# 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 addedEstimated time:0.00 hourTarget version:CoCoA-5.2.2Spent time:1.60 hour

Description

CoCoA-4 has a Seed fn 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

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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

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