

Software Design using G.O.O.S.E.

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The G.O.O.S.E. project (Generalised Object Oriented Support Environment), funded by SERC and DRA, represents an attempt to provide computer support for the activities and practices observed to occur in designing software, as opposed to those practices that are prescribed by software design methods. The intention was to create an environment that would be as non-intrusive as possible, and which would use the power of the computer to assist with 'scaling up' existing design practices.

The current G.O.O.S.E. prototype now provides quite extensive facilities, which include:

- * three diagram editors (for functional, behavioural and structural properties);
- * text and audio noted editors;
- * a knowledge-based 'consistency checker';
- * a design 'execution' tool with supporting 'scenario' editor;
- * a logging facility to provide optional recording of all major actions.

Copies of the prototype, together with supporting documentation, have also been provided to a number of research groups in the UK and the USA. (GOOSE currently runs on a Sun Sparc 2 workstation, although it may be access from any terminal device that runs X and Motif.)

In parallel with further developments, we are planning to perform two simple experiments to investigate how well GOOSE meets the aims implicit in its design. These will involve:

1. Comparison of design activities using GOOSE with those using 'paper and pencil' techniques, using a moderate sized problem, and a group of novice designers.
2. Study of how more experienced designers use the facilities of GOOSE for a rather larger problem. In particular, we would like to see how they adapt their practices and whether GOOSE constrains these in any way.

We would welcome the opportunity to discuss our experimental plans while at the PPIG meeting, and to learn from the experiences of others.

Demonstration of KidSim

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