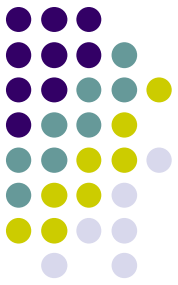


Software Systems Architecture

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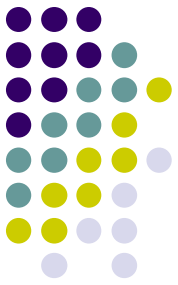


Contact information

Xiaobin Xu

Assistant Professor

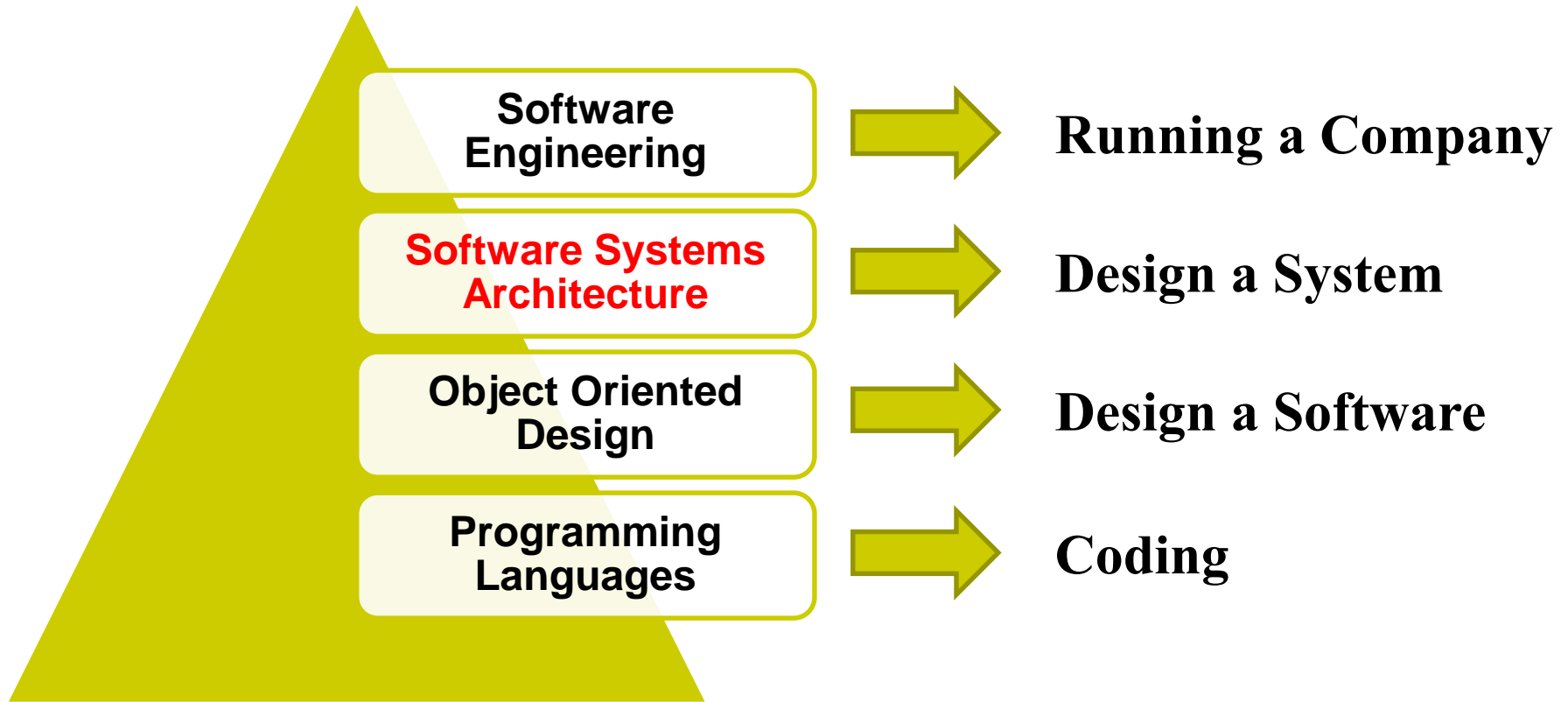
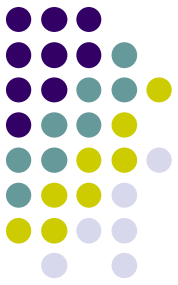
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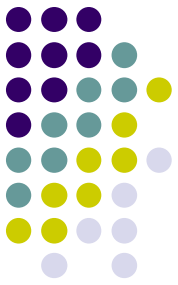


Course Overview

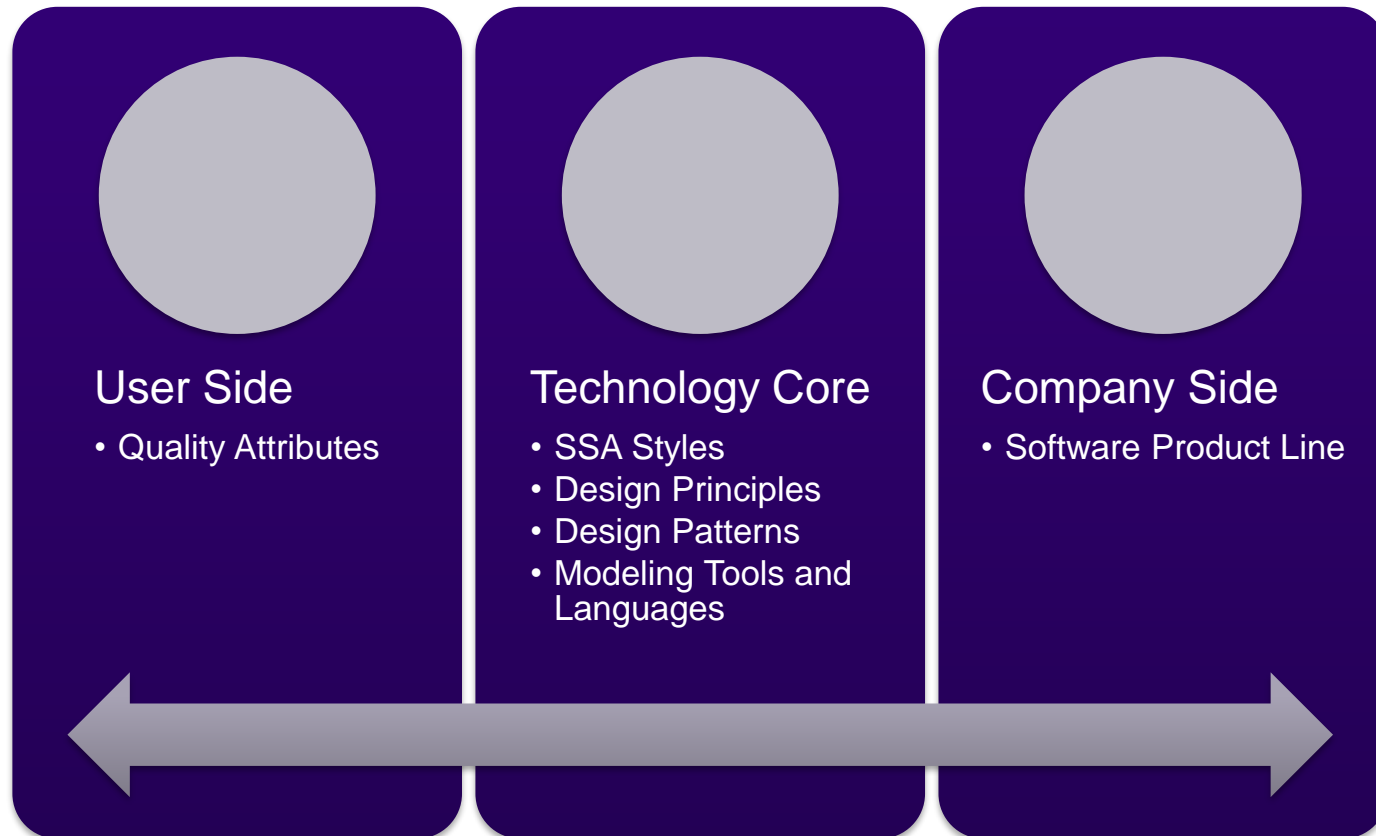
- **Software Systems Architecture Overview**
- **Design Principles**
- **Design Patterns**
- **Modeling Tools and Languages**
- **SSA Styles**
- **Quality Attributes**
- **Software Product Line**
- **Summary of SSA**

Course Property & Principles

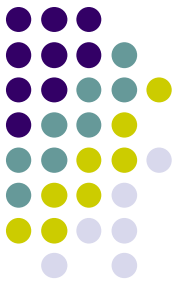




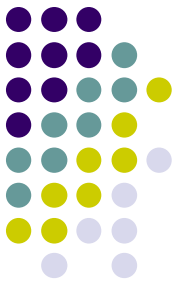
Course Property & Principles



Course Property & Principles

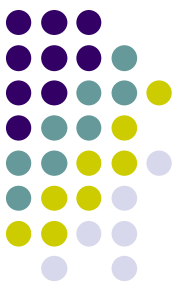


- **Evolutional Knowledge**
- **Open Course & More Discussion**
- **Tools First**
- **Two Course Consultants from Baidu**
- **More Practical Program Design**



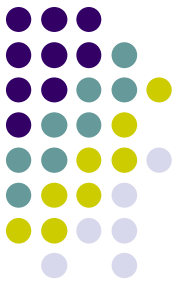
Literature

- **Software Architecture in Practice, 3rd Edition**
 , By Len Bass, Paul Clements, Rick Kazman, Publisher: Addison Wesley, ISBN: 978- 0321815736 .
- **Agile Software Development, Principles, Patterns, and Practices, by Robert C. Martin, Publisher: Prentice Hall, ISBN-10: 0135974445, ISBN-13: 978-1292025940.**
- **The Design Patterns Java Companion, Free online book by James W. Cooper**



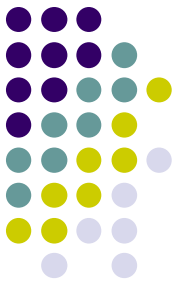
Literature

- 软件体系结构（第二版） 覃征，邢剑宽，董金春，郑翔 编著 出版社：清华大学出版社，**2008-3-1**
- 软件体系结构（第2版）张友生 等编著 出版社：清华大学出版社，**2006-11-1**
- 软件体系结构理论与实践 马冲，江贺，冯静芳 编著 出版社：人民邮电出版社，**2004-01**
- 冀振燕编著，《UML 系统分析与设计教程(第二版)》（21世纪高等学校计算机规划教材精品系列），人民邮电出版社，**ISBN 978-7-115-19795-5/TP，2009.5月。**



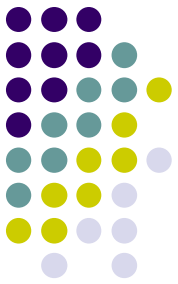
Useful Websites I

- **Carnegie Mellon SEI:**
http://www.sei.cmu.edu/ata/ata_init.html
- **Worldwide Institute of Software Architects:**
<http://www.wwisa.org/wwisamain/index.htm>
- **Software Architecture:**
<http://www.softat.org/>
- **中国系统分析员:** <http://www.csai.cn/>



Useful Websites II

- **OO Design Principles:**
 - [http://c2.com/cgi/wiki?PrinciplesOfObjectOriented Design](http://c2.com/cgi/wiki?PrinciplesOfObjectOrientedDesign)
- **Design Patterns:**
 - http://sourcemaking.com/design_patterns
 - http://www.tutorialspoint.com/design_pattern/build er_pattern.htm



Evaluation Criteria

- **Your final score consists of three parts.**
 - **Completion of Video Materials 20%**
 - **Assignments 30%**
 - **Written Exam/Curriculum Design 50%**

Any More Questions?

