

Business Domain Modelling Using an Integrated Framework

Authors : Mohammed Hasan Salahat, Stave Wade

Abstract : This paper presents an application of a “Systematic Soft Domain Driven Design Framework” as a soft systems approach to domain-driven design of information systems development. The framework combining techniques from Soft Systems Methodology (SSM), the Unified Modeling Language (UML), and an implementation pattern known as ‘Naked Objects’. This framework has been used in action research projects that have involved the investigation and modeling of business processes using object-oriented domain models and the implementation of software systems based on those domain models. Within this framework, Soft Systems Methodology (SSM) is used as a guiding methodology to explore the problem situation and to develop the domain model using UML for the given business domain. The framework is proposed and evaluated in our previous works, and a real case study ‘Information Retrieval System for Academic Research’ is used, in this paper, to show further practice and evaluation of the framework in different business domains. We argue that there are advantages from combining and using techniques from different methodologies in this way for business domain modeling. The framework is overviewed and justified as multi-methodology using Mingers Multi-Methodology ideas.

Keywords : SSM, UML, domain-driven design, soft domain-driven design, naked objects, soft language, information retrieval, multimethodology

Conference Title : ICSCE 2015 : International Conference on Software and Computer Engineering

Conference Location : London, United Kingdom

Conference Dates : June 28-29, 2015