Learn to Create and Work with Relational Databases

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Database Systems Design, Implementation and Management, 11th Ed. is an up-to-date, well-organized textbook that provides a comprehensive look at relational databases. It thoroughly covers entity relationship modeling, database modeling, normalization, and the development of useful database systems using structured query language (SQL), as well as relational database optimization, database administration, and security. From the basic to the complex, it is intended to get the reader to the point of creating and working with databases.

The book doesn’t presuppose any familiarity with the material – it starts with the fundamentals – but some understanding of computer systems would be helpful to readers, particularly if they are reading it outside the context of a course. As a good reference for database concepts, it would be handy to keep it on the shelf for its practical glossary and as a refresher.

Contents
The book is divided into six parts:
1. Database Concepts provides an interesting history of data and database management systems.
2. Design Concepts covers data modeling and normalization.
3. Advanced Design and Implementation gets into detail about SQL.
5. Databases and the Internet covers connectivity and web applications.
6. Database Administration focuses on administration and security.

Database Systems Design, Implementation and Management provides many practical SQL examples and is implementation agnostic. It covers SQL language variants specific to SQL Server, Oracle, MySQL, and even MS Access, providing SQL examples for each. The book also provides advice and cautions for specific database types.

The book also discusses business intelligence, data analytics, cloud-based systems and big data, and non-SQL systems, but these topics are not covered in the same detail as SQL and relational databases, which are at the core of this book. While it makes readers aware of these newer topics, they are a bit of an afterthought. Those who are not focused specifically on relational database management systems should look elsewhere.

Supplemental Materials
The publisher’s website provides downloads of the sample databases discussed for several different systems, as well as free downloadable appendices. Additional study materials are provided with the purchase of a separate website access card, but I did not have the opportunity to review them.

Usefulness for RIM
Database Systems Design, Implementation and Management could serve as a good introduction to relational database management systems for the records and information management (RIM) professional who is familiar with them at the 10,000-foot level but needs to gain additional practical knowledge. It is written as a textbook, however, so there are no
answers provided for the quizzes at the end of each chapter, and some topics that might benefit from a more in-depth discussion seem to be left to the instructor. A different book might be more appropriate for self-study, but this one would be a good supplement for independent study.

Because of the degree of detail provided, this book is probably inappropriate for someone interested in gaining just high-level familiarity with the functioning of various database systems, rather than acquiring a practical understanding of relational database development and management. END

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