CoCoALib - Feature #257

Transcribe C4 code for GCD in QQ[x]

09 Oct 2012 15:36 - John Abbott

Status:	New	Start date:	09 Oct 2012	
Priority:	Normal	Due date:		
Assignee:		% Done:	0%	
Category:		Estimated time:	0.00 hour	
Target version:	CoCoALib-1.0	Spent time:	0.00 hour	
Description				
The old CoCoA-4 univariate GCD code should be transcribed into CoCoALib.				
It comprises: • gcd in Fp[x] via standard euclidean algorithm. • Removal of content. • Leading coeff handling. • Optional reversal trick. • chinese remaindering of many modular images • heuristic stopping criterion & check • final content correction				
Why not use Hensel?				
Related issues:				
Related to CoCoA-5 - Support #242: CoCoA-5 Projects for students (e.g. credit			In Progress	28 Sep 2012
Related to CoCoALib - Feature #127: Convert DUPFF code to C++			In Progress	05 Apr 2012
Related to CoCoALib - Slug #952: GCD very slow			Closed	25 Oct 2016
Related to CoCoA-5 - Slug #480: gcd too slow for large degree univariate poly			New	18 Mar 2014

History

#1 - 01 Aug 2014 08:59 - Anna Maria Bigatti

- Target version set to CoCoALib-1.0

#2 - 24 Nov 2016 13:23 - John Abbott

- Related to Feature #127: Convert DUPFF code to C++ added

#3 - 24 Nov 2016 13:23 - John Abbott

- Related to Slug #952: GCD very slow added

#4 - 24 Nov 2016 13:24 - John Abbott

- Related to Slug #480: gcd too slow for large degree univariate poly added