1. Record Nr. UNINA9910829108803321 Autore Kelly Steven Titolo Domain-specific modeling : enabling full code generation / / Steven Kelly, Juha-Pekka Tolvanen Pubbl/distr/stampa Hoboken, N.J., : Wiley-Interscience, : IEEE Computer Society, c2008 **ISBN** 1-281-21727-1 9786611217273 0-470-24926-9 0-470-24925-0 Edizione [1st ed.] Descrizione fisica 1 online resource (445 p.) Altri autori (Persone) TolvanenJuha-Pekka Disciplina 005.1 Soggetti Programming languages (Electronic computers) Computer software - Development Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 415-421) and index. Nota di contenuto Foreword -- Preface -- PART 1: BACKGROUND AND MOTIVATION -- 1. Introduction -- 1.1 Seeking the better level of abstraction -- 1.2 Codedriven and model-driven development -- 1.3 An example: modeling

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Sommario/riassunto

"[The authors] are pioneers. . . . Few in our industry have their breadth of knowledge and experience." / -From the Foreword by Dave Thomas, Bedarra Labs Domain-Specific Modeling (DSM) is the latest approach to software development, promising to greatly increase the speed and ease of software creation. Early adopters of DSM have been enjoying productivity increases of 500-1000% in production for over a decade. This book introduces DSM and offers examples from various fields to illustrate to experienced developers how DSM can improve software development in their teams. Two authorities in the field explain what DSM is, why it works, and how to successfully create and use a DSM solution to improve productivity and quality. Divided into four parts, the book covers:background and motivation; fundamentals; in-depth examples; and creating DSM solutions. There is an emphasis throughout the book on practical guidelines for implementing DSM, including how to identify the necessary language constructs, how to generate full code from models, and how to provide tool support for a new DSMlanguage. The example cases described in the book are available the book's Website, www.dsmbook.com, along with, an evaluation copy of the MetaEdit+ tool (for Windows, Mac OS X, and Linux), which allows readers to examine and try out the modeling

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languages and code generators. Domain-Specific Modeling is an essential reference for lead developers, software engineers, architects, methodologists, and technical managers who want to learn how to create a DSM solution and successfully put it into practice.