

Software Engineering By Ian Sommerville Ebook

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Introduction to Software Engineering (Custom Edition) - Sommerville 2012-06-25
This custom edition is published for the University of Southern Queensland.
Software Engineering - Ian Sommerville 2011

"The ninth edition of Software Engineering presents a broad perspective of software engineering, focusing on the processes and techniques fundamental to the creation of reliable, software systems. Increased coverage

of agile methods and software reuse, along with coverage of 'traditional' plan-driven software engineering, gives readers the most up-to-date view of the field currently available. Practical case studies, a full set of easy-to-access supplements, and extensive web resources make teaching the course easier than ever."-- Publisher's website.

Rationale Management in Software

Engineering - Allen H. Dutoit 2007-02-02

This is a detailed summary of research on design rationale providing researchers in software engineering with an excellent overview of the subject. Professional software engineers will find many examples, resources and incentives to enhance their ability to make decisions during all phases of the software lifecycle. Software engineering is still primarily a human-based activity and rationale management is concerned with making design and development decisions explicit to all stakeholders involved.

Software Engineering for Large Software

Systems - City University (London, England). Centre for Software Reliability. Conference 1990-07-31

These proceedings include tutorials and papers presented at the Sixth CSR Conference on the topic of Large Software Systems. The aim of the Conference was to identify solutions to the problems of developing and maintaining large software systems, based on approaches which are currently being undertaken by software practitioners. These proceedings are intended to make these solutions more widely available to the software industry. The papers from software practitioners describe:

- important working systems, highlighting their problems and successes;
- techniques for large system development and maintenance, including project management, quality management, incremental delivery, system security, independent V & V, and reverse engineering.

In addition, academic and industrial researchers discuss the practical impact of current research in formal methods,

object-oriented design and advanced environments. The keynote paper is provided by Professor Brian Warboys of ICL and the University of Manchester, who masterminded the development of the ICL VME Operating System, and the production of the first database-driven software engineering environment (CADES). The proceedings commence with reports of the two tutorial sessions which preceded the conference:

- Professor Keith Bennett of the Centre for Software Maintenance at Durham University on Software Maintenance;
- Professor John McDermid of the University of York on Systems Engineering Environments for High Integrity Systems.

The remaining papers deal with reports on existing systems (starting with Professor Warboys' keynote paper), approaches to large systems development, methods for large systems maintenance and the expected impact of current research.

Maintainability - Benjamin S. Blanchard
1995-03-10

Gets professionals quickly on-line with all the crucial design concepts and skills they need to dramatically improve the maintainability of their products or systems. Maintainability is a practical, step-by-step guide to implementing a comprehensive maintainability program within your organization's design and development function. From program scheduling, organizational interfacing, cost estimating, and supplier activities, to maintainability prediction, task analysis, formal design review, and maintainability tests and demonstrations, it describes all the planning and organizational aspects of maintainability for projects under development and * Schools readers in state-of-the-art maintainability design techniques * Demonstrates methods for quantitatively measuring maintainability at every stage of the development process * Shows how to increase effectiveness while reducing life-cycle costs of already existing systems or products * Features numerous case studies,

sample applications, and practice exercises *
Functions equally well as a professional
reference and a classroom text Independent cost
analysis studies indicate that an
inordinately large percentage of the overall life-
cycle cost of most systems/products is currently
taken up by maintenance and support. In fact, for
many large-scale systems, maintenance and
support have been shown to account for as much
as 60% to 75% of overall life-cycle costs. At a
time of fierce global competition, long-term cost
effectiveness is a major competitive advantage
that manufacturers simply cannot afford to
underestimate. Clearly then, to remain
competitive in today's international
marketplace, companies must institute programs
for reducing system maintenance and support
costs-- comprehensive programs that are an
integral part of the design and development
process from its earliest conceptual stages. This
book shows you how to implement such a
program within your organization's design and

development function. From program scheduling,
organizational interfacing, cost estimating,
and supplier activities, to maintainability
prediction, task analysis, formal design review,
and maintainability tests and demonstrations, it
describes all the planning and organizational
aspects of maintainability for projects under
development while schooling you in the use of
the full range of proven design techniques--
including methods for quantitatively measuring
maintainability at every stage of the development
process. The authors also clearly explain how the
principles and practices outlined in
Maintainability can be applied to the evaluation
of systems/products now in use both to increase
their effectiveness and reduce long-term costs.
While theoretical aspects of maintainability are
discussed, the authors' main purpose in writing
this book is to help get professionals quickly on-
line with the essential maintainability concepts
and skills. Hence, in addition to clarity of
presentation and a rational hierarchical format,

Maintainability features many case studies and sample applications that help to clarify the points covered, and numerous practice exercises that help engineers to test their mastery of the concepts and techniques covered.

Maintainability is an invaluable professional tool for engineers from all disciplines who are involved with the design, testing, prototyping, manufacturing, and maintenance of products and systems. It also serves as a superior course book for graduate-level programs in those disciplines.

Software Engineering - PRESSMAN 2019-09-09
For almost four decades, *Software Engineering: A Practitioner's Approach* (SEPA) has been the world's leading textbook in software engineering. The ninth edition represents a major restructuring and update of previous editions, solidifying the book's position as the most comprehensive guide to this important subject.

Foundations for Designing User-Centered

Systems - Frank E. Ritter 2014-04-11

Foundations for Designing User-Centered Systems introduces the fundamental human capabilities and characteristics that influence how people use interactive technologies. Organized into four main areas—anthropometrics, behaviour, cognition and social factors—it covers basic research and considers the practical implications of that research on system design. Applying what you learn from this book will help you to design interactive systems that are more usable, more useful and more effective. The authors have deliberately developed *Foundations for Designing User-Centered Systems* to appeal to system designers and developers, as well as to students who are taking courses in system design and HCI. The book reflects the authors' backgrounds in computer science, cognitive science, psychology and human factors. The material in the book is based on their collective experience which adds up to almost 90 years of

working in academia and both with, and within, industry; covering domains that include aviation, consumer Internet, defense, eCommerce, enterprise system design, health care, and industrial process control.

The Elements of UML(TM) 2.0 Style - Scott W. Ambler 2005-05-09

Concise and easy-to-understand guidelines and standards for creating UML 2.0 diagrams.

Real-Time Software Design for Embedded Systems - Hassan Gomaa 2016-05-26

Organized as an introduction followed by several self-contained chapters, this tutorial takes the reader from use cases to complete architectures for real-time embedded systems using SysML, UML, and MARTE and shows how to apply the COMET/RTE design method to real-world problems. --

Schaum's Outline of Software Engineering - David Gustafson 2002-05-22

Tough Test Questions? Missed Lectures? Not Enough Time? Fortunately for you, there's

Schaum's Outlines. More than 40 million students have trusted Schaum's to help them succeed in the classroom and on exams. Schaum's is the key to faster learning and higher grades in every subject. Each Outline presents all the essential course information in an easy-to-follow, topic-by-topic format. You also get hundreds of examples, solved problems, and practice exercises to test your skills. This Schaum's Outline gives you Practice problems with full explanations that reinforce knowledge Coverage of the most up-to-date developments in your course field In-depth review of practices and applications Fully compatible with your classroom text, Schaum's highlights all the important facts you need to know. Use Schaum's to shorten your study time-and get your best test scores! Schaum's Outlines-Problem Solved.

Object-Oriented and Classical Software Engineering - Stephen R. Schach 2001-11

Classical and Object-Oriented Software Engineering, 5/e is designed for an introductory

software engineering course. This book provides an excellent introduction to software engineering fundamentals, covering both traditional and object-oriented techniques. Schach's unique organization and style makes it excellent for use in a classroom setting. It presents the underlying software engineering theory in Part I and follows it up with the more practical life-cycle material in Part II. Many software engineering books are more like reference books, which do not provide the appropriate fundamentals before inundating students with implementation details. In this edition, more practical material has been added to help students understand how to use what they are learning. This has been done through the use of "How To" boxes and greater implementation detail in the case study. Additionally, the new edition contains the references to the most current literature and includes an overview of extreme programming. The website in this edition will

be more extensive. It will include Solutions, PowerPoints that incorporate lecture notes, newly developed self-quizz questions, and source code for the term project and case study.

Introduction to Discrete Event Simulation and Agent-based Modeling - Theodore T. Allen
2011-01-12

Discrete event simulation and agent-based modeling are increasingly recognized as critical for diagnosing and solving process issues in complex systems. Introduction to Discrete Event Simulation and Agent-based Modeling covers the techniques needed for success in all phases of simulation projects. These include:

- Definition - The reader will learn how to plan a project and communicate using a charter.
- Input analysis - The reader will discover how to determine defensible sample sizes for all needed data collections. They will also learn how to fit distributions to that data.
- Simulation - The reader will understand how simulation controllers work, the Monte Carlo (MC) theory

behind them, modern verification and validation, and ways to speed up simulation using variation reduction techniques and other methods. • Output analysis – The reader will be able to establish simultaneous intervals on key responses and apply selection and ranking, design of experiments (DOE), and black box optimization to develop defensible improvement recommendations. • Decision support – Methods to inspire creative alternatives are presented, including lean production. Also, over one hundred solved problems are provided and two full case studies, including one on voting machines that received international attention. Introduction to Discrete Event Simulation and Agent-based Modeling demonstrates how simulation can facilitate improvements on the job and in local communities. It allows readers to competently apply technology considered key in many industries and branches of government. It is suitable for undergraduate and graduate students, as well as researchers and other

professionals.

Object-Oriented Software Engineering: An Agile Unified Methodology - David Kung
2013-01-25

Object-Oriented Software Engineering: An Agile Unified Methodology by David Kung presents a step-by-step methodology that integrates modeling and design, UML, patterns, test-driven development, quality assurance, configuration management, and agile principles throughout the life cycle. The overall approach is casual and easy to follow, with many practical examples that show the theory at work. The author uses his experiences as well as real-world stories to help the reader understand software design principles, patterns, and other software engineering concepts. The book also provides stimulating exercises that go far beyond the type of question that can be answered by simply copying portions of the text.

Essentials of Software Engineering - Frank Tsui
2011

Computer Architecture/Software Engineering
Software Engineering - Ian Sommerville

2011-11-21

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Intended for introductory and advanced courses in software engineering. The ninth edition of Software Engineering presents a broad perspective of software engineering, focusing on the processes and techniques fundamental to the creation of reliable, software systems. Increased coverage of agile methods and software reuse, along with coverage of 'traditional' plan-driven software engineering, gives readers the most up-to-date view of the field currently available. Practical case studies, a full set of easy-to-access supplements, and extensive web resources make teaching the course easier than ever. The book is now structured into four parts: 1: Introduction to Software Engineering 2: Dependability and

Security 3: Advanced Software Engineering 4:
Software Engineering Management

Requirements Engineering - Gerald Kotonya
1998-09-16

Requirements Engineering Processes and Techniques Why this book was written The value of introducing requirements engineering to trainee software engineers is to equip them for the real world of software and systems development. What is involved in Requirements Engineering? As a discipline, newly emerging from software engineering, there are a range of views on where requirements engineering starts and finishes and what it should encompass. This book offers the most comprehensive coverage of the requirements engineering process to date - from initial requirements elicitation through to requirements validation. How and Which methods and techniques should you use? As there is no one catch-all technique applicable to all types of system, requirements engineers need to know about a range of different techniques.

Tried and tested techniques such as data-flow and object-oriented models are covered as well as some promising new ones. They are all based on real systems descriptions to demonstrate the applicability of the approach. Who should read it? Principally written for senior undergraduate and graduate students studying computer science, software engineering or systems engineering, this text will also be helpful for those in industry new to requirements engineering. Accompanying Website: <http://www.comp.lancs.ac.uk/computing/resources/re>
Visit our Website:

<http://www.wiley.com/college/wws>

Software Engineering, Global Edition - Ian Sommerville 2016-03-23

For courses in computer science and software engineering The Fundamental Practice of Software Engineering Software Engineering introduces students to the overwhelmingly important subject of software programming and development. In the past few years, computer

systems have come to dominate not just our technological growth, but the foundations of our world's major industries. This text seeks to lay out the fundamental concepts of this huge and continually growing subject area in a clear and comprehensive manner. The 10th Edition contains new information that highlights various technological updates of recent years, providing students with highly relevant and current information. Sommerville's experience in system dependability and systems engineering guides the text through a traditional plan-based approach that incorporates some novel agile methods. The text strives to teach the innovators of tomorrow how to create software that will make our world a better, safer, and more advanced place to live. The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline

through the Bookshelf (available as a free download), available online and also via the iPad and Android apps. Upon purchase, you'll gain instant access to this eBook. Time limit The eBooks products do not have an expiry date. You will continue to access your digital ebook products whilst you have your Bookshelf installed.

ARIS — Business Process Modeling - August-Wilhelm Scheer 2013-11-27

This book describes in detail how ARIS methods model and identify business processes by means of the UML (Unified Modeling Language), leading to an information model that serves as the basis for a systematic and intelligent development of application systems. Multiple real-world examples using SAP R/3 illustrate aspects of business process modeling including methods of knowledge management, implementation of workflow systems and standard software solutions, and the deployment of ARIS methods.

Kotlin Development for Android - Michael Fordham 2017-08

Learn how to create your own apps for Android, in the Kotlin programming language! Through the course of this book, you will be taught from the ground-up how to create and develop your own Android apps in the Kotlin language, which has been given first-class status by Google. You will be given detailed tutorials on how to set up Android Studio, test devices, and creating your first "hello world!" application, all the way through to creating new activities for your app and handling constraints. Not only will you be exposed to real, working Kotlin code, you will also learn how to develop Android apps which are adaptable to many different form factors and orientations. In addition, you'll be developing in Android Studio 3.0, the latest version of the IDE made by Google. Through every step there are screenshots of what you should be doing, alongside code examples for you to play with. You will develop three Android apps during the

course of the book, each progressively getting more complex and building upon what you learnt from the last one. So what are you waiting for? Start building your own Android app today! Want to learn the basics first? Check out my other book on Amazon - Kotlin Development for Beginners (with Code Examples) here: bit.ly/kotlin-book.

Dictionary of Computer Science, Engineering and Technology - Philip A. Laplante 2017-12-19

A complete lexicon of technical information, the Dictionary of Computer Science, Engineering, and Technology provides workable definitions, practical information, and enhances general computer science and engineering literacy. It spans various disciplines and industry sectors such as: telecommunications, information theory, and software and hardware systems. If you work with, or write about computers, this dictionary is the single most important resource you can put on your shelf. The dictionary

addresses all aspects of computing and computer technology from multiple perspectives, including the academic, applied, and professional vantage points. Including more than 8,000 terms, it covers all major topics from artificial intelligence to programming languages, from software engineering to operating systems, and from database management to privacy issues. The definitions provided are detailed rather than concise. Written by an international team of over 80 contributors, this is the most comprehensive and easy-to-read reference of its kind. If you need to know the definition of anything related to computers you will find it in the Dictionary of Computer Science, Engineering, and Technology.

Secure Software Development - Jason Grembi 2008

Leads readers through the tasks and activities that successful computer programmers navigate on a daily basis.

Software Engineering - Jibitesh Mishra 2011

Our new Indian original book on software engineering covers conventional as well as current methodologies of software development to explain core concepts, with a number of case studies and worked-out examples interspersed among the chapters. Current industry practices followed in development, such as computer aided software engineering, have also been included, as are important topics like 'Widget based GUI' and 'Windows Management System'. The book also has coverage on interdisciplinary topics in software engineering that will be useful for software professionals, such as 'quality management', 'project management', 'metrics' and 'quality standards'. Features Covers both function oriented as well as object oriented (OO) approach Emphasis on emerging areas such as 'Web engineering', 'software maintenance' and 'component based software engineering' A number of line diagrams and examples Case Studies on the ATM system and milk dispenser Includes multiple-choice, objective-type

questions and frequently asked questions with answers.

Engineering Software Products - Ian Sommerville 2021

Beginning Software Engineering - Rod Stephens 2015-03-02

A complete introduction to building robust and reliable software Beginning Software Engineering demystifies the software engineering methodologies and techniques that professional developers use to design and build robust, efficient, and consistently reliable software. Free of jargon and assuming no previous programming, development, or management experience, this accessible guide explains important concepts and techniques that can be applied to any programming language. Each chapter ends with exercises that let you test your understanding and help you elaborate on the chapter's main concepts. Everything you need to understand waterfall, Sashimi, agile,

RAD, Scrum, Kanban, Extreme Programming, and many other development models is inside! Describes in plain English what software engineering is Explains the roles and responsibilities of team members working on a software engineering project Outlines key phases that any software engineering effort must handle to produce applications that are powerful and dependable Details the most popular software development methodologies and explains the different ways they handle critical development tasks Incorporates exercises that expand upon each chapter's main ideas Includes an extensive glossary of software engineering terms

The Requirements Engineering Handbook - Ralph Rowland Young 2004

Gathering customer requirements is a key activity for developing software that meets the customer's needs. A concise and practical overview of everything a requirement's analyst needs to know about establishing customer

requirements, this first-of-its-kind book is the perfect desk guide for systems or software development work. The book enables professionals to identify the real customer requirements for their projects and control changes and additions to these requirements. This unique resource helps practitioners understand the importance of requirements, leverage effective requirements practices, and better utilize resources. The book also explains how to strengthen interpersonal relationships and communications which are major contributors to project effectiveness. Moreover, analysts find clear examples and checklists to help them implement best practices.

Software Engineering - Ian Sommerville 2004

This book discusses a comprehensive spectrum of software engineering techniques and shows how they can be applied in practical software projects. This edition features updated chapters on critical systems, project management and software requirements.

Software Engineering - Hans van Vliet 2001

Engineering Software Products - Ian Sommerville 2019

For one-semester courses in software engineering. Introduces software engineering techniques for developing software products and apps With *Engineering Software Products*, author Ian Sommerville takes a unique approach to teaching software engineering and focuses on the type of software products and apps that are familiar to students, rather than focusing on project-based techniques. Written in an informal style, this book focuses on software engineering techniques that are relevant for software product engineering. Topics covered include personas and scenarios, cloud-based software, microservices, security and privacy and DevOps. The text is designed for students taking their first course in software engineering with experience in programming using a modern programming language such as Java, Python or

Ruby.

Trust in Technology: A Socio-Technical Perspective - Karen Clarke 2006-03-02

This book encapsulates some work done in the DIRC project concerned with trust and responsibility in socio-technical systems. It brings together a range of disciplinary approaches - computer science, sociology and software engineering - to produce a socio-technical systems perspective on the issues surrounding trust in technology in complex settings. Computer systems can only bring about their purported benefits if functionality, users and usability are central to their design and deployment. Thus, technology can only be trusted in situ and in everyday use if these issues have been brought to bear on the process of technology design, implementation and use. The studies detailed in this book analyse the ways in which trust in technology is achieved and/or worked around in everyday situations in a range of settings - including hospitals, a

steelworks, a public enquiry, the financial services sector and air traffic control. Whilst many of the authors here may already be known for their ethnographic work, this book moves on from accounts of 'field studies' to show how the DIRC project has utilised the data from these studies in an interdisciplinary fashion, involving computer scientists, software engineers and psychologists, as well as sociologists. Chapters draw on the empirical studies but are organised around analytical themes related to trust which are at the heart of the authors' socio-technical approach which shows the nuanced ways in which technology is used, ignored, refined and so on in everyday settings.

eBook: Object-Oriented Systems Analysis 4e - BENNETT 2021-03-26

eBook: Object-Oriented Systems Analysis 4e

Object-oriented Software Engineering -

Timothy Christian Lethbridge 2004

This book covers the essential knowledge and skills needed by a student who is specializing in

software engineering. Readers will learn principles of object orientation, software development, software modeling, software design, requirements analysis, and testing. The use of the Unified Modelling Language to develop software is taught in depth. Many concepts are illustrated using complete examples, with code written in Java.

Software Engineering: A Practitioner's Approach - Roger Pressman 2014-01-23

For almost three decades, Roger Pressman's *Software Engineering: A Practitioner's Approach* has been the world's leading textbook in software engineering. The new eighth edition represents a major restructuring and update of previous editions, solidifying the book's position as the most comprehensive guide to this important subject. The eighth edition of *Software Engineering: A Practitioner's Approach* has been designed to consolidate and restructure the content introduced over the past two editions of the book. The chapter structure

will return to a more linear presentation of software engineering topics with a direct emphasis on the major activities that are part of a generic software process. Content will focus on widely used software engineering methods and will de-emphasize or completely eliminate discussion of secondary methods, tools and techniques. The intent is to provide a more targeted, prescriptive, and focused approach, while attempting to maintain SEPA's reputation as a comprehensive guide to software engineering. The 39 chapters of the eighth edition are organized into five parts - Process, Modeling, Quality Management, Managing Software Projects, and Advanced Topics. The book has been revised and restructured to improve pedagogical flow and emphasize new and important software engineering processes and practices.

Operating System (A Practical App) - Rajiv Chopra 2009-01-01

For the Students of B.E. / B.Tech., M.E. /

M.Tech. & BCA / MCA It is indeed a matter of great encouragement to write the Third Edition of this book on 'Operating Systems - A Practical Approach' which covers the syllabi of B.Tech./B.E. (CSE/IT), M.Tech./M.E. (CSE/IT), BCA/MCA of many universities of India like Delhi University, GGSIPU Delhi, UPTU Lucknow, WBUT, RGPV, MDU, etc.

Guide to the Software Engineering Body of Knowledge (Swebok(r)) - IEEE Computer Society 2014

In the Guide to the Software Engineering Body of Knowledge (SWEBOK(R) Guide), the IEEE Computer Society establishes a baseline for the body of knowledge for the field of software engineering, and the work supports the Society's responsibility to promote the advancement of both theory and practice in this field. It should be noted that the Guide does not purport to define the body of knowledge but rather to serve as a compendium and guide to the knowledge that has been developing and evolving over the

past four decades. Now in Version 3.0, the Guide's 15 knowledge areas summarize generally accepted topics and list references for detailed information. The editors for Version 3.0 of the SWEBOOK(R) Guide are Pierre Bourque (Ecole de technologie superieure (ETS), Universite du Quebec) and Richard E. (Dick) Fairley (Software and Systems Engineering Associates (S2EA)).

PHP & MySQL in easy steps - Mike McGrath
2012-08-24

PHP and MySQL in easy steps will teach the user to write PHP server-side scripts and how to make MySQL database queries. It has an easy-to-follow style that will appeal to: anyone who wants to begin producing data-driven web pages.web developers wanting to add database interaction to their web sites.the programmer who quickly wants to add PHP and MySQL to their skills set.the hobbyist who wants to begin creating scripts for upload to their own ISP.the student, and to those seeking a career in

computing, who need a fundamental understanding of server-side programming with PHP and MySQL. PHP & MySQL in easy steps demonstrates by example how to produce data-driven web pages using the powerful PHP scripting language and the popular free MySQL database server. The book examples provide clear syntax-highlighted code showing how to selectively insert and extract data from databases for presentation on your web browser. PHP & MySQL in easy steps begins by explaining how to install a free web server, the PHP interpreter, and MySQL database server, to create an environment in which you can produce your very own data-driven server-side web pages. You will learn how to write PHP server-side scripts and how to make MySQL database queries. Examples illustrate how to store and retrieve Session Data, how to provide a Message Board, and how to create an E-Commerce Shopping Cart. This book assumes you have no previous experience of any programming or

scripting language so is ideal for the newcomer to PHP and MySQL technologies.

Software Maintenance Success Recipes -

Donald J. Reifer 2016-04-19

Dispelling much of the folklore surrounding software maintenance, *Software Maintenance Success Recipes* identifies actionable formulas for success based on in-depth analysis of more than 200 real-world maintenance projects. It details the set of factors that are usually present when effective software maintenance teams do their work and instructs on

Java Foundations - John Lewis 2010-02-12

Inspired by the success of their best-selling introductory programming text, *Java Software Solutions*, authors Lewis, DePasquale, and Chase now release *Java Foundations, Second Edition*. This text is a comprehensive resource for instructors who want a two-or three-semester introduction to programming textbook that includes detail on data structures topics. *Java Foundations* introduces a Software Methodology

early on and revisits it throughout to ensure students develop sound program development skills from the beginning. Control structures are covered before writing classes, providing a solid foundation of fundamental concepts and sophisticated topics.

Discovering Requirements - Ian F. Alexander 2009-02-11

"This book is not only of practical value. It's also a lot of fun to read." Michael Jackson, The Open University. Do you need to know how to create good requirements? *Discovering Requirements* offers a set of simple, robust, and effective cognitive tools for building requirements. Using worked examples throughout the text, it shows you how to develop an understanding of any problem, leading to questions such as: What are you trying to achieve? Who is involved, and how? What do those people want? Do they agree? How do you envisage this working? What could go wrong? Why are you making these decisions? What are you assuming? The established author

team of Ian Alexander and Ljerka Beus-Dukic answer these and related questions, using a set of complementary techniques, including stakeholder analysis, goal modelling, context modelling, storytelling and scenario modelling, identifying risks and threats, describing rationales, defining terms in a project dictionary, and prioritizing. This easy to read guide is full of carefully-checked tips and tricks. Illustrated with worked examples, checklists, summaries, keywords and exercises, this book will encourage you to move closer to the real problems you're trying to solve. Guest boxes from other experts give you additional hints for your projects. Invaluable for anyone specifying requirements including IT practitioners, engineers, developers, business analysts, test engineers, configuration managers, quality engineers and project managers. A practical sourcebook for lecturers as well as students studying software engineering who want to learn about requirements work in industry. Once

you've read this book you will be ready to create good requirements!

Data Structures and Other Objects Using Java - Michael Main 2011-11

Data Structures and Other Objects Using Java is a gradual, "just-in-time" introduction to Data Structures for a CS2 course. Each chapter provides a review of the key aspects of object-oriented programming and a syntax review, giving students the foundation for understanding significant programming concepts. With this framework they are able to accomplish writing functional data structures by using a five-step method for working with data types; understanding the data type abstractly, writing a specification, using the data type, designing and implementing the data type, and analyzing the implementation. Students learn to think analytically about the efficiency and efficacy of design while gaining exposure to useful Java classes libraries.

Software Engineering - Ian Sommerville 2014

