Flexible Generation of Animations using ANIMAL

Guido Rößling, Bernd Freisleben
Department of Electrical Engineering and Computer Science
University of Siegen
Hölderlinstr. 3, D-57068 Siegen, Germany
{roessling,freisleb}@informatik.uni-siegen.de

ANIMAL is a tool for generating animations suitable for integration in lectures. Animations can be generated by
• visual editing using drag and drop,
• scripting using the built-in scripting language
• and generation by function calls in the ANIMAL API.

ANIMAL offers the primitives point, polyline/polygon, text, arc and list element. All elements are adaptable to subtypes such as square, ellipse or circle segment. Animations consist of separate steps containing an arbitrary number of effects each. Current effects include show/hide, move, rotate and change color and can be given both offset and duration, measured in milliseconds or internal time units.

Both scripting and API support inclusion of source/pseudo code with indentation, element and code highlighting, arrays including index pointers, and relative object placement. Automating animation generation is easily accomplished. The resulting animation files seldom exceed 10kB.

ANIMAL is implemented in Java and available at http://www.informatik.uni-siegen.de/~inf/Software/Animal/.