

Lean Software Development

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CIS 350 01 - Introduction to Software Engineering

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- I. What is LSD?
- II. What are the seven principles?
 - A. What is waste?
 - i. examples of waste
 - a. useless features as defined by customer
 - ii. how to eliminate waste
 - B. what is empowerment?
 - i. employees make there own decisions
 - ii.
 - iii.
 - C. Short iterations in development cycle.
 - i. Benefits of short iterations.
 - a. changes are less costly.
 - b.
 - c.
- III. Examples of lean theory outside of software development.
 - A. Toyota car manufacturing.
 - B.
 - C.
- IV. Concluding remarks.

Guidelines: The term paper is on a topic related to the reading and lecture materials. See the “Term Paper Topics” section for a recommended list of topics. The deadlines are shown in the “Tentative Schedule” section. The body of your paper must be seven to ten pages of double-spaced material. Pay attention to factors such as

- mechanics (grammar, punctuation, format, and spelling)
- content and organization
- analysis of the topic by you
- paragraph structure and transition

References

- [1] Georges Gonthier. Formal proof – the Four-Color theorem. *Notices of the American Mathematical Society.*, page 1382, 2008.
- [2] Michael Huth and Mark Ryan. *Logic in computer science : modelling and reasoning about systems*. Cambridge University Press, Cambridge, [England]; New York, 2004.
- [3] Norman Megill. Metamath. <http://users.shore.net/%7Endm/java/mm.html>.
- [4] F. Wiedijk, Roman Matuszewski, and Anna Zalewska. The QED manifesto revisited, 2007.