

Book Review:

Advanced Database Systems

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The book entitled *Advanced Database Systems* published by the AES Publishing House is coordinated by professors Manole Velicanu and Ion Lungu.

The team of authors is composed of professors from the Economic Informatics department from AES Bucharest, but also a specialist in the field who have extensive expertise in using advanced types of database systems. Authors fields of interest include: databases, design of economic information systems, database management systems, decision support systems, executive information systems. Authors concerns in these areas are demonstrated by the publication of books, articles and scientific papers in international conferences, international development masters courses and coordinating research projects in major research programs conducted at national level.

During over 430 pages, the book *Advanced database systems* defines theoretical foundations and propose practical examples needed to develop and use database applications that integrates some new informatic technologies. Therefore, the developers or users of advanced database systems should already know the fundamental aspects of this field: databases, database management systems, relational systems, programming languages, programming techniques.

This book is written in academic style, combining theoretical and practical aspects. Most chapters have at least one case study built with Oracle products. Some aspects are addressed in detail and others are just presented. In both cases, there are bibliographical references where the reader will find other explanations. In the end of each chapter can be find multiple-choice tests, both theoretical and practical. These elements are presented over the 7 chapters of the work.

The first chapter, *Fundamental Aspects regarding the Database Systems*, presents the concept of database system (DBS), the DBS architecture and some aspects regarding the DBS administration.

The chapter *Several Types of Advanced Database Systems* presents some types of advanced database systems and two technologies that are integrated in such systems: Business Intelligence (BI) and Grid Computing. There are presented three case studies, which use Oracle Grid Control, Oracle Miner and Oracle Spatial.

The chapter *Distributed Database Systems* presents the database systems that have integrated the distributed technologies.

The chapter *Object-Oriented Database Systems* presents the database systems that have integrated the object-oriented technology. The chapter ends with a case study regarding the object-oriented extension of Oracle PL /SQL language.

The *Java Platform Integration into the Database Systems* chapter presents the Java platform, which includes, besides the programming language, a number of widely used technologies that use it. Two case studies are presented using both the Oracle JDeveloper product.

The *Web Technology Integration into the Database Systems* chapter presents aspects regarding the Web technologies. The case studies presented use Oracle Portal and Oracle InterMedia products.

The chapter *Data Warehouses* presents the integration into database systems of the data warehouse technology and the case study uses Oracle Discoverer.

The *Bibliography* includes a large number of books, articles, papers presented at international conferences and websites of literature, including contributions from authors in the development field.

The book ends with several annexes containing: SQL compendium, PL/SQL compendium, a list of abbreviations, a list of proposals for database applications and a comparison table between relational systems, the object oriented and object-relational.

The book is addressed to the students and to the IT&C specialists. The case studies included in the book are of real help to the students.

Prof. Ion SMEUREANU, PhD