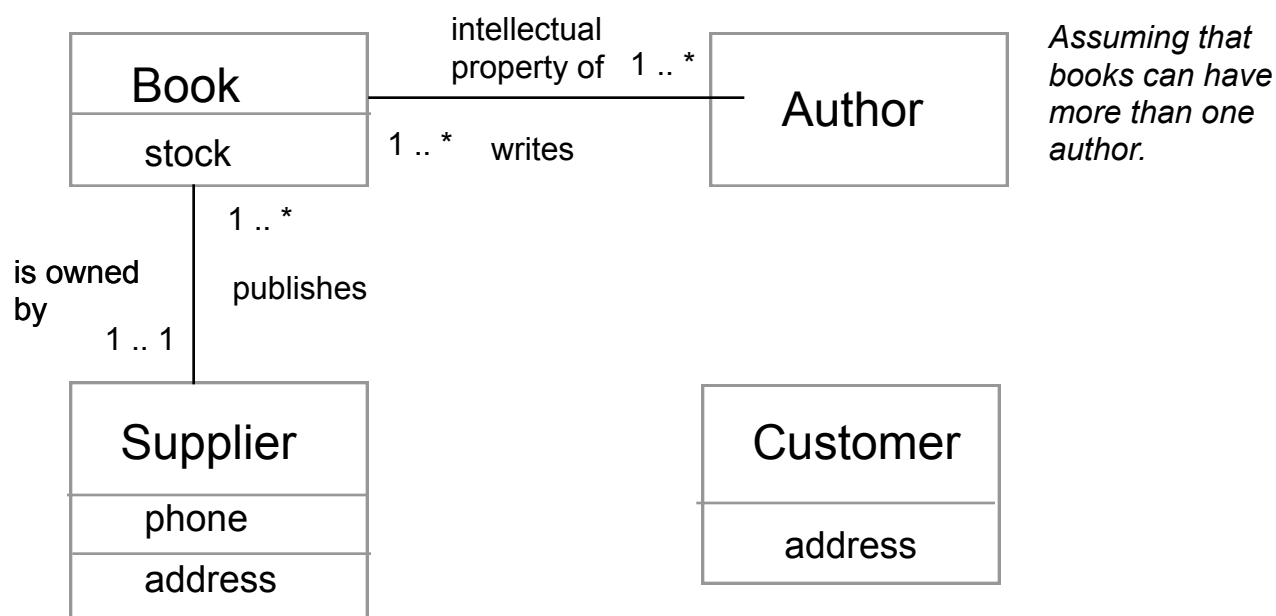


## ER Diagram for Bookstore

### ER Diagram for Bookstore

#### ER Diagram



A single book is the intellectual property of between one and many authors. A single author writes between one and many books. A single book is owned by a single supplier. A single supplier publishes between one and many books. Customer is not connected with book/supplier yet.

#### Relational Vocabulary

Book **has\_and\_belongs\_to\_many** Author  
 Author **has\_and\_belongs\_to\_many** Book  
 Supplier **has\_many** Book  
 Book **belongs\_to** Supplier

## Relational Tables

| suppliers |                  |              |                   |
|-----------|------------------|--------------|-------------------|
| id        | name             | phone        | address           |
| 20        | Simon & Schuster | 800-162-3458 | 124 Sandcastle Ln |
| 30        | HarperCollins    | 800-245-0956 | 489 Chisholm Trl  |
| 40        | Penguin          | 800-784-9968 | 1289 Topaz St     |

| authors |                |
|---------|----------------|
| id      | name           |
| 50      | John Green     |
| 60      | David Levithan |
| 70      | George Orwell  |

| customers |                    |                 |
|-----------|--------------------|-----------------|
| id        | name               | address         |
| 80        | Jennifer Hernandez | 786 Sunshine Rd |
| 90        | Justin Wong        | 8764 E. Elm St  |

| books |                            |       |             |
|-------|----------------------------|-------|-------------|
| id    | name                       | stock | supplier_id |
| 100   | Will Grayson, Will Grayson | 40    | 20          |
| 110   | 1984                       | 99    | 40          |
| 120   | Animal Farm                | 15    | 30          |

| authors_books |         |
|---------------|---------|
| author_id     | book_id |
| 50            | 100     |
| 60            | 100     |
| 70            | 110     |
| 70            | 120     |

**Brainstorming some concrete instances:** *Will Grayson, Will Grayson* is a book written by John Green and David Levithan. Both *1984* and *Animal Farm* were written by the same author George Orwell. Publishers for these books include Simon & Schuster, HarperCollins, and Penguin.

Two book store customers bought these books: Jennifer Hernandez and Justin Wong.