

# Design of an Online Book Purchasing Platform with .Net and SQL Server

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## Abstract

With the rapid development of computer science and the popularization of Internet, it has become a social production and daily life. They narrowed the distance from the world, but also give our life to bring the convenience. Therefore, e-commerce came into being and Today, e-commerce has become an important part of business activities, and changed the way we live in a certain extent. The entity bookstore in order to adapt to the development of the times, the implementation of information management and expand its sales channels, the design of a simple operation, friendly interface, the books management system management system is imperative. design of a simple operation, friendly interface, the books management system management system is imperative. This system uses Microsoft Visual Studio 2010 as the development platform, using ASP.NET and C# technology, using SQL Sever 2008 database to manage the NET and C# technology, using SQL Sever 2008 database to manage the data information, the establishment of a B/S structure of the book platform, provide a more broad market for the majority of small bookstores, but also The establishment of a B/S structure of the book platform, provide a more broad market for the majority of small bookstores, but also provide more choices for the consumer.

## Keywords

Online Bookshop; ASP.NET; Visual Studio 2010; SQL Sever 2008.

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## 1. Introduction

With the development of human needs and the arrival of the information society, a new type of economic transaction activity - e-commerce came into being, which has changed the traditional form of business shopping, making the development of social commerce across the limits of time and space, and in a short period of time has had a significant impact on the world economic situation. In China, the development space and prospects of e-commerce are favorable, and it is no longer a course on paper in our classes, but has come into our lives practically. Therefore, the website has become a new way for enterprises to carry out e-commerce, which can bring better publicity and provide security for their marketing.

## 2. Related Jobs

In 1994, Bezos founded the Amazon online bookstore in Seattle. Four years later, the online bookstore has 4.5 million customers, \$610 million in sales, a stock market value of more than \$10 billion, and control of 80% of the online book market in the U.S. It is now the largest and most recognized online bookstore in the world.

At present, many bookstores in China still only use the traditional brick-and-mortar bookstore business model, but the high operating costs of brick-and-mortar stores and the large online book-buying platforms only Amazon, Dangdang and Jingdong, small and medium-sized bookstores are

under the two-way attack of large online websites and large bookstores such as Xinhua, and have little room for survival. Therefore, if small and medium-sized bookstores want to survive more competitively, developing online bookstores, increasing publicity, broadening their market scope and reducing rental costs are the ways to survive [3].

### 3. System Design

#### 3.1 System Architecture Design

This system uses a common design structure and a development structure with a direct connection between the interface and the database. The result of the operation can be fed back to the server directly through the operation on the page seen.

The user interface, which is the interface where the user connects to the server. In this layer, the user can operate with what is displayed in the interface, and the result of the operation will be displayed on this page.

The database, which is used to store the data information needed by the system. The data that is displayed in the user interface is stored in the database.

Frontend: User registration -> User login -> Search books -> View book information -> Add the book you want to buy to the shopping cart -> Place an order for the book.

Backstage: Admin Login -> Admin Management -> Category Management -> Product Management -> Order Management -> User Management -> Admin Logout.

#### 3.2 Design of the Database

This design uses SQL Server 2008 to design a database to hold the data needed in the system.

The system database is named buy. 6 tables are created in the database for better information management and recall, namely user, bigsort, smallsort, orders, goods and d\_users.

**Table 1.** Administrator table user

Listings	Data Type	Allow Null values	Description
id	int	No	Number
name	nvarchar(20)	Yes	Administrators
pwd	nvarchar(50)	Yes	Password
createtime	nvarchar(20)	Yes	Creation time

**Table 2.** Category table bigsort

Listings	Data Type	Allow Null values	Description
id	int	No	Number
name	nvarchar(20)	Yes	Category Name

**Table 3.** Subcategory table smallsort

Listings	Data Type	Allow Null values	Description
id	int	No	Number
name	nvarchar(20)	Yes	Sub-category Name
bigtypeid	Int	Yes	Large category id

**Table 4.** Order formsorders

Listings	Data Type	Allow Null values	Description
id	int	No	Number
bookname	nvarchar(50)	Yes	Book Name
price	int	Yes	Price
orderpeople	nvarchar(50)	Yes	Contact Name
tel	nvarchar(50)	Yes	Phone
email	nvarchar(50)	Yes	Mailbox
address	nvarchar(50)	Yes	Address
createtime	nvarchar(50)	Yes	Order time
num	int	Yes	Quantity
status	nvarchar(50)	Yes	Order Status
userid	int	No	User id
goodsid	int	No	Book id

**Table 5.** Commodity tablegoods

Listings	Data Type	Allow Null values	Description
id	int	No	Number
name	nvarchar(20)	Yes	Book Name
price	int	Yes	Price
outime	nvarchar(18)	Yes	Sale Time
createtime	nvarchar(18)	Yes	Production time
comment	text	Yes	Remarks
pic	nvarchar(20)	Yes	Pictures

**Table 6.** User table d\_users

Listings	Data Type	Allow Null values	Description
uid	int	No	Number
username	nvarhar(50)	Yes	User Name
trurname	nvarhar(50)	Yes	Real Name
password	nvarhar(50)	Yes	Password
question	nvarhar(50)	Yes	Question
answer	nvarhar(50)	Yes	Answer
email	nvarhar(50)	Yes	Email
sex	nvarhar(50)	Yes	Gender
QQ	nvarhar(50)	Yes	QQ number
Address	nvarchar(200)	Yes	Address
Telephone	nvarhar(50)	Yes	Cell phone number

## 4. Implementation of the System

The system uses ASP.NET + SQL Server 2008 development technology. Before the system runs for the first time, the database needs to be configured as follows.

- (1) Attach the database to the database management software, set the user name and password, and make sure you can access the database correctly.
- (2) Set the database access username and password in the web.config file.
- (3) Install the .net architecture program.

Administrators can manage books by adding, modifying and deleting in this module. This module is limited to administrator operation to prevent confusion of books. Modify the existing books as shown in Figure 1 below.

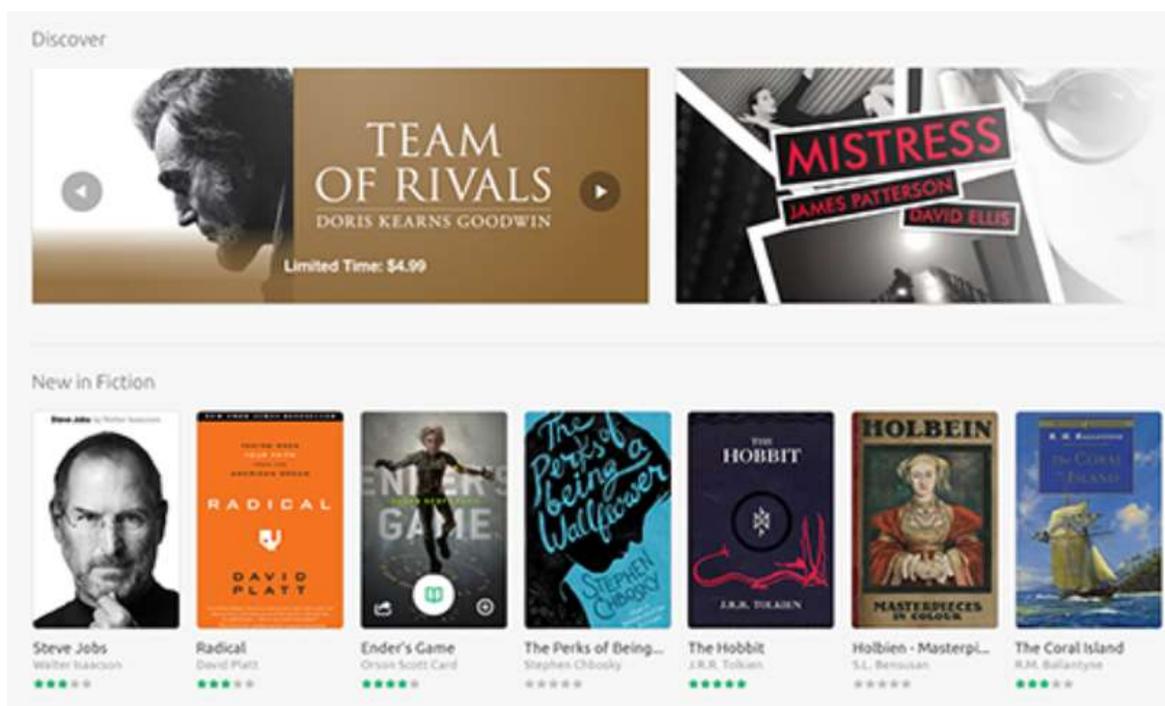


Figure 1. Modifying books

## 5. Summary

NET, Visual C#, SQL Server 2008, and B/S architecture to achieve most of the functions of the online book buying platform, intended to provide a low-cost, easy-to-use online book selling system for small and medium-sized brick-and-mortar bookstores, while enabling every book buyer to select and buy the books they want at home through the Internet without having to leave home.

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