

Date: Thu, 29 Apr 99 15:22 +0200
From: annette@cs.vu.nl (Ten Teije Annette)
To: georg.duftschmid@akh-wien.ac.at
Subject: input for list of properties
Cc: silvia@ifs.tuwien.ac.at, balser@informatik.uni-ulm.de,
georg.duftschmid@akh-wien.ac.at, reif@bach.informatik.uni-ulm.de, frankh@cs.vu.nl,
Annette ten Teije <annette@cs.vu.nl>
Phone: +31 - 20 - 444 7818
WWW: <http://www.cs.vu.nl/~annette/>
X-Mailer: Z-Mail (3.2.1 10apr95)

Georg,

Below our list of rather sloppy/informal/vague properties for the list of properties.

Annette,
Frank.

List of sloppy/informal/vague properties

- (1) relation between the control structure (e.g. do-all-sequentially) and conditions (e.g. filter-conditions)

Example:

If in a do-all-sequentially and the filter-condition fails then there is an error in the plan.

If in a do-some-any-order, the actions of one subplan should not influence conditions of other subplans

- (2) parameters that are asked or observed but which are never used, or the other way around (parameters are used, but never asked/observed/got)
This are "gaps" in the protocol.

- (3) relate effects to intentions.
An effect can make the intention (partial) true or (partial) false.

- (4) filter & setup & complete (& some-terminology) -> intentions
or variants of these as we saw in Karlsruhe:
filter & setup & ~suspended & ~aborted & complete -> intentions

- (5) complete conditions should be consistent (or derivable) with the filter/setup-conditions and the execution of the plan.
Derivable:
filter & setup -> [plan]complete

- (6) A subplan has to contribute to the intention of the plan.

(7) filter/setup condition should also hold for its subplans.

(8) for each setup condition should be a plan or set of plans that satisfied the setup condition. (by intentions/complete-conditions/effects)
(ie there must be a plan to make the setup conditions true)

Several relation could hold:

Plan or set of plans are "stronger" (do more) then the setup condition.

soundness: {plan} $\rightarrow$ setup

Plan or set of plans are "weaker" (do less) then the setup condition.

completeness: setup $\rightarrow$ {plan}

Plan or set of plans do exactly the same.

Or more difficult: "partly" soundness/completeness...

(9) the specification is "complete" as:

complete-conditions & terminology $\leftrightarrow$ intentions

complete-conditions & effects & terminology $\leftrightarrow$ intentions

setup & filter & not aborted & not suspended $\rightarrow$
(complete $\leftrightarrow$ intentions)

setup & filter & not aborted & not suspended $\rightarrow$
(complete & effects $\leftrightarrow$ intentions)

(10) complete conditions represent $\rightarrow$ *actual behaviour* $\leftarrow$, where as effects represent $\rightarrow$ *expected behaviour* $\leftarrow$.

effect \subset complete-condition ?