Abstract

The success of the software system is measured by the degree to which it meets the purpose for which it was intended. Requirement Engineering is the process of discovering that purpose, by identifying stakeholders and their needs and documenting these in a form that is amendable to analysis, communication and implementation. Agent –oriented concepts are becoming very popular in software engineering as modelling frameworks for requirement engineering. This paper introduces the current Agent Oriented Requirement Engineering (AORE) Methodologies. It discusses what approaches have been followed; the suitability of these approaches for agent modelling; compares these approaches in a tabular form and some conclusions drawn from review.

References

- Jennings, N. R. and Wooldridge, M. (Eds.), Agent Technology: Foundations,
- Alexei Lapouchnian, "Modeling Mental States in Requirements Engineering – An Agent-Oriented Framework Based on i* and CASL", A thesis submitted to the Faculty of Graduate Studies in partial fulfillment of the requirements for the degree of Master of Science York University Toronto, Canada July, 2004
- M. Jackson, System Development, Prentice-Hall, 1983
- Carlos A. Iglesias, M. Garijo, A Survey of Agent Oriented Methodologies;
- S. Nwana Software agents: An Overview; (1996)
- Awais Rashid, Peter Sawyer, Ana Moreira, João Araújo, Early Aspects: a Model for Aspect-Oriented Requirements Engineering
A Comparative Analysis of Agent Oriented Requirement Engineering Frameworks

- Ecole Polytechnique Federale de Lausanne, Goal Driven Requirements Engineering
  Overview
- Smith, R. (1996a), "Software Agent Technology", Proceedings of The First
  International Conference on the Practical Applications of Intelligent Agents and Multi-Agent
  Technology, London, UK, 557-571
- Bashar N. and S. Easterbrook, "Requirement Engineering: A Roadmap";
- Y. Lesperance, Steven Shapario, "On Agent Oriented Requirement
  Engineering";
- E. Yu and J. Mylopoulos, "Understanding Why in Requirements Engineering – with an
  Example", Workshop on System Requirements: Analysis, Management, and Exploitation, Schloß
  Dagstuhl, Saarland, Germany, October 4–7, 1994.
- Paolo Donzeli, "Agents, goals and Quality in a Structured Requirement
  Engineering Framework-a case study";
- Paolo Bresciani and Paolo Donzeli, "REF: a Practical Agent Based Requirement
  Engineering Framework";
- Lespérance, Y. and Shapiro, S., "On Agent-Oriented Requirements Engineering,
  position paper, International Workshop on Agent-Oriented Information Systems
  (AOIS'99), Heidelberg, Germany, June 1999.
  Requirements, Engineering (SQUARE) Methodology, November 2005
- S. Ratchev, E. Urwin, D. Muller, K. S. Pawar, I. Moulek, Knowledge based
  requirement engineering for one-of-a-kind complex systems, Jan 2002

Index Terms

Computer Science
Software Engineering

Keywords

Requirement Engineering Agent Orientation Software Agent Modelling Frameworks.