

Online Book Store

1. Books are represented by, ISBN, Title, Author, Publisher, Edition, Publication Year, Price, Short Reviews if available, Table of Contents if available, an cover photo of the book, category (e.g., computer science -> operating systems)

Book
isbn
title
author
publisher
edition
publicationYear
price
reviews
contents
coverPhoto
popularity
reviews
category

Category
id
name
subCategory

2. Customers will use a web based interface to browse books based on categories, search books using keywords. Initially only the title and author of the book(s) are displayed, on click other attributes are displayed. Customers can buy books using their e-purse. The store also displays the number of copies of the book left in stock. Out of stock books cannot be purchased immediately, but can be ordered.

Customer
identity
fullname
age
location
interests
email
epurse
username
password
isAdmin

3. Customers create accounts in the book store. Each account contains customer profile information: name, age, geographical location, categories of interest, email. Each account has an e-purse. Customers can specify the amount of money to be deposited with the e-purse. Profile and e-purse information can be updated by the customer.

Customers will login to the book store using an account name and password.

4. All online sales data are recorded in the database with timestamp.

Sale
saleId customer book timestamp

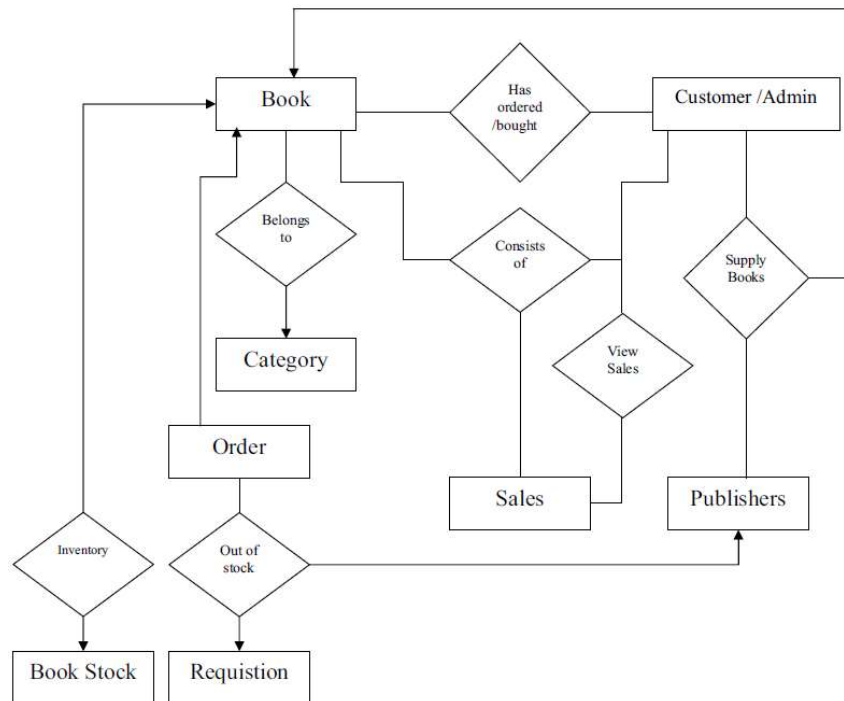
5. Owner of the bookstore can give requisition for buying of books to publishers based on the amount of stock remaining. For each book the owner maintains a stock which is at least the number of copies of the book sold over last 3 months. Books ordered by some customer are immediately requisitioned. Requisitions are placed in a requisition table. The publishers inspect the table on the 1st of every month and immediately supply the books. Once a book is supplied it is cleared from the requisition table.

BookStock
isbn copiesLeft copiesSold

Requisition
requisitionId isbn publisher

Publisher
publisherId name logo

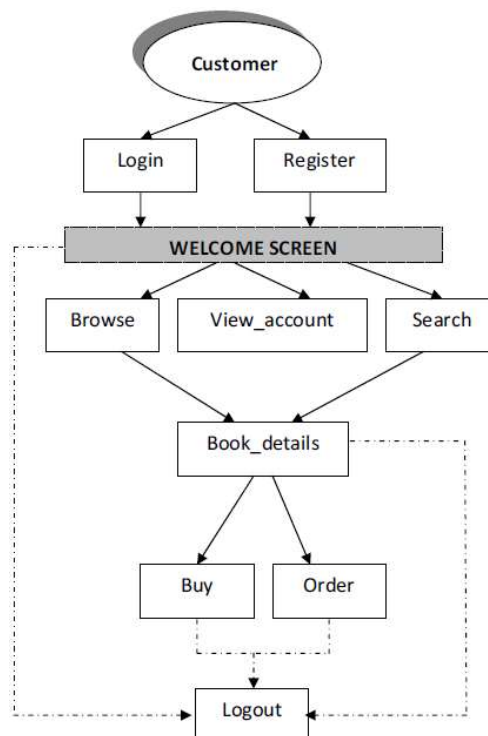
Order
orderId customer book



6. We can divide the site users in mainly three categories:

I. Customers

For already registered Customers, we have a login window on the homepage of the bookstore. If the user is not registered he or she can sign up for an account by just clicking on the register link which takes him direct to the Registration page



II. Admin

Admin can login into the system using his username and password through the homepage of the bookstore. We have hardcoded the admin username and password for simplicity. When admin clicks on the Update Requisition button or link, the requisition is fetched and shown on table. Admin can check out the books that have been delivered to the doorstep. When he clicks on the commit button all the changes are updated (entries are deleted from the requisition table and at the same time order table is checked if there was any order pending against that book, if yes, one copy of the book is shipped to the user who had placed the order).

Admin can also enter the details of any new book into the database. This capability was included just for convenience purpose while checking the complete system.

Admin can also view sales done by the store at any time.

III. Publishers

We have assumed that publishers do know their usernames and passwords beforehand. They can login into the bookstore using their usernames and passwords and they are directed to a publisher welcome page where they can access the controls provided which are update requisition and logout. When publisher clicks on the update requisition option, dynamically generated page shows requisitions which are for that particular publisher. Publisher can check out the requisitions that he wants to fulfill at that time.