{tag}

{/tag}
International Journal of Computer Applications

Volume 50 - Number 13

Year of Publication: 2012

Authors:

Sukhpal Singh

Inderveer Chana

10.5120/7834-1132

{bibtex}pxc3881132.bib{/bibtex}

Abstract

Software Engineering Discipline is constantly achieving momentum from past two decades. In last decade, remarkable progress has been observed. New process models that are introduced from time to time in order to keep pace with multidimensional demands of the industry. New software development paradigms are finding its place in industry such as Agile Software Development, Reuse based Development and Component based Development. But different software development models fail to satisfy many needs of software industry. As aim of all the process models is same, i. e. , to get quality product, reduce time of development, productivity improvement and reduction in cost. Still, no single process model is complete in itself. Software industry is moving towards Agile Software Development. Agile development does not obviously fit well for building reusable artifacts. However, with careful attention, and important modifications made to agile processes, it may be possible to successfully adapt and put on agile methods to development of reusable objects. The model being proposed here combines the features of Agile Software Development and reusability.

References

- Salo O. , "Enabling Software Process Improvement in Agile Software Development Teams and Organizations", ESPOO 2006, VTT Publications 618, pp149 +app. 96 pp.
- Jim Highsmith: "Agile Software Development Ecosystems", Addison-Wesley, 2002
- Cusumano M. , MacCormack A. , Kemerer C. F. , and Crandall W. , "A Global Survey of Software Development Practices", available at http://ebusiness. mit. edu/research/papers/178_Cusumano_Intl_Comp. pdf.
- Agile Manifesto, http://www. agilemanifesto. org, last accessed: 5-11-2011
- Zannier C. , "Tool Support for Refactoring to Design Patterns ", Conference on OOP System Language and Applications, Companion of the 17th annual ACP SIGPLAN Conference on OOP Systems, Languages and Applications, Seattle, Washington, 2002, pp. 122-123.
- Murauskaite A. , Adomauskas V. , "Bottlenecks in Agile Software Development using Theory of Constraints (TOC) Principles", Master's Thesis, Gothenburg, Sweden 2008.
- Turk D. , France R. , and Rumpe B. , "Limitations of Agile Software Processes", 3rd International Conference on XP and Agile Processes in Software Engineering (XP 2002), May 2002.
- Dyba T. , and Dingsoyr T. , "Empirical Studies and Agile Software Development: A Systematic Review", Information and Software Technology, 2008, vol. 50, pp. 833-859.
- Hansson C. , Dittrich Y. , Gustafsson B. , and Zarnak S. , "How Agile are Industrial Software Development Practices?", Journal of Systems and Software , Sept. 2006, vol. 79, issue 9, pp. 1295-1311.
- Cronholm S. , "Using Agile Methods? Expected Effects", 17th International Conference on Information Systems Development (ISD 2008), Paphos, Cyprus, Aug 25- 27, 2008.
- Hanssen G. K. , and Faegri T. E. , "Process Fusion: An industrial Case Study on Agile Software Product Line Engineering", Journal of Systems and Software, 2008, vol. 81, pp. 843-854.
- Ge X. , Paige R. F. , Polack F. A. C. , Chivers H. , and Brooke P. J. , "Agile Development of Secure Web Applications", Proceedings of the 6th International Conference on Web Engg. 2006, pp. 305-312.
- Boehm B. , and Turner R. , "Balancing Agility and Discipline: Evaluating and Integrating Agile and Plan-Driven methods", ICSE 2004, pp. 718-719.
- Salo O. , and Abrahamsson P. , "An Iterative Improvement Process for Agile Software Development" available at www. agile-itea. org/public/papers/SPIP. pdf.
- www. win. tue. nl/~mchaudro/cbse2007/managing%20CBSE%20and %20reuse. pdf
- Garlen D. , Allen R. , and Ockerbloom J. , "Architectural Mismatch: Why Reuse is So Hard", IEEE Software, November1995, vol. 12, no 6, pp 17-26.
- Pressman R. S. , "Software Engineering", 7th edition, McGraw Hill Education, 2009.
- Gomma H. and Farrukh G. A. , "Composition of Software Architectures from Reusable Architecture Patterns", Foundations of Software Engineering, Proceedings of 3rd International Workshop on Software Architecture, Orlando, Florida, US, 1998, pp. 45-48.

- Gomma H. , and Farukh G. A. , "A Reusable Architecture for Federated Client/Server Systems", Proceedings of the 1999 Symposium on Software Reusability, Los Angeles, California, US, 1999, pp. 113-121.
- Paulisch F. , Siemens AG," Software Architecture and Reuse – an Inherent Conflict?" 3rd International Conference on Software Reuse, Nov. 1994, pp. 214.
- K. S. J. , and Dr. Vasantha R. , "A New Process Model for Reuse based Software Development Approach", Proceedings of the World Congress on Engineering, London U. K, July 2008, vol. 1. Peterson, L. L. 1993. Reasoning about naming systems. .

Index Terms

Computer Science Software Engineering

Keywords

Agile software development Reusability Agile methodologies