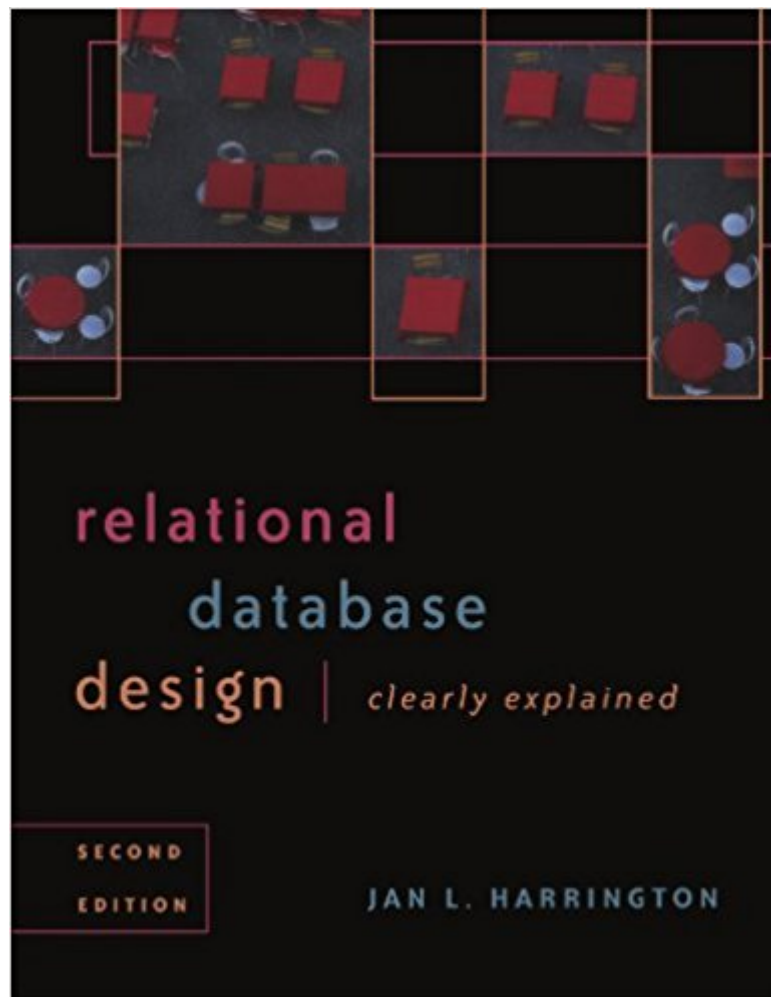# Relational Database Design Clearly Explained, Second Edition (The Morgan Kaufmann Series In Data Management Systems)

relational
database
design | clearly explained

SECOND
EDITION

JAN L. HARRINGTON

Synopsis

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.

Book Information

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Customer Reviews

I've been programming for quite a while, but up until a couple of years ago, I had never done

anything with databases. When I switched jobs and needed to learn, I asked a few friends where to begin. At the time they recommended "SQL For Dummies" and "Oracle8: The Complete Reference" -- starting with the first and then diving in to the second.This didn't work so well for me. SQL For Dummies is actually a reasonable review of constructing basic SQL statements, but it didn't provide me with any conceptual framework for thinking about databases. The complete Oracle8 reference book certainly seemed to have a lot of material in it, but it was a bit too daunting (1300 pages) for a tutorial. I learned the basics that I needed to learn and have gradually assimilated things since then.Recently I came across this book at and found that it had pretty good customer reviews, so I thought I'd check it out. It is excellent. This is the book I wish I had had from day one.The book begins by reviewing basic concepts of databases and database design, plus by going over the various documents and diagrams that typically go along with databases. Then it briefly reviews the SQL one would use to create databases. And it ends with three detailed database design examples. These examples are pretty substantial -- in each case I read the description and thought "this is too complex a database to cover here" but the author broke the problem in comprehensible pieces, drew entity-relationship diagrams, and worked through the design.I highly recommend this book to people just starting out with databases. You will probably need to follow it with something that teaches you more SQL, but that should follow, not preceed, an introduction like this.

The author claims to have condensed a college course down into a single 300 page book, which I would have trouble believing except that she apparently skipped over 1/2 of the course content. I do not think that this is a good book to explain Relational Databases, OR Database Design. The author gives a cursory explanation of each, then dives into an example DB with many hard-to-understand tables.After confusing the reader with a 200,000 foot overview of Databases, the author goes into a very detailed explanation of the normalization process, which is IMPOSSIBLE to understand, and a long, drawn-out review of the theory of how a Relational Database Server should work, with no explanation of how current products do or do not adhere to this theory.The author spends quite a bit of time plugging a Macintosh-Based ER system, all the way down to a section explaining the drawing environment of that *piece* of software.Overall, this book was a waste of time. Buy Database Design for Mere Mortals by Michael J. Hernandez , a MUCH better book.

Jan Harrington accomplishes her task neatly, to clearly explain relational database design. I was very pleased with how quickly I was able to grasp fundamental concepts and I would recommend this book to anyone getting started with databases. I had hoped that the book would be perfect and

would clearly explain every relevant concept but that was not the case. When it came to the three interesting case studies that concluded the book, the author used concepts that were never explained - control-break layout, parent entities, ISAM file organization, repeating groups, reblocking files. While not understanding these concepts did not stop me from grasping the fundamentals of database design it was frustrating and made clear that this is an introductory text and not the last book to read on the subject. There were also about a dozen typos but these were disconcerting rather than misleading.

In a book named "Clearly Explained" , you'd expect to have a minimum of confusion. That is not the case with this book.Page(25) for example:"Other many-to-many relationships include that between a child and her biological mother. A woman may have zero, one or more biological daugthers; a daugther has only one biological daughter"Please correct me if I'm wrong but that does not describe a many-to-many relationship. There are other confusing examples in the book (pg 33 for example).I found myself reading sections over and over because the examples were not that clear. Coupled with the errors, I found this book to be less than helpful.

It is typical in DB texts to error in the examples, such as to assume all phone numbers only need 7 INTs (we all live in the same area code, and country, right?) However, in this book there are so many serious inaccuracies that I found myself doubting all of the information presented. A quick example, pp4 on page 24 and again on pp2 page 25, on "one-to-many" relationships, "Other many-to-many relationships include that between a child and her biological mother." Uh, is she talking multiple embryonic transplants?The information that *is* explained correctly is explained in a baffling, overly academic manner. For example, in explaining one-to-one relationships, "If we have two instances of two entities (A and B) called Ai and Bi, then a one-to-one relationship exists if at all times Ai is related to no instances of entity B and Bi is related to no instances of entity A or one instance of entity A." Right... way to painfully obfuscate a self-explanatory concept.The author makes assertions, promising to back them up further in the book, and then never does so. She goes on to build additional conceptual elements based on these unsubstantiated assertions. You'll find yourself both distrusting the assertions, due to the numerous errors, but required to "believe" just to get to the next concept.All around awful attempt.

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