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Subject: Mailing list, Constructors, Info, ...
Date: 9 September 1996 at 14:49
To: gap4dev@keith.dcs.st-and.ac.uk

Hi everyone,

I have set up gap4dev@keith.dcs.st-and.ac.uk for technical GAP4 discussion.

Constructors
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Martin's basic proposals seem sensible, as far as I understand them.

I don't quite see how the ValueFilter parts work. In the example, IsQuaternionJ1Rep and IsQuaternionRep are both direct children of IsPositionalRep, and so would surely have equal value. I think we are probably OK using explicit numerical ranks here. At worst, locally correct code may not be globally most efficient, but such cases could be fixed by hand.

I think Martin is right that restricting the representation should be done by having multiple constructors.

Is NewConstructor simply a synonym of NewOperation?

Info
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I have done a GAP-level simulation of the proposed Info keyword (although obviously this version does evaluate the arguments before not printing them). This required implementing ApplyFunc in the kernel, which leaves me with a question: What file should ApplyFunc be in? I could see cases for calls.c or funcs.c or a file on its own. When this is resolved I'll check it all in.

I have done the Info stuff using a new family: InfoClassFamily with a suitable representation and methods, for what are basically just wrapped small ints. An InfoSelector is just a Set of InfoClasses, and Info takes an InfoSelector, a level and zero or more arguments to print.

This works nicely, but means that Info can't be used in four or five library files that need to be loaded before info.g. Can anyone suggest a better approach?

Steve

