

Raghu Ramakrishnan

Database Management Systems

Eventually, you will categorically discover a additional experience and deed by spending more cash. yet when? accomplish you receive that you require to get those all needs when having significantly cash? Why dont you try to get something basic in the beginning? Thats something that will lead you to understand even more regarding the globe, experience, some places, later history, amusement, and a lot more?

It is your definitely own epoch to proceed reviewing habit. in the midst of guides you could enjoy now is **Raghu Ramakrishnan Database Management Systems** below.

Database Management Systems - Ramakrishnan
2000-07

Relational Database Management Systems - N. P. Singh
2014-05-15

this book is a simplified approach towards the subject of "Relational Database Management System" It covers the following chapters:
Database Systems, Database

Systems Concepts and Architecture, Data Modelling Using ER Model, Relational Model, Normalization, Database Access and Security, SQL Using Oracle, Introduction to PL/SQL.

Fundamentals of Database Management Systems, 2nd Edition - Mark L. Gillenson
2011-11-15

This lean, focused text concentrates on giving

students a clear understanding of database fundamentals while providing a broad survey of all the major topics of the field.

The result is a text that is easily covered in one semester, and that only includes topics relevant to the database course. Mark Gillenson, an associate editor of the Journal of Database Management, has 15 years experience of working with and teaching at IBM Corp. and 15 years of teaching experience at the college level. He writes in a clear, friendly style that progresses step-by-step through all of the major database topics. Each chapter begins with a story about a real company's database application, and is packed with examples. When students finish the text, they will be able to immediately apply what they've learned in business.

Studyguide for Database Management Systems by Ramakrishnan, Raghu, ISBN 9780072465631 - Cram101 Textbook Reviews 2010-01
Never HIGHLIGHT a Book Again! Virtually all of the testable terms, concepts,

persons, places, and events from the textbook are included.

Cram101 Just the FACTS101 studyguides give all of the outlines, highlights, notes, and quizzes for your textbook with optional online comprehensive practice tests. Only Cram101 is Textbook Specific.

Accompanys: 9780072465631
9780071151108 .

Database Management Systems - Raghu Ramakrishnan 2014

ISE Database System Concepts
- Abraham Silberschatz
2019-02-28

Database System Concepts by Silberschatz, Korth and Sudarshan is now in its 7th edition and is one of the cornerstone texts of database education. It presents the fundamental concepts of database management in an intuitive manner geared toward allowing students to begin working with databases as quickly as possible. The text is designed for a first course in databases at the junior/senior undergraduate level or the first year graduate level. It also

contains additional material that can be used as supplements or as introductory material for an advanced course. Because the authors present concepts as intuitive descriptions, a familiarity with basic data structures, computer organization, and a high-level programming language are the only prerequisites. Important theoretical results are covered, but formal proofs are omitted. In place of proofs, figures and examples are used to suggest why a result is true.

SQL - Felix Alvaro 2016-11-03
Learn SQL Programming And Database Management Today With This Easy Step-By-Step Guide! Do you want learn SQL Programming? Do you want to understand how to manage databases without getting overwhelmed by complicated jargons and lingos? If so, "Easy SQL Programming & Database Management For Beginners. Your Step-By-Step Guide To Learning The SQL Database" by Felix Alvaro is THE book for you! It covers the most essential topics you must learn

to begin programming with SQL. SQL is a software language that is powerful yet simple, flexible, portable and, most of all, integrated into numerous database applications. The current trend now is to become more digital in managing databases. As I mention in this guide, deciding to become a database professional will definitely promise you a secured job with a potential high remuneration or well-paid freelance work. On the average, an entry-level database analyst in the United States earns an annual salary of around \$92,000 USD. What Separates This Book From The Rest? What separates this book from all the others out there is the approach to teaching. A lot of the books you will stumble upon simply throw information at you, leaving you confused and stuck. We believe that books of this nature should be easy to grasp and written in jargon-free English you can understand, making you feel confident and allowing you to grasp each topic with ease. To help you achieve this, the guide

has been crafted in a step-by-step manner which we feel is the best way for you to learn a new subject, one step at a time. It also includes various images to give you assurance you are going in the right direction, as well as having exercises where you can proudly practice your newly attained skills. You Will Learn The Following: The history of SQL and its uses The fundamentals of Relational Databases and Database Management Systems The SQL Structure The SQL Data Types Data Definition Language Statements Data Manipulation Language Statements Data Query Language Statements Transactional Control Commands Working with Database Views Enhancing Database Designs Using Primary and Foreign Keys, Indexes and Normalization Understanding Cursors, Triggers and Errors And much more! This guide also includes exercises throughout to give you practice, and Chapter 12 is focused solely on providing you exercises to let you practice what you have learnt. As a

wise-man once said: "Practice makes perfect." So don't delay it any longer. Take this opportunity and invest in this guide now. You will be amazed by the skills you will quickly attain! Order Your Copy Now! See you inside!

Database Management Systems - Raghu

Ramakrishnan 1998

This introductory database text takes a hands-on approach to relational database systems, emphasising both conceptual and physical database design and tuning.

Principles of Distributed Database Systems - M. Tamer Özsu 2011-02-24

This third edition of a classic textbook can be used to teach at the senior undergraduate and graduate levels. The material concentrates on fundamental theories as well as techniques and algorithms. The advent of the Internet and the World Wide Web, and, more recently, the emergence of cloud computing and streaming data applications, has forced a renewal of interest in distributed and parallel data

management, while, at the same time, requiring a rethinking of some of the traditional techniques. This book covers the breadth and depth of this re-emerging field. The coverage consists of two parts. The first part discusses the fundamental principles of distributed data management and includes distribution design, data integration, distributed query processing and optimization, distributed transaction management, and replication. The second part focuses on more advanced topics and includes discussion of parallel database systems, distributed object management, peer-to-peer data management, web data management, data stream systems, and cloud computing. New in this Edition: • New chapters, covering database replication, database integration, multidatabase query processing, peer-to-peer data management, and web data management. • Coverage of emerging topics such as data streams and cloud computing • Extensive revisions and

updates based on years of class testing and feedback Ancillary teaching materials are available.

Distributed Database Systems - Chhanda Ray 2009

Distributed Database Systems discusses the recent and emerging technologies in the field of distributed database technology. The material is up-to-date, highly readable, and illustrated with numerous practical examples. The mainstream areas of distributed database technology, such as distributed database design, distributed DBMS architectures, distributed transaction management, distributed concurrency control, deadlock handling in distributed systems, distributed recovery management, distributed query processing and optimization, data security and catalog management, have been covered in detail. The popular distributed database systems, SDD-1 and R*, have also been included.

Database Management Systems Solution Manual -

Raghu Ramakrishnan

Database Design and Implementation - Edward

Sciore 2020-02-27

This textbook examines database systems from the viewpoint of a software developer. This perspective makes it possible to investigate why database systems are the way they are. It is of course important to be able to write queries, but it is equally important to know how they are processed. We e.g. don't want to just use JDBC; we also want to know why the API contains the classes and methods that it does. We need a sense of how hard is it to write a disk cache or logging facility. And what exactly is a database driver, anyway? The first two chapters provide a brief overview of database systems and their use. Chapter 1 discusses the purpose and features of a database system and introduces the Derby and SimpleDB systems. Chapter 2 explains how to write a database application using Java. It presents the basics of

JDBC, which is the fundamental API for Java programs that interact with a database. In turn, Chapters 3-11 examine the internals of a typical database engine. Each chapter covers a different database component, starting with the lowest level of abstraction (the disk and file manager) and ending with the highest (the JDBC client interface); further, the respective chapter explains the main issues concerning the component, and considers possible design decisions. As a result, the reader can see exactly what services each component provides and how it interacts with the other components in the system. By the end of this part, s/he will have witnessed the gradual development of a simple but completely functional system. The remaining four chapters then focus on efficient query processing, and focus on the sophisticated techniques and algorithms that can replace the simple design choices described earlier. Topics include indexing, sorting, intelligent buffer usage, and

query optimization. This text is intended for upper-level undergraduate or beginning graduate courses in Computer Science. It assumes that the reader is comfortable with basic Java programming; advanced Java concepts (such as RMI and JDBC) are fully explained in the text. The respective chapters are complemented by “end-of-chapter readings” that discuss interesting ideas and research directions that went unmentioned in the text, and provide references to relevant web pages, research articles, reference manuals, and books. Conceptual and programming exercises are also included at the end of each chapter. Students can apply their conceptual knowledge by examining the SimpleDB (a simple but fully functional database system created by the author and provided online) code and modifying it.

Relational Database Design Clearly Explained - Jan L.

Harrington 2002

Fully revised and updated,
Relational Database Design,

Second Edition is the most lucid and effective introduction to relational database design available. Here, you'll find the conceptual and practical information you need to develop a design that ensures data accuracy and user satisfaction while optimizing performance, regardless of your experience level or choice of DBMS. Supporting the book's step-by-step instruction are three case studies illustrating the planning, analysis, and design steps involved in arriving at a sound design. These real-world examples include object-relational design techniques, which are addressed in greater detail in a new chapter devoted entirely to this timely subject. * Concepts you need to master to put the book's practical instruction to work. * Methods for tailoring your design to the environment in which the database will run and the uses to which it will be put. * Design approaches that ensure data accuracy and consistency. * Examples of how design can inhibit or boost database

application performance. *
Object-relational design techniques, benefits, and examples. *
Instructions on how to choose and use a normalization technique. *
Guidelines for understanding and applying Codd's rules. *
Tools to implement a relational design using SQL. *
Techniques for using CASE tools for database design.

Principles of Data

Integration - AnHai Doan
2012-06-25

How do you approach answering queries when your data is stored in multiple databases that were designed independently by different people? This is first comprehensive book on data integration and is written by three of the most respected experts in the field. This book provides an extensive introduction to the theory and concepts underlying today's data integration techniques, with detailed, instruction for their application using concrete examples throughout to explain the concepts. Data integration is the problem of

answering queries that span multiple data sources (e.g., databases, web pages). Data integration problems surface in multiple contexts, including enterprise information integration, query processing on the Web, coordination between government agencies and collaboration between scientists. In some cases, data integration is the key bottleneck to making progress in a field. The authors provide a working knowledge of data integration concepts and techniques, giving you the tools you need to develop a complete and concise package of algorithms and applications. Offers a range of data integration solutions enabling you to focus on what is most relevant to the problem at hand Enables you to build your own algorithms and implement your own data integration applications

A First Course in Database Systems - Jeffrey D. Ullman
2007

Introduction to Database Management Systems - Atul

Kahate 2004
Introduction to Database Management Systems is designed specifically for a single semester, namely, the first course on Database Systems. The book covers all the essential aspects of database systems, and also covers the areas of RDBMS. The book in.
Database Systems - Peter Rob 2004

Database Systems: The Complete Book - Hector Garcia-Molina 2013-08-29
For Database Systems and Database Design and Application courses offered at the junior, senior and graduate levels in Computer Science departments. Written by well-known computer scientists, this introduction to database systems offers a comprehensive approach, focusing on database design, database use, and implementation of database applications and database management systems. The first half of the book provides in-depth coverage of databases

from the point of view of the database designer, user, and application programmer. It covers the latest database standards SQL:1999, SQL/PSM, SQL/CLI, JDBC, ODL, and XML, with broader coverage of SQL than most other texts. The second half of the book provides in-depth coverage of databases from the point of view of the DBMS implementor. It focuses on storage structures, query processing, and transaction management. The book covers the main techniques in these areas with broader coverage of query optimisation than most other texts, along with advanced topics including multidimensional and bitmap indexes, distributed transactions, and information integration techniques. The full text downloaded to your computer With eBooks you can: search for key concepts, words and phrases make highlights and notes as you study share your notes with friends eBooks are downloaded to your computer and accessible either offline through the Bookshelf

(available as a free download), available online and also via the iPad and Android apps. Upon purchase, you'll gain instant access to this eBook. Time limit The eBooks products do not have an expiry date. You will continue to access your digital ebook products whilst you have your Bookshelf installed.

Principles of Database Management - Wilfried Lemahieu 2018-07-12

Introductory, theory-practice balanced text teaching the fundamentals of databases to advanced undergraduates or graduate students in information systems or computer science.

Fundamentals of Database Systems - Ramez Elmasri 2004

This book combines clear explanations of theory and design, broad coverage of models and real systems, and excellent examples with up-to-date introductions to modern database technologies. Now in its third edition, this book has been revised and updated to reflect the latest trends in technological and application

development. - Introduces UML modeling and how it is used right alongside ER modeling. - Provides updated and expanded material on SQL including a new chapter, which discusses Web databases and SQL, including JDBC/ODBC. - Applies ideas from the book to a fully-developed case study that implements the data needed to design a bookstore. - Expanded coverage of important database topics like security, data warehousing, and data mining. - A new chapter featuring the relationship to XML and Internet databases keeps students on the edge of database technology. - Gives examples of real database systems. - Provides coverage of the object-oriented and object/relational approach to data management. - Includes discussion of decision support applications of data warehousing and data mining, as well as emerging technologies of web databases, multimedia, and mobile databases. - Covers a

Advanced Database Systems

- Nabil R. Adam 1993-12-08
Database management is attracting wide interest in both academic and industrial contexts. New application areas such as CAD/CAM, geographic information systems, and multimedia are emerging. The needs of these application areas are far more complex than those of conventional business applications. The purpose of this book is to bring together a set of current research issues that addresses a broad spectrum of topics related to database systems and applications. The book is divided into four parts: - object-oriented databases, - temporal/historical database systems, - query processing in database systems, - heterogeneity, interoperability, open system architectures, multimedia database systems.

Architecture of a Database System - Joseph M. Hellerstein 2007

Architecture of a Database System presents an architectural discussion of DBMS design principles,

including process models, parallel architecture, storage system design, transaction system implementation, query processor and optimizer architectures, and typical shared components and utilities.

Professional NoSQL - Shashank Tiwari 2011-08-31

A hands-on guide to leveraging NoSQL databases NoSQL databases are an efficient and powerful tool for storing and manipulating vast quantities of data. Most NoSQL databases scale well as data grows. In addition, they are often malleable and flexible enough to accommodate semi-structured and sparse data sets. This comprehensive hands-on guide presents fundamental concepts and practical solutions for getting you ready to use NoSQL databases. Expert author Shashank Tiwari begins with a helpful introduction on the subject of NoSQL, explains its characteristics and typical uses, and looks at where it fits in the application stack. Unique insights help you

choose which NoSQL solutions are best for solving your specific data storage needs.

Professional NoSQL:

Demystifies the concepts that relate to NoSQL databases, including column-family oriented stores, key/value databases, and document databases. Delves into installing and configuring a number of NoSQL products and the Hadoop family of products. Explains ways of storing, accessing, and querying data in NoSQL databases through examples that use MongoDB, HBase, Cassandra, Redis, CouchDB, Google App Engine Datastore and more. Looks at architecture and internals. Provides guidelines for optimal usage, performance tuning, and scalable configurations. Presents a number of tools and utilities relating to NoSQL, distributed platforms, and scalable processing, including Hive, Pig, RRDtool, Nagios, and more.

Database Systems: The Complete Book - Hector Garcia-Molina 2008

Database Management Systems - P.S. Gill 2010-09-30

The book is intended to provide an insight into the DBMS concepts. An effort has been made to familiarize the readers with the concepts of database normalization, concurrency control, deadlock handling and recovery etc., which are extremely vital for a clear understanding of DBMS. To familiarize the readers with the equivalence amongst Relational Algebra, Tuple Relational Calculus, and SQL, a large number of equivalent queries have been provided. The concepts of normalization have been elaborated very systematically by fully covering the underlying concepts of functional dependencies, multi-valued dependencies, join dependencies, loss-less-join decomposition, dependency-preserving decomposition etc. It is hoped that with the help of the information provided in the text, a reader will be able to design a flawless database. Also, the concepts of serializability, concurrency control, deadlock handling and

log-based recovery have been covered in full detail. An overview has also been provided of the issues related to distributed-databases.

Database Tuning - Dennis Shasha 2002-06-07

Tuning your database for optimal performance means more than following a few short steps in a vendor-specific guide. For maximum improvement, you need a broad and deep knowledge of basic tuning principles, the ability to gather data in a systematic way, and the skill to make your system run faster. This is an art as well as a science, and

Database Tuning: Principles, Experiments, and Troubleshooting Techniques will help you develop portable skills that will allow you to tune a wide variety of database systems on a multitude of hardware and operating systems. Further, these skills, combined with the scripts provided for validating results, are exactly what you need to evaluate competing database products and to choose the right one. Forward by Jim

Gray, with invited chapters by Joe Celko and Alberto Lerner

Includes industrial contributions by Bill McKenna (RedBrick/Informix), Hany Saleeb (Oracle), Tim Shetler (TimesTen), Judy Smith (Deutsche Bank), and Ron Yorita (IBM) Covers the entire system environment: hardware, operating system, transactions, indexes, queries, table design, and application analysis

Contains experiments (scripts available on the author's site) to help you verify a system's effectiveness in your own environment

Presents special topics, including data warehousing, Web support, main memory databases, specialized databases, and financial time series

Describes performance-monitoring techniques that will help you recognize and troubleshoot problems

Fundamentals of Database Systems - Ramez Elmasri 2008-09

An Introduction to Database Systems - C. J. Date 2000

For over 25 years, C. J. Dates

An Introduction to Database Systems has been the authoritative resource for readers interested in gaining insight into and understanding of the principles of database systems. This exciting revision continues to provide a solid grounding in the foundations of database technology and to provide some ideas as to how the field is likely to develop in the future. The material is organized into six major parts. Part I provides a broad introduction to the concepts of database systems in general and relational systems in particular. Part II consists of a careful description of the relational model, which is the theoretical foundation for the database field as a whole. Part III discusses the general theory of database design. Part IV is concerned with transaction management. Part V shows how relational concepts are relevant to a variety of further aspects of database technology—security, distributed databases, temporal data, decision support, and so on. Finally,

Part VI describes the impact of object technology on database systems. This Seventh Edition of *An Introduction to Database Systems* features widely rewritten material to improve and amplify treatment of *Database Management Systems* - 2014

Querying XML - Jim Melton
2011-04-08

XML has become the lingua franca for representing business data, for exchanging information between business partners and applications, and for adding structure- and sometimes meaning—to text-based documents. XML offers some special challenges and opportunities in the area of search: querying XML can produce very precise, fine-grained results, if you know how to express and execute those queries. For software developers and systems architects: this book teaches the most useful approaches to querying XML documents and repositories. This book will also help managers and project leaders grasp how “querying

XML fits into the larger context of querying and XML. Querying XML provides a comprehensive background from fundamental concepts (What is XML?) to data models (the Infoset, PSVI, XQuery Data Model), to APIs (querying XML from SQL or Java) and more. * Presents the concepts clearly, and demonstrates them with illustrations and examples; offers a thorough mastery of the subject area in a single book. * Provides comprehensive coverage of XML query languages, and the concepts needed to understand them completely (such as the XQuery Data Model). * Shows how to query XML documents and data using: XPath (the XML Path Language); XQuery, soon to be the new W3C Recommendation for querying XML; XQuery's companion XQueryX; and SQL, featuring the SQL/XML * Includes an extensive set of XQuery, XPath, SQL, Java, and other examples, with links to downloadable code and data samples.

Distributed Database Management Systems - Saeed

K. Rahimi 2015-02-13

This book addresses issues related to managing data across a distributed database system. It is unique because it covers traditional database theory and current research, explaining the difficulties in providing a unified user interface and global data dictionary. The book gives implementers guidance on hiding discrepancies across systems and creating the illusion of a single repository for users. It also includes three sample frameworks—implemented using J2SE with JMS, J2EE, and Microsoft .Net—that readers can use to learn how to implement a distributed database management system. IT and development groups and computer sciences/software engineering graduates will find this guide invaluable.

Fundamentals of Relational Database Management Systems - S. Sumathi
2007-03-20

This book provides comprehensive coverage of fundamentals of database

management system. It contains a detailed description on Relational Database Management System Concepts. There are a variety of solved examples and review questions with solutions. This book is for those who require a better understanding of relational data modeling, its purpose, its nature, and the standards used in creating relational data model.

Constraints and Databases -
Raghu Ramakrishnan
1997-12-31

Constraints and Databases contains seven contributions on the rapidly evolving research area of constraints and databases. This collection of original research articles has been compiled as a tribute to Paris C. Kanellakis, one of the pioneers in the field.

Constraints have long been used for maintaining the integrity of databases. More recently, constraint databases have emerged where databases store and manipulate data in the form of constraints. The generality of constraint databases makes them highly

attractive for many applications. Constraints provide a uniform mechanism for describing heterogenous data, and advanced constraint solving methods can be used for efficient manipulation of constraint data. The articles included in this book cover the range of topics involving constraints and databases; join algorithms, evaluation methods, applications (e.g. data mining) and implementations of constraint databases, as well as more traditional topics such as integrity constraint maintenance. *Constraints and Databases* is an edited volume of original research comprising invited contributions by leading researchers.

Database System Implementation - Garcia-Molina 2000-09

Introduction to Database Management System - Satinder Bal Gupta

High-Dimensional Indexing - Cui Yu 2003-08-01

In this monograph, we study

the problem of high-dimensional indexing and systematically introduce two efficient index structures: one for range queries and the other for similarity queries.

Extensive experiments and comparison studies are conducted to demonstrate the superiority of the proposed indexing methods. Many new database applications, such as multimedia databases or stock price information systems, transform important features or properties of data objects into high-dimensional points. Searching for objects based on these features is thus a search of points in this feature space. To support efficient retrieval in such high-dimensional databases, indexes are required to prune the search space. Indexes for low-dimensional databases are well studied, whereas most of these application specific indexes are not scaleable with the number of dimensions, and they are not designed to support similarity searches and high-dimensional joins.

Database System Concepts -

Abraham Silberschatz 2011
Presents the fundamental concepts of database management. This text is suitable for a first course in databases at the junior/senior undergraduate level or the first year graduate level.

Readings in Database Systems
- Joseph M. Hellerstein 2005

The latest edition of a popular text and reference on database research, with substantial new material and revision; covers classical literature and recent hot topics. Lessons from database research have been applied in academic fields ranging from bioinformatics to next-generation Internet architecture and in industrial uses including Web-based e-commerce and search engines. The core ideas in the field have become increasingly influential. This text provides both students and professionals with a grounding in database research and a technical context for understanding recent innovations in the field. The readings included treat the most important issues in the database area--the basic

material for any DBMS professional. This fourth edition has been substantially updated and revised, with 21 of the 48 papers new to the edition, four of them published for the first time. Many of the sections have been newly organized, and each section includes a new or substantially revised introduction that discusses the context, motivation, and controversies in a particular area, placing it in the broader perspective of database research. Two introductory articles, never before published, provide an organized, current introduction to basic knowledge of the field; one discusses the history of data models and query languages and the other offers an architectural overview of a database system. The remaining articles range from the classical literature on database research to treatments of current hot topics, including a paper on search engine architecture and a paper on application servers, both written expressly for this edition. The result is a

collection of papers that are seminal and also accessible to a reader who has a basic familiarity with database systems.

Core Java SE 9 for the Impatient - Cay S. Horstmann
2017-09-15

An Accessible Guide to the Java Language and Libraries
Modern Java introduces major enhancements that impact the core Java technologies and APIs at the heart of the Java platform. Many old Java idioms are no longer needed and new features such as modularization make you far more effective. However, navigating these changes can be challenging. Core Java® SE 9 for the Impatient, Second Edition, is a complete yet concise guide that includes all the latest changes up to Java SE 9. Written by Cay S. Horstmann—author of the classic two-volume Core Java—this indispensable tutorial offers a faster, easier pathway for learning modern Java. Given Java SE 9’s size and the scope of its enhancements, there’s plenty to cover, but it’s

presented in small chunks organized for quick access and easy understanding. Horstmann's practical insights and sample code help you quickly take advantage of all that's new, from Java SE 9's long-awaited "Project Jigsaw" module system to the improvements first introduced in Java SE 8, including lambda expressions and streams. Use modules to simplify the development of well-performing complex systems Migrate applications to work with the modularized Java API and third-party modules Test code as you create it with the new JShell Read-Eval-Print Loop (REPL) Use lambda expressions to express actions more concisely Streamline and optimize data management with today's Streams API Leverage modern concurrent programming based on cooperating tasks Take advantage of a multitude of API improvements for working with collections, input/output, regular expressions, and processes Whether you're just getting started with modern

Java or you're an experienced developer, this guide will help you write tomorrow's most robust, efficient, and secure Java code. Register your product at informit.com/register for convenient access to downloads, updates, and/or corrections as they become available.

Multimedia Database Management Systems - B.
Prabhakaran 2012-12-06
Multimedia Database Management Systems presents the issues and the techniques used in building multimedia database management systems. Chapter 1 provides an overview of multimedia databases and underlines the new requirements for these applications. Chapter 2 discusses the techniques used for storing and retrieving multimedia objects. Chapter 3 presents the techniques used for generating metadata for various media objects. Chapter 4 examines the mechanisms used for storing the index information needed for accessing different media

objects. Chapter 5 analyzes the approaches for modeling media objects, both their temporal and spatial characteristics. Object-oriented approach, with some additional features, has been widely used to model multimedia information. The book discusses two systems that use object-oriented models: OVID (Object Video Information Database) and Jasmine. The models for representing temporal and spatial requirements of media objects are then studied. The book also describes authoring techniques used for specifying temporal and spatial characteristics of multimedia databases. Chapter 6 explains different types of multimedia queries, the methodologies for processing them and the language features for describing them. The features offered by query languages such as SQL/MM (Structured Query Language for

Multimedia), PICQUERY+, and Video SQL are also studied. Chapter 7 deals with the communication requirements for multimedia databases. A client accessing multimedia data over computer networks needs to identify a schedule for retrieving various media objects composing the database. The book identifies possible ways for generating a retrieval schedule. Chapter 8 ties together the techniques discussed in the previous chapters by providing a simple architecture of a distributed multimedia database management system. Multimedia Database Management Systems can be used as a text for graduate students and researchers working in the area of multimedia databases. In addition, the book serves as essential reading material for computer professionals who are in (or moving to) the area of multimedia databases.