

Course Information

01076256 **วิศวกรรมซอฟต์แวร์**
Software Engineering

Course Description

✧ แนวทางการพัฒนาซอฟต์แวร์แบบมืออาชีพ กระบวนการทางซอฟต์แวร์ แบบจำลองกระบวนการทางซอฟต์แวร์ การพัฒนาซอฟต์แวร์แบบอจาายล์ การสร้างแบบจำลองของระบบสารสนเทศ การออกแบบเชิงสถาปัตยกรรมและการทำให้เกิดผล การทดสอบซอฟต์แวร์ วิวัฒนาการของซอฟต์แวร์ การพัฒนาซอฟต์แวร์เชิงคอมโพเนนต์ สถาปัตยกรรมเชิงบริการ การวางแผนและบริหารโครงการด้านซอฟต์แวร์ การจัดการด้านคุณภาพและโครงสร้างของซอฟต์แวร์ แนวคิดด้านความปลอดภัยของซอฟต์แวร์

Topics

- ✧ Introduction to software engineering
- ✧ Software processes
- ✧ Rational unified process
- ✧ Agile software development
- ✧ Requirements engineering
- ✧ System modeling
- ✧ UML
- ✧ Software testing
- ✧ Component-based software development and Service-oriented architecture
- ✧ Software project management
- ✧ Quality management
- ✧ Quality review and inspection
- ✧ Configuration and change management

Book / Global Edition

Title : Software Engineering

Edition : 10th

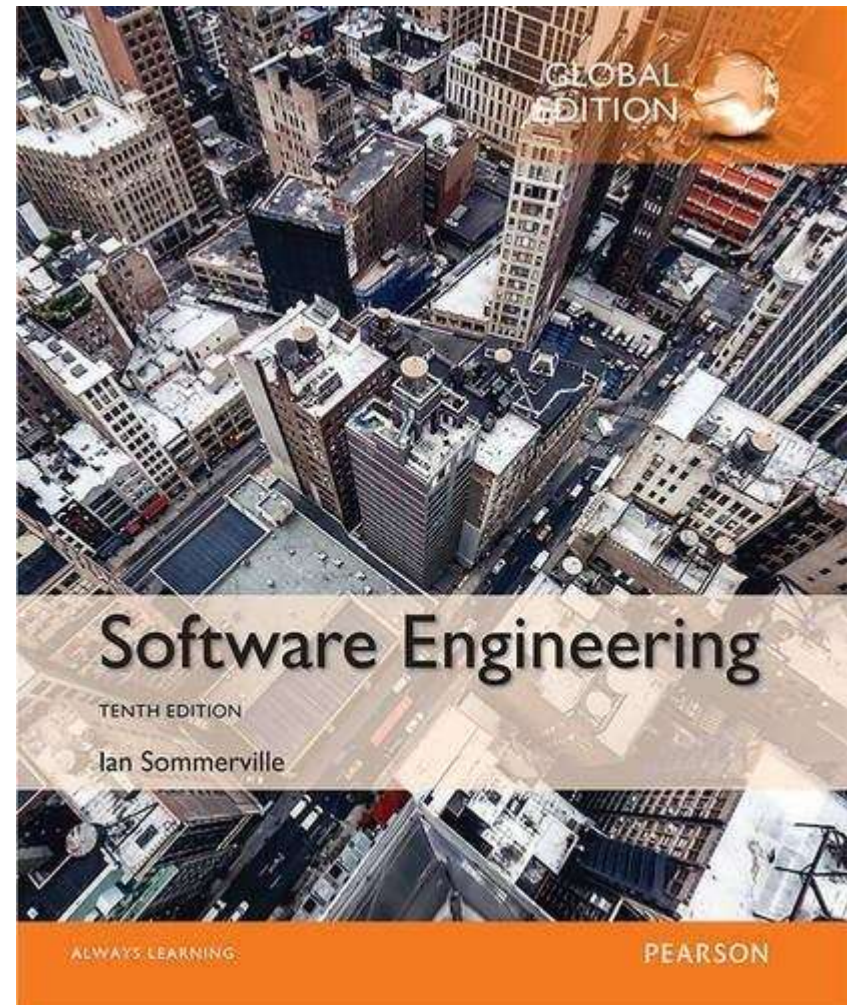
Publisher : Pearson

Year : 2015

Author : Ian Sommerville

ISBN-10 : 1292096136

ISBN-13 : 9781292096131



Book

Title : Software Engineering

Edition : 10th

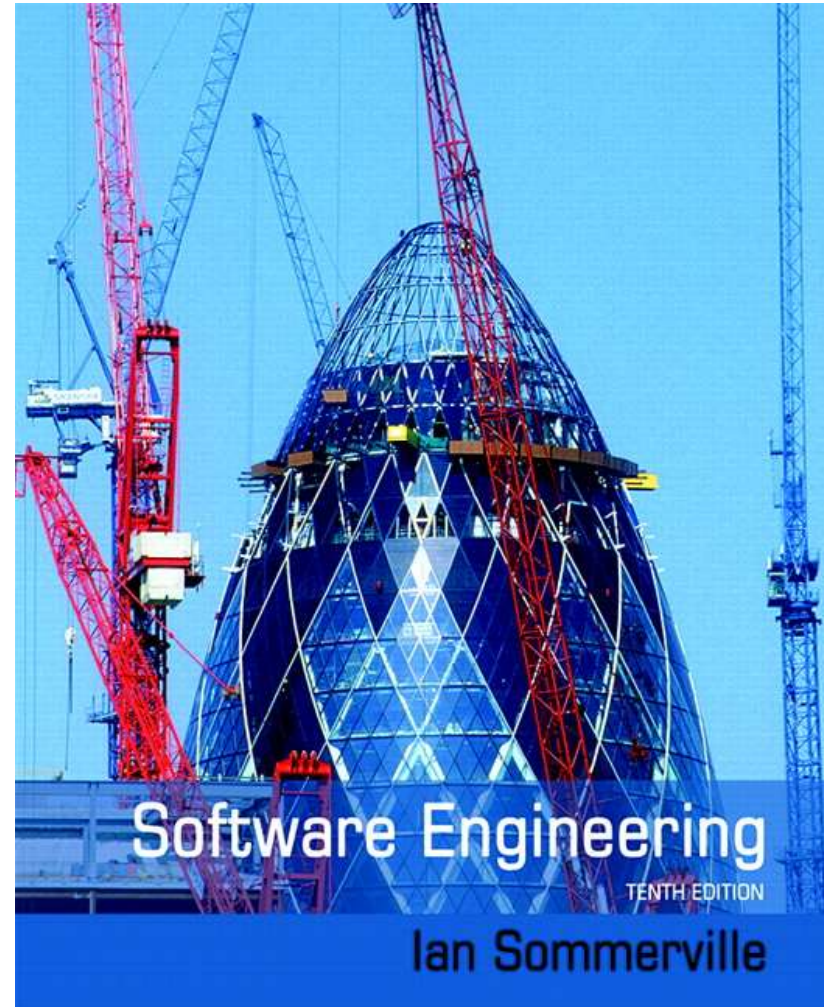
Publisher : Pearson

Year : 2015

Author : Ian Sommerville

ISBN-10: 0133943038

ISBN-13: 9780133943030



Previous Edition

Title : Software Engineering

Edition : 9th

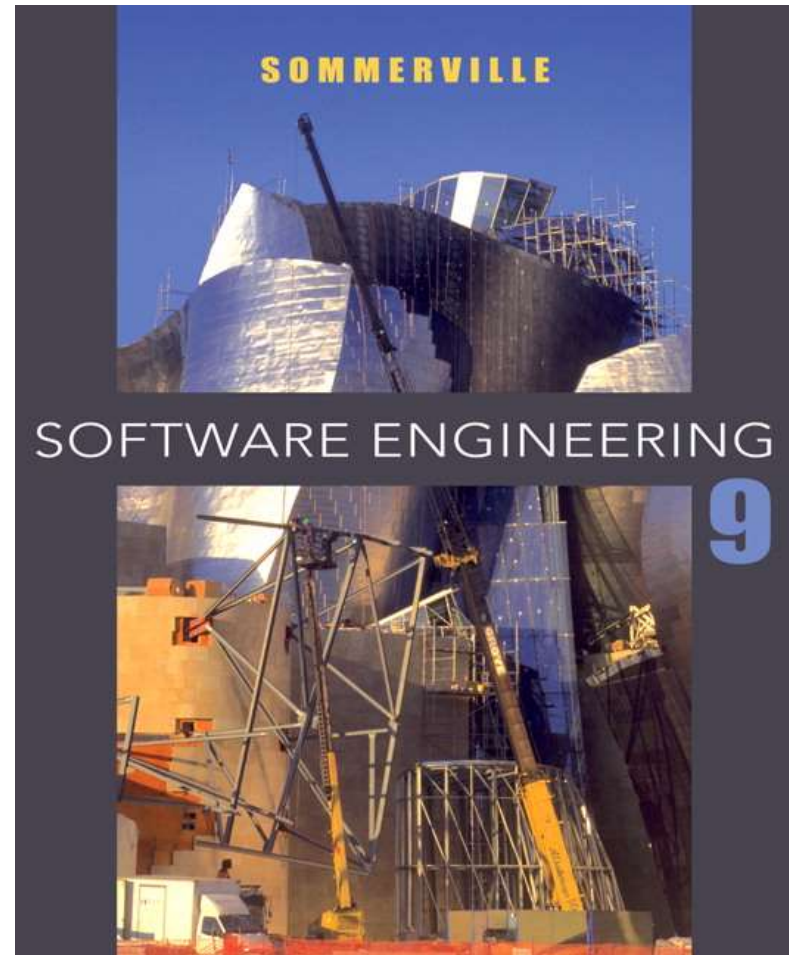
Publisher : Addison-Wesley

Year : 2011

Author : Ian Sommerville

ISBN-10: 0137035152

ISBN-13: 9780137035151



Web resource

<http://iansommerville.com/software-engineering-book/>

The screenshot shows a web browser window with multiple tabs open. The active tab is the website iansommerville.com/software-engineering-book/. The website has a navigation bar with links: Introduction, About me, Case studies, Instructors Guide, Slides, Videos, Downloads, and Contact me. The main content area is titled "SOFTWARE ENGINEERING 10TH EDITION" and "Ian Sommerville's book website". Below this is a banner image. The "Introduction" section, dated Dec 20th, 2012 by admin, states that the latest (10th) edition of the Software Engineering textbook was published in April 2015. It lists key challenges for software engineering: the need for more agile development, the need to manage system complexity, and the need to build systems that are secure and resilient. The most important changes are:

- A completely revised chapter on agile methods
- Self-contained, extensively revised chapters on reliability, safety and security engineering
- A new chapter on resilience engineering (including cybersecurity)
- New chapters on systems engineering and systems of systems

As well as this new material, all other chapters have been revised and updated.

Links provided: [Contents List](#) and [Summary of all changes made from the 9th edition](#).

On the right side, there is a search bar with the text "Search for:" and a "Search" button. Below the search bar is a section titled "ABOUT THIS SITE" which states: "This is the website for the 10th edition of my textbook on Software Engineering. From here, you can access additional learning materials - case studies, presentations and videos." Below that is a section titled "MY SOFTWARE ENGINEERING BOOK" which states: "The 1st edition of Software Engineering was published in 1982 and it has been regularly revised and updated since then." and "My book is widely used across the world as a student text, has been translated into many languages and, in different editions and languages, has sold almost a million copies."

Assessment

✧ Final exam	30%	(อ. 11 ธ.ค. 61)
✧ Midterm	20%	(อ. 25 ก.ย. 61)
✧ Project	30%	(team)
✧ Knowledge Sharing	10%	(team)
✧ Workshop	5%	
✧ Others	5%	(attendance, punctuality, enthusiasm etc)

Instructors

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We are on Canvas

✧ <https://canvas.instructure.com/enroll/NTKKJ4>

Knowledge Sharing

✧ Formal Presentation

- What is it?
- How importance of it?
- Key features and Explanation
- 10-15 minutes

✧ 3-Minute Miracle

- At most 2 slides
- 3 minutes



Project Ideas

- ✧ anything Portal (buy, sell, repair, rent, blog, etc.)
 - Bike portal
 - Camera portal
- ✧ Prompt Pay / Bank
- ✧ Small Scale Business Management System
- ✧ KMITL ID
- ✧ Pet Wellness Management System (Pet Shop, Pet Taxi, Pet School, Pet Hospital, Pet Café, etc.)
- ✧ Charity Network (to help schools, hospitals, temples, etc.)

Videos from Ian – Intro to SE

- ✧ [Ten Questions about Software Engineering](#)
- ✧ [Why Software Engineering Matters](#)