Model-Driven Software Engineering in Practice

Morgan & Claypool

Synthesis Lectures on Software Engineering

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(Kindle Edition now at less than 9$!)
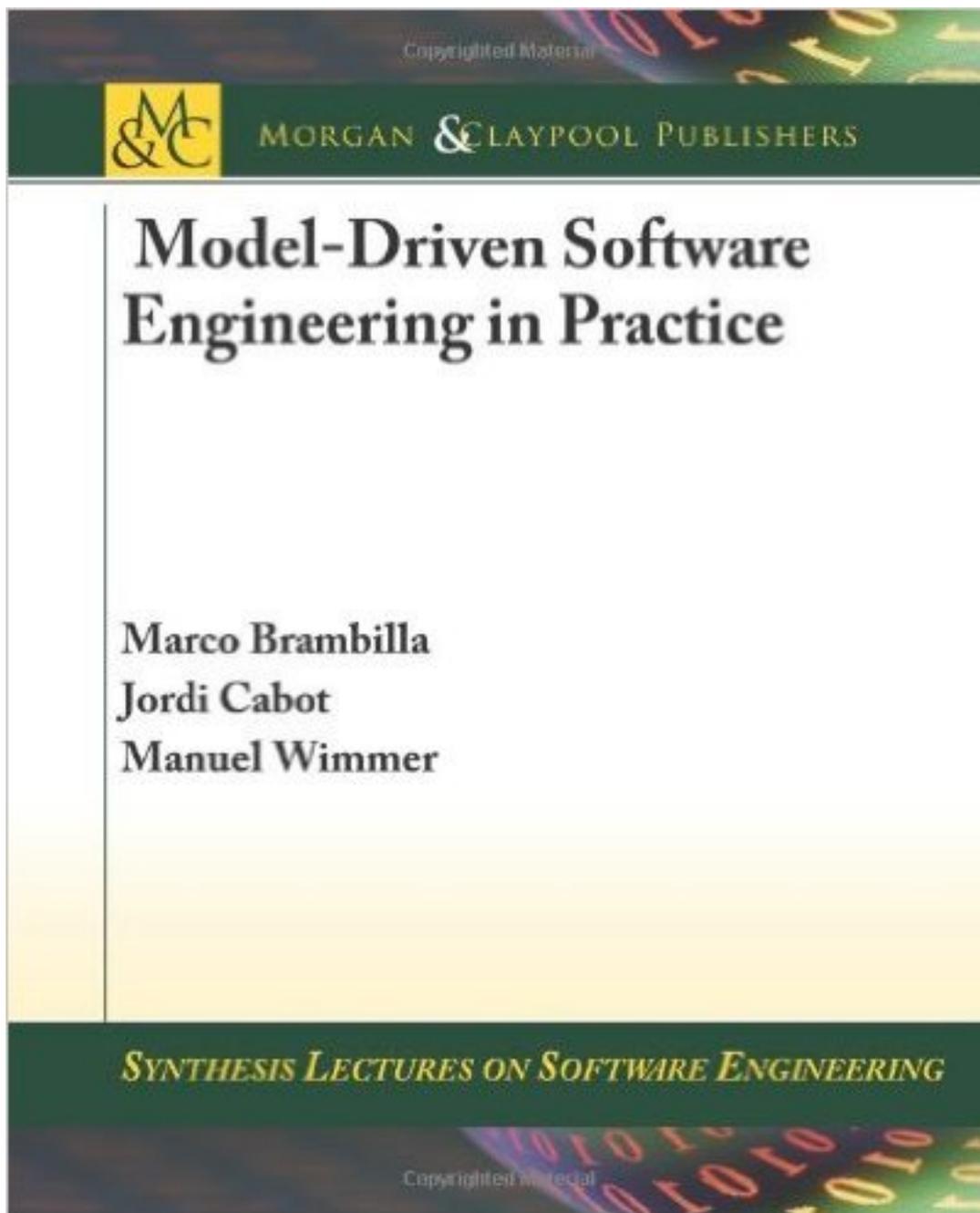
The complete set of slides is available:

Chapter 1 - http://www.slideshare.net/mbrambil/modeldriven-software-engineering-in-practice-chapter-1-introduction
Chapter 2 - http://www.slideshare.net/mbrambil/modeldriven-software-engineering-in-practice-chapter-2-mdse-principles
Chapter 3 - http://www.slideshare.net/jcabot/model-driven-software-engineering-in-practice-chapter-3-mdse-use-cases
Chapter 4 - http://www.slideshare.net/jcabot/modeldriven-software-engineering-in-practice-chapter-4
Chapter 5 - http://www.slideshare.net/mbrambil/modeldriven-software-engineering-in-practice-chapter-5-integration-of-modeldriven-in-development-processes
Chapter 6 - http://www.slideshare.net/jcabot/mdse-bookslideschapter6
Chapter 7 - http://www.slideshare.net/mbrambil/model-driven-software-engineering-in-practice-book-chapter-7-developing-your-own-modeling-language
Chapter 8 - http://www.slideshare.net/jcabot/modeldriven-software-engineering-in-practice-chapter-8-modeltomodel-transformations
Chapter 9 - https://www.slideshare.net/mbrambil/model-driven-software-engineering-in-practice-book-chapter-9-model-to-text-transformations-and-code-generation
Chapter 10 - http://www.slideshare.net/jcabot/mdse-bookslideschapter10managingmodels

This book discusses how approaches based on modeling can improve the daily practice of software professionals. This is known as Model-Driven Software Engineering (MDSE) or, simply, Model-Driven Engineering (MDE).

MDSE practices have proved to increase efficiency and effectiveness in software development. MDSE adoption in the software industry is foreseen to grow exponentially in the near future, e.g., due to the convergence of software development and business analysis.

This book is an agile and flexible tool to introduce you to the MDE and MDSE world, thus allowing you to quickly understand its basic principles and techniques and to choose the right set of MDE instruments for your needs so that you can start to benefit from MDE right away.

The first part discusses the foundations of MDSE in terms of basic concepts (i.e., models and transformations), driving principles, application

scenarios and current standards, like the wellknown MDA initiative proposed by OMG (Object Management Group) as well as the practices on how to integrate MDE in existing development processes.

The second part deals with the technical aspects of MDSE, spanning from the basics on when and how to build a domain-specific modeling language, to the description of Model-to-Text and Model-to-Model transformations, and the tools that support the management of MDE projects.

The book covers the MD* world, metamodeling, domain specific languages, model transformations, reverse engineering, OMG's MDA, UML, OCL, ATL, QVT, MOF, Eclipse, EMF, GMF, TCS, xText.

Find more at:
http://www.mdse-book.com

Preview of the book on Amazon:
Model-Driven Software Engineering in Practice