

Amazon.com

“Product/Book Information Management
Business Process”



Exam 1 Solution Package

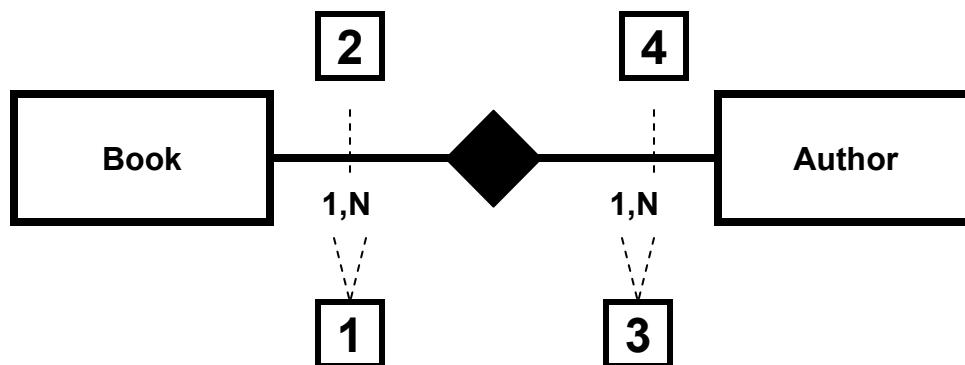
ACCT 302
Spring 2009

1 We record at least one author for each book.

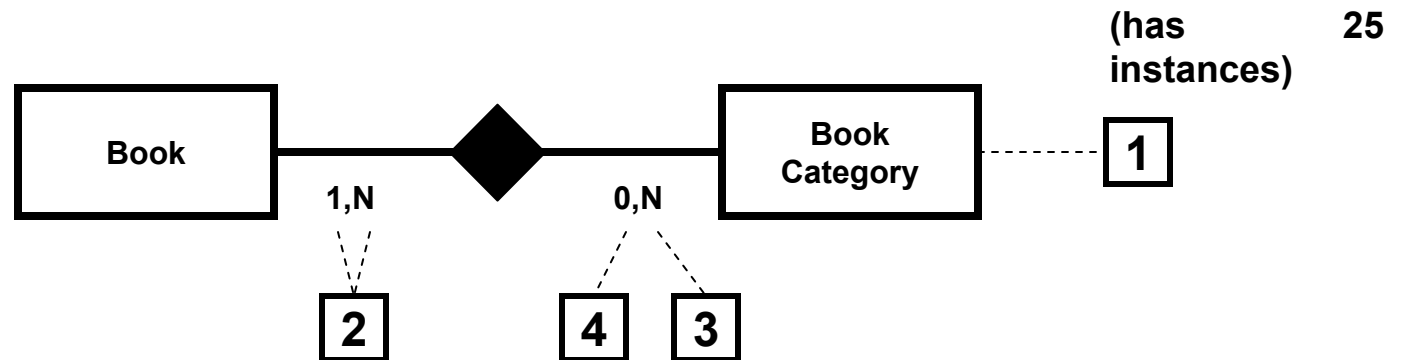
2 Some books have more than ten authors; this is especially the case for computer books.

3 We only consider authors that have published at least one book.

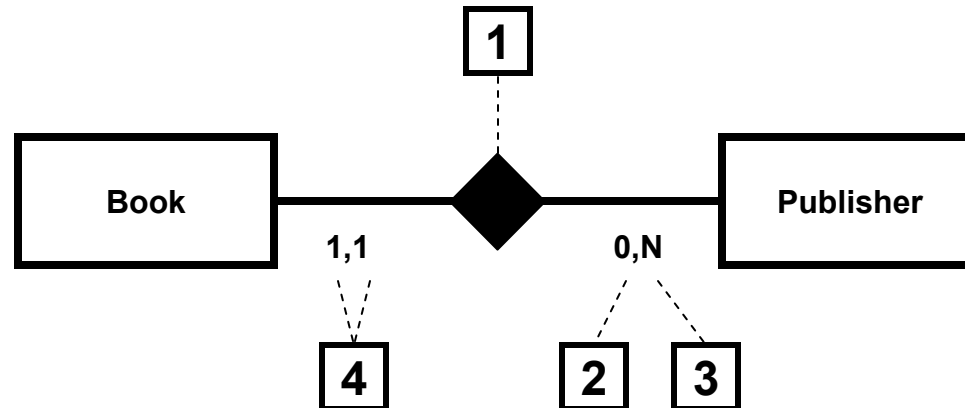
4 We sell all seven Harry Potter books by J.K. Rowling (author).



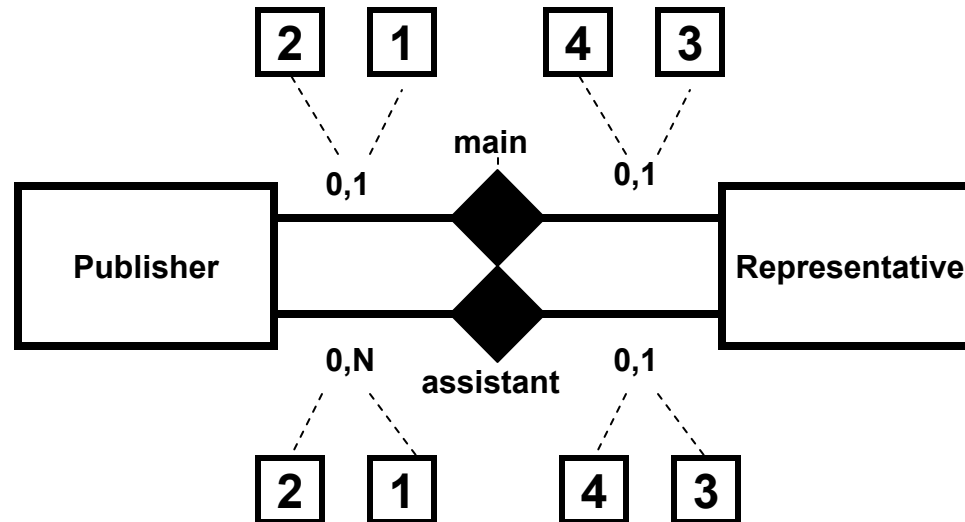
- 1 We categorize books into 25 categories – children, history, fiction, business, cardinalities, IT (Information Technology), etc.
- 2 We record between one and three categories for each book (at least one; at most three).
- 3 We currently sell more than 500 books of category “children.”
- 4 It is possible to have a category for which there are currently no books.



- 1 We also record a book's publisher (publishing company).
- 2 We would like to record information about as many publishers as possible. Stated differently, we might include a publisher even when we don't sell books from that publisher.
- 3 We currently have more than 1000 titles (books) from Addison-Wesley (a publisher) for sale.
- 4 There is exactly one publisher for each book.



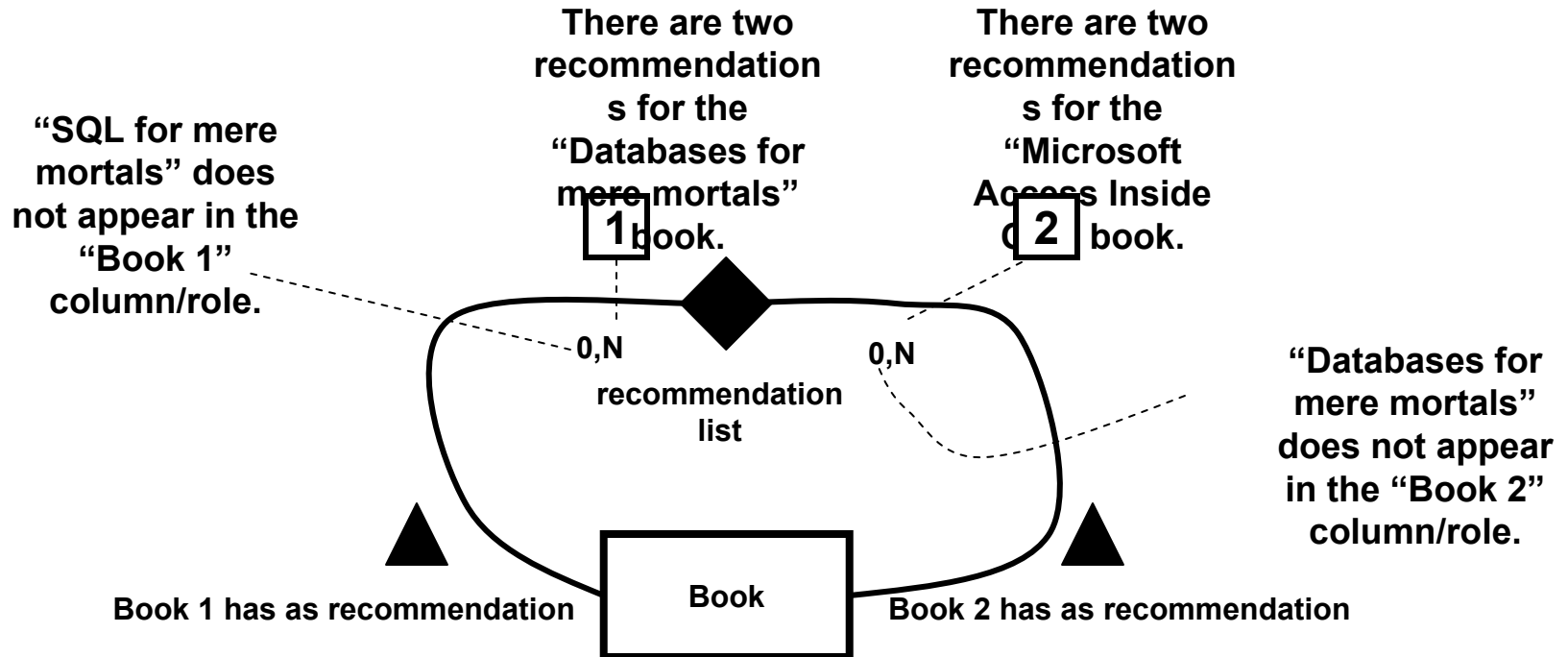
- 1 We ask each publisher for one main representative and a number of assisting representatives.
- 2 but we don't have any representatives for Microsoft Press (a publisher) yet.
- 3 Each representative works for (is associated with) only one publisher.
- 4 A representative is either a main representative or an assistant representative.



Book 1	Book2
Databases for mere mortals	SQL for mere mortals
Databases for mere mortals	Microsoft Access Inside Out
The Complete Reference to Microsoft Access	Microsoft Access Inside Out

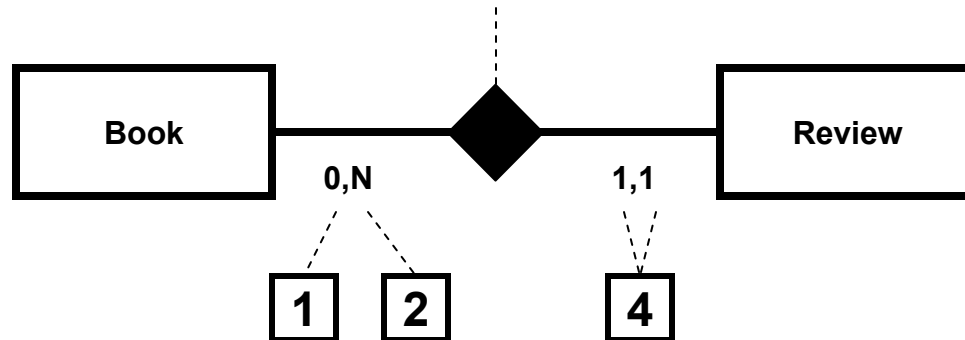
1

2



5

- 1 Not all books have reviews
- 2 but most books have many reviews.
- 3 There is exactly one book per review.

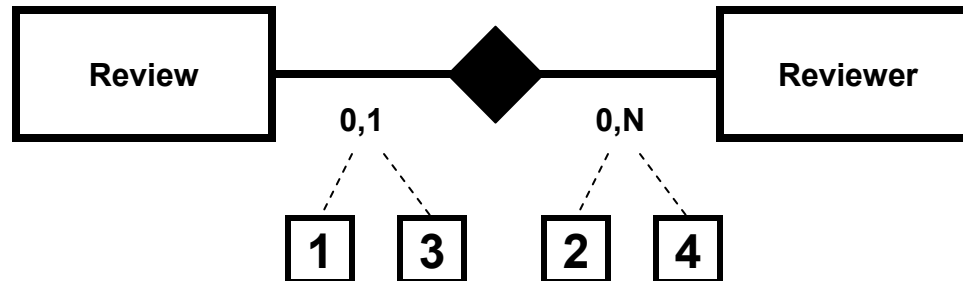


1 Most reviews are anonymous.

2 It is possible for a reviewer to create an account without submitting reviews.

3 However, most reviewers submit many reviews after they have created an account.

4 There is at most one reviewer per review.



1

Expert reviewers are asked to write reviews for specific books (and we record that information in the database). Each “expert reviewer” is asked to review at least one book.

2

We have asked Jimmy Buffet, an expert reviewer, to review each of the Harry Potter books (i.e., seven books).

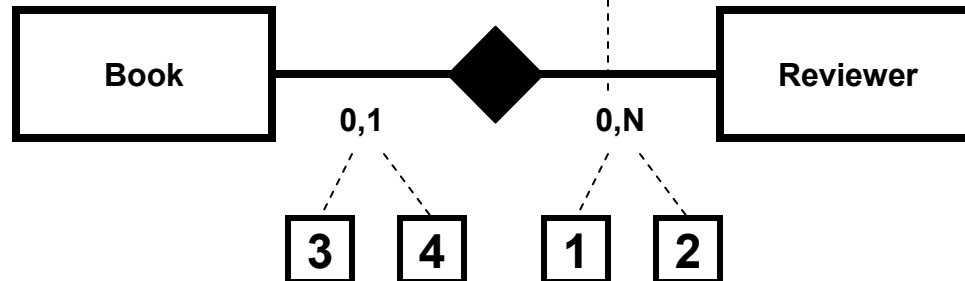
3

No expert reviewer has been assigned to “What Not How. The Business Rules Approach to Application Development,” the latest book by C.J. Date (an author).

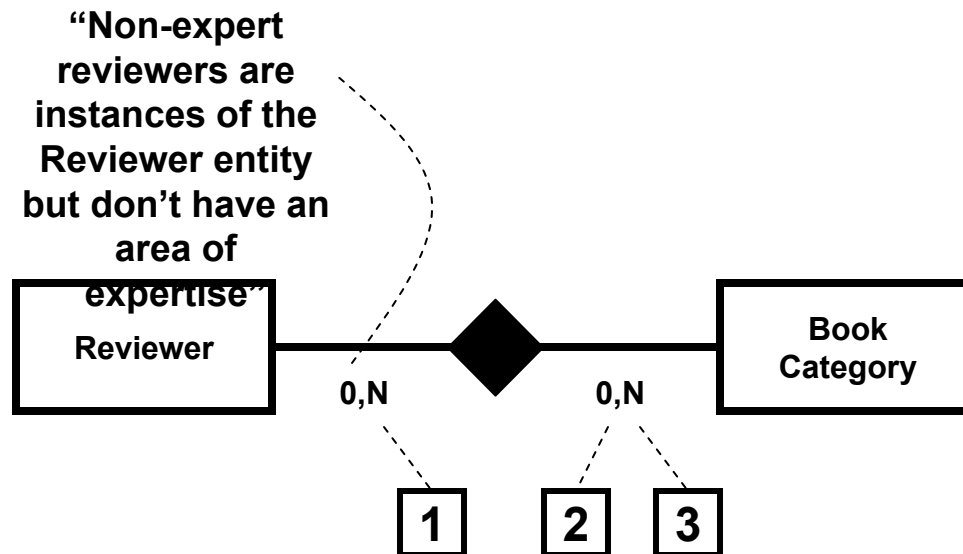
4

We never assign more than one expert reviewer to the same book.

“Non-expert reviewers are instances of the Reviewer entity but are not asked to write reviews for specific books”



- 1 Each expert reviewer has at least one area of expertise.
- 2 We don't have an expert reviewer for the (book) category "cardinalities" yet.
- 3 We have more than twenty expert reviewers for the "children" (book) category (area of expertise).



1 We further record the ranking per book per list.

2 We like to keep a history for each list, so we also record the period to which the ranking applies. The period is defined by a start date and an end date. For example “the Historian” (a book) was ranked number 2 (ranking) on the “Top Sellers” list (a list) in March (the period between 3/1/2009 and 3/31/2009).

3 Not all books appear on a list. Actually most don't.

4 There is at least one book for each list.

