed the CoCoA-5 manual to use the new name. There was no need to change any tests.

Also added SylvesterMat to CoCoALib doc; no test :(
Mmm, I wonder how resultant is implemented? 8-{

#8 - 11 Oct 2019 18:01 - Anna Maria Bigatti

John Abbott wrote:

Not really related: there is a function **jacobian** which returns the jacobian matrix. Should it be called **JacobianMat**?

yes!

#9 - 11 Oct 2019 21:54 - John Abbott

I have renamed jacobian to JacobianMat; jacobian is now in obsolescent (both for CoCoA-5 and CoCoALib).

#10 - 16 Jan 2020 12:28 - John Abbott

- Status changed from *Resolved* to *Closed*
- % Done changed from 80 to 100
- Estimated time set to 2.22 h

There is no test, but otherwise the code looks fine. Closing.

#11 - 16 Jan 2020 14:10 - John Abbott

- Estimated time changed from 2.22 h to 2.77 h

Added test to test-MatrixSpecial1.C

#12 - 29 Jan 2021 11:59 - Anna Maria Bigatti

cocoa5 manual for jacobian updated now (2021-01)