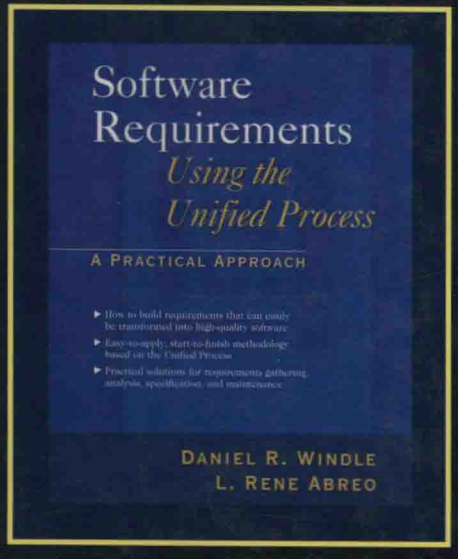
原版风暴·软件工程系列

PRENTICE HALL PTR

Software Requirements
Using the Unified Process a Practical Approach

软件需求——
基于统一过程的实践方法
（影印版）

[美] Daniel R. Windle　L. Rene Abreo　著



如何建立能够更为有效的软件需求■
基于统一过程的易于使用且完整的方法■
需求收集、分析、规范及维护问题的实际解决方案■

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Software Requirements

Using the Unified Process a Practical Approach

软件需求——基于统一过程的实践方法（影印版）

有效需求开发：行之有效的端到端过程

本书主要讨论了用于建立有效需求的系统的、易于应用的方法。本书作者重点介绍了在整个需求生命周期中会遇到的各种实际问题以及相应的解决方案：收集、分析、规范、验证以及维护。

在使用统一过程的前提下，Windle 和 Abreo 在书中探讨了建立有效需求的流程，给出了详细的图表，并根据他们所参与的重大关键项目的经验提出了深刻见解，这些项目从纽约证券交易所到美国空军的指挥控制系统无所不有。本书内容包括：

- 高质量软件需求的主要特征
- 理解需求分析过程以及 Artifact
- 创建用户需求
  - 问题域、角色、用例、活动图以及 Storyboarding
- 创建需求体系结构
  - 实体、事件、类图、状态转换图以及顺序图
- 创建规范
  - 软件需求、接口需求以及验证
- 使用你所创建的需求体系结构

无论你是分析员、构架师、开发人员、测试人员、管理人员还是软件的用户，本书都将帮助你定义能精确体现你的需要的软件需求，而这些需求可以用于创建比以前更快、更经济的软件。

DANIEL R. WINDLE 拥有在软件开发的各个方面使用面向对象范例的丰富经验。作为纽约市 SIAC 需求开发方面的常务董事，他带领开发了纽约证券交易所的专家系统的需求结构。他在 IT 业已经工作了 20 多年。

L. RENE ABREO 带领一个需求分析小组使用 UML 和统一过程进行了主要资产贸易系统的需求开发。他曾分别以项目/程序经理、小组负责人、开发人员、需求分析员以及测试主任的身份参与了多个大型项目。

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Software Requirements Using the Unified Process

A Practical Approach

DANIEL R. WINDLE

L. RENE ABREO

Preface

We intend that this book provide you with a practical approach to gathering, analyzing, specifying, and managing software requirements throughout the software's life cycle.

If you are an analyst responsible for specifying requirements from which software systems are built, we think you will find a straightforward and effective approach to meeting the demands of the users you work with and the developers and testers you deliver specifications to.

If you are a developer responsible for building software systems from requirements specifications, we think you will find an effective way to communicate all software requirements in a coherent and easy-to-follow manner.

If you are a tester responsible for testing software systems from a specification, we think you'll find that the specifications described in this book provide a complete and clear control flow model of the entire system, allowing you to systematically develop tests. We also believe you will find that the requirements artifacts described in this book will allow you to learn a new system quickly and thoroughly.

If you are a manager of software development or testing, we think you will find that the establishment and maintenance of requirements artifacts will ensure that you can always quickly bring new people up to speed on your systems. We also believe you will find a practical approach to shortening the time it takes to specify software requirements while maintaining your organization's intellectual property.

Acknowledgments

First, we would like to thank our wives, Kathleen Windle and Sandi Abreo, and our children—Tasha Windle, Cynthia Windle, Michael Abreo, and Alexandra Abreo—for their understanding and patience as we embarked on this endeavor.

We would also like to thank our colleagues at the Securities Industry Automation Corporation in New York City who helped with reviews of this book, in particular, Mark Lewis and Alex Ciccotelli, who generously gave of their time. We would like to specifically thank Charles Bowman for setting us on the path to writing this book.

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