CoCoA-5 - Feature #1011

Random seed fn

20 Feb 2017 16:16 - John Abbott

Status:	Closed	Start date:	20 Feb 2017
Priority:	High	Due date:	
Assignee:	John Abbott	% Done:	100%
Category:	CoCoA-4 function to be added	Estimated time:	0.00 hour
Target version:	CoCoA-5.2.2	Spent time:	1.60 hour
Description			
CoCoA-4 has a Seed to for resetting the global random number generator			

CoCoA-4 has a Seed in for resetting the global random number generator.

Make it (or something equivalent) available in CoCoA-5?

History

#1 - 20 Feb 2017 16:20 - John Abbott

An interactive CoCoA-5 session will always generate the same sequence of (pseudo-)random numbers. In CoCoA-4 there was a fn called Seed which would restart the random number generator from the given seed.

In CoCoALib, a seed value may be given when creating a random source; or the source may be "reseeded" after construction.

The CoCoA-4 fn can be emulated by reseeding the GlobalRandomSource in CoCoALib. This makes me suggest that we could call the fn reseed (and perhaps put Seed in as an obsolescent fn?)

Opinions?

#2 - 12 May 2017 17:05 - John Abbott

- Priority changed from Normal to High

- Target version changed from CoCoA-5.?.? to CoCoA-5.2.2

#3 - 12 May 2017 17:16 - John Abbott

- Status changed from New to In Progress
- % Done changed from 0 to 10

The CoCoA-5 function **random** calls random_forC5 defined in CoCoALibSupplement.C. Presumably reseed can be defined as a CoCoALib builtin fn, working via CoCoALibSupplement.C.

#4 - 14 May 2017 11:05 - John Abbott

- Assignee set to John Abbott

- % Done changed from 10 to 50

I have implemented reseed, and written a manual page. Not sure about making a test... I suppose I could make an easy one.

#5 - 07 Jun 2017 15:19 - John Abbott

In the manual page I have given a simplistic example of calling reseed with an argument which varies with the time: so two CoCoA session started at

least 1 second apart will be seeded differently.

Should there be an easy way of achieving this? For instance a specific function (with no args) which reseeds from a time-dependent value? Maybe ReseedFromTime()?

Perhaps it is not so important? The user could just copy the line from the manual...

#6 - 15 Nov 2017 17:43 - John Abbott

- Status changed from In Progress to Closed
- % Done changed from 50 to 100