INFO331: Advanced Topics in Software Engineering

Temporary Curriculum (The papers can be found in the Student Portal or be downloaded from the web. Notice that you have to be logged on to the UiB studentweb to get access to the papers.)

Classical SE papers:
1. Boehm, B. (1988). A spiral Model of Software Development and Enhancement. *IEEE Computer*, 1988 (May).
2. Royce, W. W. (1970). Managing the Development of Large Software Systems. *Proceedings of IEEE WESCON,* 1-9.
   The first formal description of the waterfall model of software development.

Agile software development:
1. Abrahamsson, P., N. Oza, et al. (2010). Agile Software Development Methods: A Comparative Review. Agile Software Development. T. Dingsøyr, T. Dybå and N. B. Moe, Springer Berlin Heidelberg: 31-59.
2. Cao, L., Mohan, K., Xu, P., & Ramesh, B. (2009). A framework for adapting agile development methodologies. *European Journal of Information Systems,* 18(4), 332-343.
3. Chan, F. K. Y., & Thong, J. Y. L. (2009). Acceptance of agile methodologies: A critical review and conceptual framework. *Decision Support Systems,* 46(4), 803–814.
4. Conboy, K., Coyle, S., Xiaofeng, W., & Pikkarainen, M. (2011). People over Process: Key Challenges in Agile Development. *Software*, IEEE, 28(4), 48–57.
5. Dingsøyr, T., Nerur, S., Balijepally, V., & Moe, N. B. (2012). A decade of agile methodologies: Towards explaining agile software development. Journal of Systems and Software, 85(6), 1213–1221.
6. Dybå, T., & Dingsøyr, T. (2009). Empirical studies of agile software development: A systematic review, *Information and Software Technology,* 50, 833–859.
7. Dybå, T., & Dingsøyr, T. (2009). What Do We Know about Agile Software Development? *IEEE Software* (Sept/Oct), 6-9.
8. Fagerholm, F. and M. Pagels (2014). *Examining the Structure of Lean and Agile Values among Software Developers.* In Cantone, G., and M. Marchesi (Eds.): XP 2014, LNBIP 179, pp. 218–233, 2014. Springer International Publishing.
9. Hummel, M. (2014). State-of-the-Art: A Systematic Literature Review on Agile Information Systems Development. 47th Hawaii International Conference on System Science. Hawaii, IEEE Computer society**:** 4712-4721.
10. Lui, K. M., Barnes, K. A., & Chan, K. C. C. (2010). Pair Programming: Issues and Challenges. In T. Dingsøyr, T. Dybå & N. B. Moe (Eds.), *Agile Software Development* (pp. 143-163): Springer Berlin Heidelberg.
11. Martin, A., Biddle, R., & Noble, J. (2010). An Ideal Customer: A Grounded Theory of Requirements Elicitation, Communication and Acceptance on Agile Projects. In T. Dingsøyr, T. Dybå & N. B. Moe (Eds.), *Agile Software Development* (pp. 111-141): Springer Berlin Heidelberg.
12. Mishra, D., & Mishra, A. (2009). Effective Communication, Collaboration, and Coordination in eXtreme Programming: Human-Centric Perspective in a Small Organization. Human Factors and Ergonomics in Manufacturing, 19(5), 438–456.
13. Moe, N. B., & Dingsøyr, T. (2008). Scrum and Team Effectiveness: Theory and Practice. Paper presented at the XP 2008, Agile Process in Software Engineering and Extreme Programming, Limerick, Ireland.

14. Moe, N. B., Dingsøyr, T., & Dybå, T. (2010). A teamwork model for understanding an agile team: A case study of a Scrum project. *Information and Software Technology*, 52(5), 480-491.
15. Pikkarainen, M., Haikara, J., Salo, O., Abrahamsson, P., & Still, J. (2008). The impact of agile practices on communication in software development. *Empir Software Eng,* 13, 303–337.
16. Power, K. (2010, 9-13 Aug. 2010). Stakeholder Identification in Agile Software Product Development Organizations: A Model for Understanding Who and What Really Counts. Paper presented at the *AGILE Conference*, 2010.
17. Rutherford, K., Shannon, P., Judson, C., & Kidd, N. (2010). From Chaos to Kanban, via Scrum. In A. Sillitti, A. Martin, X. Wang & E. Whitworth (Eds.), *Agile Processes in Software Engineering and Extreme Programming* (48 ed., pp. 344-352): Springer Berlin Heidelberg.
18. Salo, O., & Abrahamsson, P. (2007). An Iterative Improvement Process for Agile Software Development. [Research]. *Software Process Improvement and Practice,* 12, 81-100.
19. Schwaber, K. and J. Sutherland (July 2013). "The Scrum Guide." https://www.scrum.org/Scrum-Guide
20. Sharp, H., Baddoo, N., Beecham, S., Hall, T., & Robinson, H. (2009). Models of motivation in software engineering. *Information and Software Technology*, 51(1), 219-233.
21. Sharp, H., & Robinson, H. (2010). Three 'C's of Agile Practice: Collaboration, Co-ordination and Communication. In T. Dingsøyr, T. Dybå & N. B. Moe (Eds.), Agile Software Development (pp. 61-85): Springer Berlin Heidelberg.
22. Sharp, H., Robinson, H., & Petre, M. (2009). The role of physical artefacts in agile software development: Two complementary perspectives. *Interacting with Computers,* 21(1-2), 108-116.
23. Siakas, K. V., & Siakas, E. (2007). The Agile Professional Culture: A Source of Agile Quality. [Practice]. *Software Process Improvement and Practice, 12*, 597-610.
24. Tessem, B., & Maurer, F. (2007). *Job Satisfaction and Motivation in a Large Agile Team.* Paper presented at the XP 2007.

Further Study

- Schwaber, K. (Producer). (2006, 05 June, 2010). Scrum Overview. *Google TechTalks*. [Presentation] Retrieved from http://www.youtube.com/watch?v=IyNPeTn8fpo
- Kniberg, H., & Skarin, M. (2010). Kanban and Scrum - making the most of both Retrieved from http://www.infoq.com/minibooks/kanban-scrum-minibook