Record Nr. UNINA9910437593403321 Autore Lake Peter Titolo Concise Guide to Databases: A Practical Introduction / / by Peter Lake, Paul Crowther London:,: Springer London:,: Imprint: Springer,, 2013 Pubbl/distr/stampa **ISBN** 1-4471-5601-3 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (316 p.) Undergraduate Topics in Computer Science, , 1863-7310 Collana Disciplina 005.73 Soggetti Database management Information storage and retrieval Data structures (Computer science) Software engineering **Database Management** Information Storage and Retrieval Data Structures and Information Theory Software Engineering/Programming and Operating Systems Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Part I: Databases in Context -- Data: An Organisational Asset -- The History of Databases -- Physical Storage and Distribution -- Part II: Database Types -- Relational: The Start of the Modern Era in Databases -- NoSQL: Column-Based and Document-Based Databases -- Big Data -- Object and Object-Relational -- In-Memory Databases -- Part III: What Database Professionals Worry About -- Scalability -- Availability -- Performance -- Security. Modern businesses depend on data for their very survival, creating a Sommario/riassunto need for sophisticated databases and database technologies to help store, organise and transport their valuable data. This easy-to-read textbook/reference presents a comprehensive introduction to databases, opening with a concise history of databases and of data as an organisational asset. As relational database management systems are no longer the only database solution, the book takes a wider view

of database technology, encompassing big data, NoSQL, object and object-relational, and in-memory databases. The text also examines

the issues of scalability, availability, performance and security encountered when building and running a database in the real world. Topics and features: Presents review and discussion questions at the end of each chapter, in addition to skill-building, hands-on exercises Introduces the fundamental concepts and technologies in database systems, placing these in an historic context Describes the challenges faced by database professionals Reviews the use of a variety of database types in business environments Discusses areas for further research within this fast-moving domain Suggests a structure for a potential university course in the preface With its learning-by-doing approach, supported by both theoretical and practical examples, this clearly-structured textbook will be of great value to advanced undergraduate and postgraduate students of computer science, software engineering, and information technology. Practising database professionals and application developers will also find the book an ideal reference that addresses today's business needs.