



# Feature-Oriented Software Product Lines: Concepts and Implementation

Sven Apel, Don Batory, Christian Kästner, Gunter Saake

Download now

Click here if your download doesn"t start automatically

## Feature-Oriented Software Product Lines: Concepts and **Implementation**

Sven Apel, Don Batory, Christian Kästner, Gunter Saake

Feature-Oriented Software Product Lines: Concepts and Implementation Sven Apel, Don Batory, Christian Kästner, Gunter Saake

While standardization has empowered the software industry to substantially scale software development and to provide affordable software to a broad market, it often does not address smaller market segments, nor the needs and wishes of individual customers. Software product lines reconcile mass production and standardization with mass customization in software engineering. Ideally, based on a set of reusable parts, a software manufacturer can generate a software product based on the requirements of its customer. The concept of features is central to achieving this level of automation, because features bridge the gap between the requirements the customer has and the functionality a product provides. Thus features are a central concept in all phases of product-line development.

The authors take a developer's viewpoint, focus on the development, maintenance, and implementation of product-line variability, and especially concentrate on automated product derivation based on a user's feature selection. The book consists of three parts. Part I provides a general introduction to feature-oriented software product lines, describing the product-line approach and introducing the product-line development process with its two elements of domain and application engineering. The pivotal part II covers a wide variety of implementation techniques including design patterns, frameworks, components, feature-oriented programming, and aspect-oriented programming, as well as tool-based approaches including preprocessors, build systems, version-control systems, and virtual separation of concerns. Finally, part III is devoted to advanced topics related to feature-oriented product lines like refactoring, feature interaction, and analysis tools specific to product lines. In addition, an appendix lists various helpful tools for software product-line development, along with a description of how they relate to the topics covered in this book.

To tie the book together, the authors use two running examples that are well documented in the product-line literature: data management for embedded systems, and variations of graph data structures. They start every chapter by explicitly stating the respective learning goals and finish it with a set of exercises; additional teaching material is also available online. All these features make the book ideally suited for teaching – both for academic classes and for professionals interested in self-study.



**Download** Feature-Oriented Software Product Lines: Concepts ...pdf



Read Online Feature-Oriented Software Product Lines: Concept ...pdf

# Download and Read Free Online Feature-Oriented Software Product Lines: Concepts and Implementation Sven Apel, Don Batory, Christian Kästner, Gunter Saake

#### From reader reviews:

## **Stephanie Rodriguez:**

Do you considered one of people who can't read pleasant if the sentence chained inside the straightway, hold on guys this aren't like that. This Feature-Oriented Software Product Lines: Concepts and Implementation book is readable by you who hate the straight word style. You will find the data here are arrange for enjoyable looking at experience without leaving possibly decrease the knowledge that want to offer to you. The writer of Feature-Oriented Software Product Lines: Concepts and Implementation content conveys the idea easily to understand by many individuals. The printed and e-book are not different in the information but it just different available as it. So, do you nevertheless thinking Feature-Oriented Software Product Lines: Concepts and Implementation is not loveable to be your top checklist reading book?

#### **Lisa Gonzales:**

The book with title Feature-Oriented Software Product Lines: Concepts and Implementation has a lot of information that you can understand it. You can get a lot of help after read this book. This kind of book exist new know-how the information that exist in this publication represented the condition of the world today. That is important to yo7u to find out how the improvement of the world. This specific book will bring you within new era of the syndication. You can read the e-book with your smart phone, so you can read that anywhere you want.

### Mark Maney:

You are able to spend your free time to learn this book this publication. This Feature-Oriented Software Product Lines: Concepts and Implementation is simple to develop you can read it in the recreation area, in the beach, train as well as soon. If you did not have got much space to bring typically the printed book, you can buy typically the e-book. It is make you simpler to read it. You can save the particular book in your smart phone. Consequently there are a lot of benefits that you will get when you buy this book.

### Lidia Mejia:

A lot of book has printed but it is unique. You can get it by net on social media. You can choose the top book for you, science, witty, novel, or whatever simply by searching from it. It is known as of book Feature-Oriented Software Product Lines: Concepts and Implementation. You can add your knowledge by it. Without leaving the printed book, it might add your knowledge and make you actually happier to read. It is most significant that, you must aware about publication. It can bring you from one destination for a other place.

Download and Read Online Feature-Oriented Software Product Lines: Concepts and Implementation Sven Apel, Don Batory, Christian Kästner, Gunter Saake #9HXY4ZOB3KA

# Read Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake for online ebook

Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake books to read online.

Online Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake ebook PDF download

Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake Doc

Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake Mobipocket

Feature-Oriented Software Product Lines: Concepts and Implementation by Sven Apel, Don Batory, Christian Kästner, Gunter Saake EPub