Book Review

Enterprise service oriented architecture: Concepts, Challenges and Recommendations

James McGovern, Oliver Sims, Ashish Jain, Mark Little (Eds.)
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Over the past few years, Enterprise service oriented architecture (ESOA) has become an intensive area of research in the domain of 'Software Engineering'. The growth of ESOA largely relies on research in many areas like Grid Computing, Web Services, Service oriented computing, Software Architectures, Data base technology & other related areas. The research papers on the above mentioned areas are collectively now brought by James McGovern, Oliver Sims, Ashish Jain, Mark Little in their work, "Enterprise service Oriented Architecture".

The book has eight chapters such as Understanding Service Oriented Architecture, Component–based Services, Orchestration, Working with registry and UDDI, Understanding enterprise security, SOA management, Transactions, Event-driven Architecture. This book strives to provide vivid insight into the dynamics of SOA & a strategic approach to successfully integrate technology business divisions.

The introductory chapter outlines how services can be federated and how business logic can be separated from underlying platform technology. This book provides the mechanisms for leveraging emerging enterprise integration strategies, Work flow systems, Business Process Execution Language (BPEL). The chapter on SOA Management discusses Life Cycle Management, Routing, Versioning and Analysis, Business Processes, Architecture Management, Agents, Logging, Auditing, Monitoring, Alerting, Provisioning.

The entire collection of articles is impressive and leads to a comprehensive understanding of the security technologies like Security Tokens, XML Digital signature, XML key management for public key representation, location & validation. The last chapter focuses on the challenging concepts like Service Ontology, Service Description, Enterprise service Business , Patterns, Finite State Machine, Brokered Notifications, Chain of Responsibility Pattern, Interpreter Pattern, Fly weight Pattern The aspects of ESOA stimulate further research in these areas and offer concrete findings.

This book enables academicians, researchers, students and IT professionals to have clear, readable, and programmatic overview to all aspects of ESOA with hands-on guidelines for implementing technologies J2EE, CORBA & .NET. We believe that this monograph can serve as a tool to know the interesting and challenging developments in the thrust areas of ESOA.

T. Srinivasan (tsrini@svce.ac.in)
Department of Computer Science and Engineering
Sri Venkateswara College of Engineering
Chennai. Tamil Nadu, India – 602 105.
URL : http://www.svce.ac.in/~tsrini

Mobile Information Systems: Infrastructure and Design for Adaptivity and Flexibility

Barabar Pernici (Ed)
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The concept 'mobility' has gained momentum in the recent years in the wake of people movement across places. Information systems need to be designed by considering the mobility features of objects and players. Hence, mobile information systems find a significant place in the discussion in information world.

This book address the mobile information systems from three different but interrelated parts. First, the core technologies for mobile information systems are illustrated. The second part enabling technologies are illustrated while the third one considers the methodological aspects of the development of mobile adaptive applications. The Multi-channel Adaptive Information Systems (MAIS) has developed the prototype environment for mobile information system. Hence the current work is based on the MAIS project and its outcome.

For a comprehensive understanding on the basic concepts of the mobile information system, the author of the chapter presented the novel aspects of mobile information system and wireless infrastructures by providing due emphasis on service-oriented systems and cooperative mobile information systems. The MAIS architecture and its elements form the second chapter where the architecture and framework about the elements are illustrated.

The E-service which work on any electronic network such as Internet, wireless or smart cards has significant impact on web service and hence the chapter on it describes the various issues in e-service. While presenting the software and hardware system objects that support the network service, the Quality of service such as bandwidth, memory size and other features are presented as they are subject to changes.

Adaptive networks need an understanding of the new protocols, devices for layers such as physical layer, the data link layer and the network layer. The architecture and protocols required for all the layers are described with many illustrations in the chapter Adaptive networks.

The effective data management relies on many factors such as data availability, devices for more storage and the data processing environment. The Very Small DataBase project, an integral unit of the MAIS project is illustrated with scenarios and architecture. The VSDB design presented in this chapter can serve as an effective model for designing database management systems.

The support for flexible and adaptive execution of application in a distributed, multi-channel and mobile information system can be achieved if the present day hardware performance is improved by software demonstrations. The architectural developments of the project is explored through the MAIS software architecture. This chapter has described specifically the Multiculture ST200 architecture and the medium access control layer.

An important contribution in the current book is the explicit representation of methods and techniques for the design and development of web based information systems. There are discussions on the general design methodology for the development of adaptive information systems. The design and implementation of tools supporting adaptive interaction with web information systems is described as an important component in this chapter. The methods to evaluate the usability and accessibility of adaptive systems is the another major contribution in this current chapter.

The guidelines for the design of web services is illustrated with the phases of analysis. The three phases viz., service identification, high-level redesign and customization are addressed with a discussion on the channels and users. The service profiling and mining for recommender systems are presented focusing on service recommendation. The final chapter has demonstrated the use of mobile applications on small devices in a variable execution environment.

This book is an illustration of how a project results can culminated into a basic and comprehensive presentation on the emerging field. The strength of the book lies on the effective deployment of underlying architecture developed in the test bed of MAIS project that proved to be a base for creating the mobile information system.

The reading of this book will ensure the reader an understanding of different architectures for mobile information systems. I do hope that the reader will get stimulation to work for many applications on mobile information system.

Daisy Jacobs
Department of Information Science
School of Information Technology
University of Pretoria
Pretoria 002
South Africa
daisy.jacobs@up.ac.za