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Declarative Programming
for Knowledge Management

16th International Conference on Applications
of Declarative Programming and Knowledge Management, INAP 2005
Fukuoka, Japan, October 22-24, 2005
Revised Selected Papers
Preface

Knowledge means power – but only if it is available at the right time, the right place, and in the hands of the right people. Structured, engineered, repeatable methods to gather, transport, and apply knowledge are collectively called knowledge management.

Declarative programming strives for the ideal of programming by wish: the user states what he or she wants, and the computer figures out how to achieve it. Thus, declarative programming splits into two separate parts: methods for humans on how to write wishes, and algorithms for computers that fulfil these wishes.

Knowledge management is now recognized as an economic key factor. Declarative programming has matured far beyond the research stage of a merely interesting formal logic model to one of the powerful tools in computer science. Nowadays, no professional activity is thinkable without knowledge management, and companies increasingly need to document their business processes. Here, declarative programming carries the promise to be a shortcut to not only documenting but also implementing knowledge-based enterprises.

This volume presents a selection of papers presented at the 16th International Conference on Applications of Declarative Programming and Knowledge Management, INAP 2005, held in October 2005 at Waseda University, Fukuoka, Japan. These papers reflect a snapshot of ongoing research and current applications in knowledge management and declarative programming. Further, they provide reality checks and many pointers for readers who consider introducing related technologies into their products or working environments.

Skimming through the table of contents, technology managers as well as implementors will be surprised on the wide scope covered by this selection of papers. If you think of knowledge streams as supply, manufacturing, or distribution chains, you will see that it all fits together.

The papers have been selected for their thought-provoking value, the authors are aware that their readers have diverse backgrounds. We sincerely hope that this book is stimulating reading, applying and conducting further research in declarative programming and knowledge management.

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(Editor)
INAP 2005 was organized by IF Computer, Japan, the Kyushu Institute of Technology, Japan, Fraunhofer FIRST, Germany, University of Würzburg, Germany, and Waseda University, Japan.

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