CoCoALib - Bug #1014

RowMat, ColMat with arg an empty list/vector

24 Feb 2017 17:39 - John Abbott

Status:	In Progress		**Start date:**	24 Feb 2017
Priority:	Low		**Due date:**	
Assignee:			**% Done:**	10%
Category:	Tidying		**Estimated time:**	0.00 hour
Target version:	CoCoALib-1.0		**Spent time:**	0.45 hour
Description				
What should RowMat and ColMat do if given am empty list/vector as argument?				
Related issues:				
Related to CoCoALib - Feature #202: MatrixView/function for viewing a single ...		**Closed**		04 Jul 2012

History

#1 - 24 Feb 2017 17:45 - John Abbott

- % Done changed from 0 to 10

In CoCoA-5 one can call RowMat([]) and ColMat([]) to produce a matrix 1x0 or 0x1.
In CoCoALib a similar call produces an error ("empty list").
These two behaviours are incompatible: which is the "correct" (desired?) behaviour?

#2 - 24 Feb 2017 17:49 - John Abbott

At the moment JAA thinks that giving an error is probably better.

Is there a situation where one might reasonably want to convert an empty list/vector into a row/column matrix? Or is it much more likely that some earlier program error has produced an empty list/vector, and this should be signalled when calling RowMat or ColMat?

This might be mildly related to issue #202: what happens if a user asks for the n-th row of an n-by-0 matrix? The result should be a 1-by-0 matrix, I suppose.

#3 - 24 Feb 2017 17:49 - John Abbott

- Related to Feature #202: MatrixView/function for viewing a single row or column (RowMat, ColMat) added

#4 - 24 Feb 2017 17:54 - John Abbott

- Status changed from New to In Progress

Another (mild?) incompatibility is that in CoCoA-5 RowMat and ColMat accept as input lists of INT and/or RAT.
In CoCoALib the input has to be a vector<RingElem>.

Certainly the CoCoA-5 approach is convenient in an "informal" interactive context. Is such an "informal" interface desirable in CoCoALib too?