What is Domain-Specific Modeling?
Domain-Specific Modeling raises the level of abstraction beyond programming by specifying the solution directly using domain concepts. The final products are generated from these high-level specifications. This automation is possible because both the language and generators need fit the requirements of only one company and domain.

Industrial experiences of DSM consistently show it to be 5-10 times faster than current practices, including current UML-based implementations of MDA. As Booch et al. say* “the full value of MDA is only achieved when the modeling concepts map directly to domain concepts rather than computer technology concepts.” For example, DSM for cell phone software would have concepts like “Soft key button”, “SMS” and “Ring tone”, and generators to create calls to corresponding code components.

Workshop on Domain-Specific Modeling
The objective of the DSM workshops is to bring together practitioners and researchers in the field of DSM to discuss, share experiences and present new ideas on modeling and tools.

The workshop includes a session for presentations of selected papers and a group work session followed by group reports and a discussion. The electronic version of the proceedings, presentation slides and workshop results will be available on the workshop web page.

Framework for DSM implementation and use
In the past OOPSLA workshops the following framework for DSM implementation and use has been applied (see figure below). Full code generation from models requires three things: a domain-specific modeling language and editor, a domain-specific code generator, and a domain-specific framework/component library. For any realistic chance of being able to achieve these, there must be an expert who has already developed several products in this domain, developed the architecture behind the product, or has been responsible for forming the framework or architecture for the product.

The expert developer defines the metamodel (modeling concepts, rules, notation) and mappings to code. Other developers make models using the DSM language and code is automatically generated. Since the expert specified the code generator - for a given domain and components - the resulting code is better than most developers write by hand.

Additional information
Additional information about the workshop, including the submission guidelines, anticipated workshop format, the pre/post workshop activities, and links to the previous workshops is available at http://www.dsmforum.org/events/DSM06

* Grady Booch, Alan Brown, Sridhar Iyengar, Jim Rumbaugh, Bran Selic, MDA Journal, May 2004
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