ABSTRACT

A Book Information System is a database that stores information about books, including their title, author, publication date, ISBN, and genre. The system may also include information about the publisher, the format of the book (e.g., hardcover, paperback), the number of pages, and a summary or excerpt of the book's contents. This information can be used for various purposes such as cataloging a library's collection, providing search functionality to find books by specific criteria, or for displaying book recommendations based on a user's reading history. The system may also include features such as user reviews, ratings, and the ability to place holds or purchase the book online. The design of a Book Information System can vary depending on the specific needs and requirements of the organization or individual using it.

The book information system is away to view information about any book necessary and buy it if needed. In today's world hundreds of books are publisher every week and a traditional bookstore or library cannot keep track of the large no of books and their details and availability. In an online environment information on multiple books can easily be updated and kept track of. The online Book information system allows users to view the information of the required book and also find a its availability in popular online shopping services. It also allows uses to directly buy the book from the vendor via the website. This is very convenient for book enthusiasts, students and casual readers.

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INTRODUCTION

1.1 Aim of the Project

The main aim of project is to create a platform where one can get the information of the books and can buy it.

1.2 Overview of the Project

This project is useful for those who love to read books. Here, users can search for the books they want and go through the basic details of the books and add to their wish list. Users can also buy the books from the provided link.

1.3 Outcome of the Project

The system will display all the books which were added by the admin. Every book will show the details like title, author name, publisher name, overview and price of the book. Books can be added or deleted by the admin. Based on the interest one can create a wish list and buy books.

1.4 Software Requirements

- Operating System Windows 7/8/10/11
- Front End HTML, CSS
- Back End MySQL
- Tools XAMPP Server

DESIGN

2.1 Schema Diagram

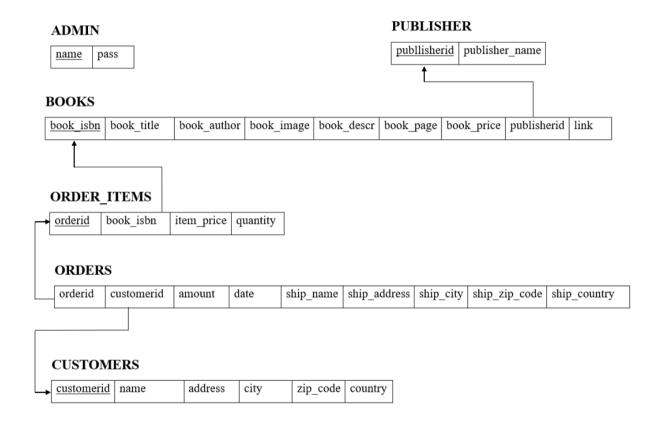


Fig 2.1 Schema Diagram

2.2 E-R Diagram

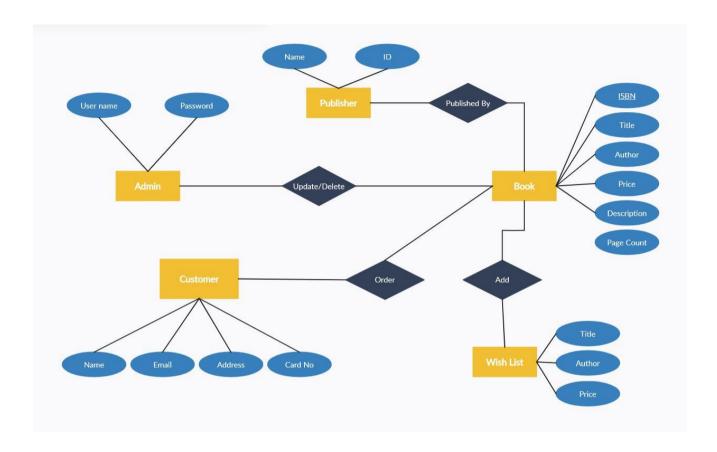


Fig 2.2 E-R Diagram

2.3 Use Case Diagram

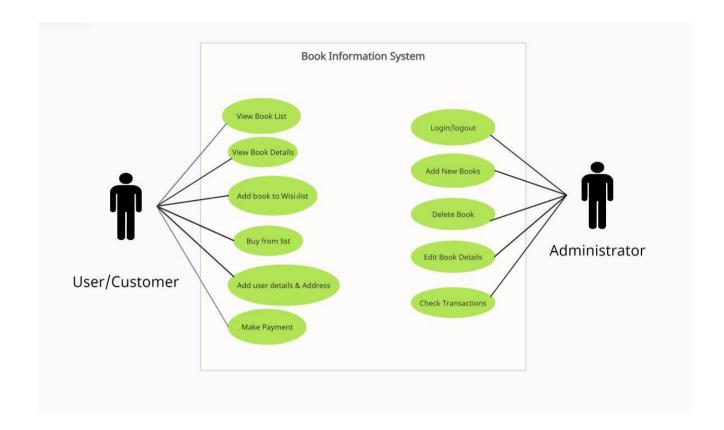


Fig 2.3 Use Case Diagram

2.4 Data Flow Diagram

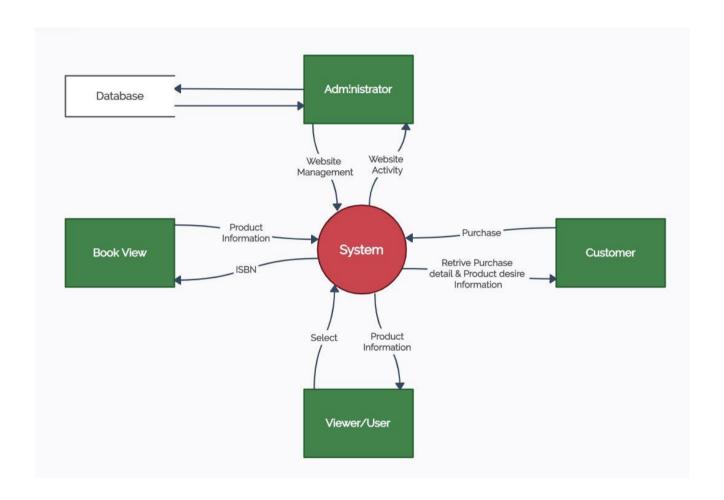


Fig 2.4 Data Flow Diagram

2.5 Sequence Diagram

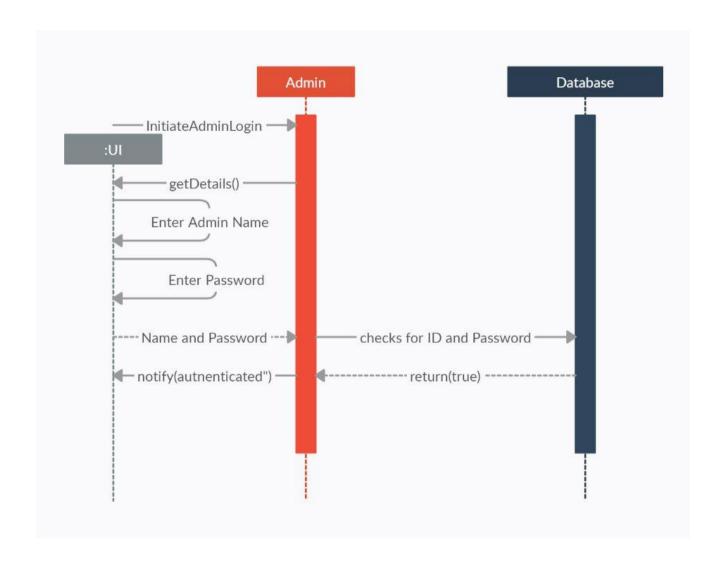


Fig 2.5 Sequence Diagram

IMPLEMENTATION

3.1Description of Tables

3.1.1 Name

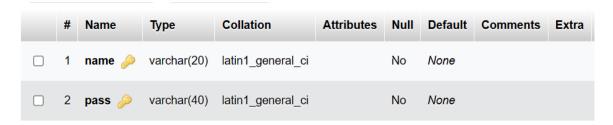


Fig 3.1.1 Name

3.1.2 Books

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	book_isbn 🔑	varchar(20)	latin1_general_ci		No	None		
2	book_title	varchar(60)	latin1_general_ci		Yes	NULL		
3	book_author	varchar(60)	latin1_general_ci		Yes	NULL		
4	book_image	varchar(40)	latin1_general_ci		Yes	NULL		
5	book_descr	text	latin1_general_ci		Yes	NULL		
6	book_page	int(10)		UNSIGNED	Yes	NULL		
7	book_price	decimal(10,2)			No	None		
8	publisherid	int(10)		UNSIGNED	No	None		
9	link	varchar(200)	latin1_general_cs		No	None		

Fig 3.1.2 Books

3.1.3 Customers

#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra
1	customerid 🔑	int(10)		UNSIGNED	No	None		AUTO_INCREMENT
2	name	varchar(60)	latin1_general_ci		No	None		
3	address	varchar(80)	latin1_general_ci		No	None		
4	city	varchar(30)	latin1_general_ci		No	None		
5	zip_code	varchar(10)	latin1_general_ci		No	None		
6	country	varchar(60)	latin1_general_ci		No	None		

Fig 3.1.3 Customers

3.1.4 Orders

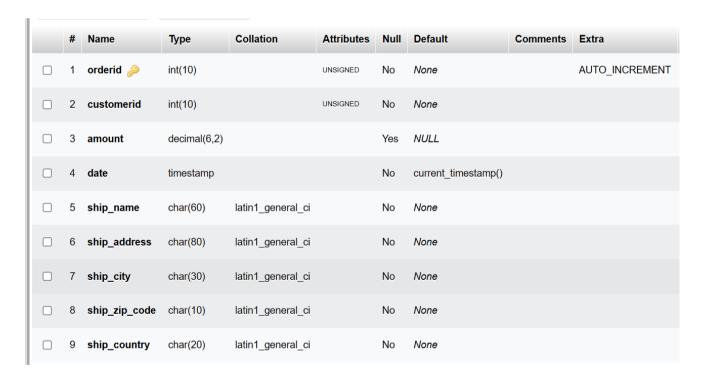


Fig 3.1.4 Orders

3.1.5 Order_items

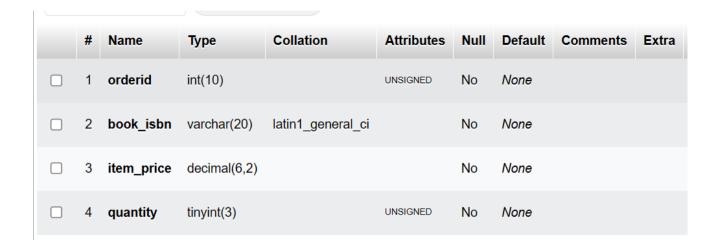


Fig 3.1.5 Order_items

3.1.6 Publisher



Fig 3.1.6 Publisher

3.2 Constraints on Tables

Table BOOKS

- 1. book_isbn Primary Key, Not NULL
- 2. book_title Not NULL
- 3. book_author Not NULL
- 4. book_image Not NULL
- 5. book_descr Not NULL
- 6. publisherid Foreign key reference PUBLISHER(publisherid)

Table ADMIN

- 1. name Primary Key
- 2. pass Not NULL

Table PUBLISHER

- 1. publisherid Primary Key, Not NULL, Auto increment
- 2. publisher_name Not NULL

Table CUSTOMERS

- 1. customerid Primary Key, Not NULL, Auto increment
- 2. name Not NULL
- 3. address Not NULL
- 4. city Not NULL
- 5. zip_code Not NULL

Table ORDER_ITEMS

- 1. orderid Primary key, Not NULL, Auto increment
- 2. book_isbn Foreign key references BOOKS(book_isbn)

Table ORDERS

- 1. ordreid Foreign key references ORDER_ITEMS(orderid)
- 2. customerid Foreign key references CUSTOMERS(customerid)
- 3. amount Not NULL
- 4. date Not NULL

3.3 Back End Implementations

```
-- phpMyAdmin SQL Dump
-- version 5.2.0
-- https://www.phpmyadmin.net/
-- Host: 127.0.0.1
-- Generation Time: Jan 21, 2023 at 03:24 PM
-- Server version: 10.4.27-MariaDB
-- PHP Version: 8.0.25
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";
-- Database: 'bis'
-- Table structure for table `admin`
CREATE TABLE `admin` (
 'name' varchar(20) NOT NULL,
 'pass' varchar(40) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_general_ci;
-- Dumping data for table `admin`
INSERT INTO 'admin' ('name', 'pass') VALUES
 ('admin', 'd033e22ae348aeb5660fc2140aec35850c4da997');
-- Table structure for table `books`
CREATE TABLE `books` (
 'book_isbn' varchar(20) NOT NULL,
 `book_title` varchar(60) DEFAULT NULL,
 `book_author` varchar(60) DEFAULT NULL,
 `book_image` varchar(40) DEFAULT NULL,
 `book_descr` text DEFAULT NULL,
 `book_page` int(10) UNSIGNED DEFAULT NULL,
 `book_price` decimal(10,2) NOT NULL,
 `publisherid` int(10) UNSIGNED NOT NULL,
 `link` varchar(200) CHARACTER SET latin1 COLLATE latin1_general_cs NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_general_ci;
```

-- Dumping data for table `books` INSERT INTO 'books' ('book isbn', 'book title', 'book author', 'book image', 'book descr', 'book page', `book_price`, `publisherid`, `link`) VALUES ('978-0-321-94786-4', 'Learning Mobile App Development', 'Jakob Iversen, Michael Eierman', 'mobile_app.jpg', "Now, one book can help you master mobile app development with both market-leading platforms: Apple's iOS and Google's Android. Perfect for both students and professionals, Learning Mobile App Development is the only tutorial with complete parallel coverage of both iOS and Android. With this guide, you can master either platform, or both - and gain a deeper understanding of the issues associated with developing mobile apps.\r\n\r\n You'll develop an actual working app on both iOS and Android, mastering the entire mobile app development lifecycle, from planning through licensing and distribution.\r\n\r\n Each tutorial in this book has been carefully designed to support readers with widely varying backgrounds and has been extensively tested in live developer training courses. If you're new to iOS, you'll also find an easy, practical introduction to Objective-C, Apple's native language.", 464, '7500.00', 6, 'https://www.amazon.in/Learning-Mobile-App-Development-Hands/dp/032194786X'); -- Table structure for table `customers` **CREATE TABLE** `customers` (`customerid` int(10) UNSIGNED NOT NULL, 'name' varchar(60) NOT NULL, 'address' varchar(80) NOT NULL, 'city' varchar(30) NOT NULL, 'zip code' varchar(10) NOT NULL, `country` varchar(60) NOT NULL) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_general_ci; -- Dumping data for table `customers` INSERT INTO `customers` (`customerid`, `name`, `address`, `city`, `zip_code`, `country`) VALUES (3, 'test', '123 test', '12121', 'test', 'test'); -- Table structure for table `orders` CREATE TABLE `orders` (`orderid` int(10) UNSIGNED NOT NULL, `customerid` int(10) UNSIGNED NOT NULL, `amount` decimal(6,2) DEFAULT NULL, `date` timestamp NOT NULL DEFAULT current_timestamp(), `ship_name` char(60) NOT NULL, `ship_address` char(80) NOT NULL, `ship_city` char(30) NOT NULL,

`ship_zip_code` char(10) NOT NULL,
`ship_country` char(20) NOT NULL

) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_general_ci;

```
-- Dumping data for table `orders`
INSERT INTO `orders` (`orderid`, `customerid`, `amount`, `date`, `ship_name`, `ship_address`, `ship_city`,
`ship_zip_code`, `ship_country`) VALUES
 (3, 3, '20.00', '2015-12-03 19:34:21', 'test', '123 test', '12121', 'test', 'test');
-- Table structure for table `order_items`
CREATE TABLE `order_items` (
 `orderid` int(10) UNSIGNED NOT NULL,
 'book_isbn' varchar(20) NOT NULL,
 `item_price` decimal(6,2) NOT NULL,
 `quantity` tinyint(3) UNSIGNED NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_general_ci;
-- Dumping data for table `order_items`
INSERT INTO 'order_items' ('orderid', 'book_isbn', 'item_price', 'quantity') VALUES
(1, '978-1-49192-706-9', '400.00', 1);
-- Table structure for table `publisher`
CREATE TABLE `publisher` (
 `publisherid` int(10) UNSIGNED NOT NULL,
 `publisher_name` varchar(60) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_general_ci;
-- Dumping data for table `publisher`
INSERT INTO 'publisher' ('publisherid', 'publisher name') VALUES
(1, 'Wrox'), (2, 'Wiley'), (3, "O'Reilly Media");
-- Indexes for dumped tables
-- Indexes for table `admin`
ALTER TABLE 'admin'
 ADD PRIMARY KEY ('name', 'pass');
```

```
-- Indexes for table `books`
ALTER TABLE `books`
 ADD PRIMARY KEY ('book_isbn');
-- Indexes for table `customers`
ALTER TABLE `customers`
 ADD PRIMARY KEY (`customerid`);
-- Indexes for table `orders`
ALTER TABLE `orders`
 ADD PRIMARY KEY ('orderid');
-- Indexes for table `publisher`
ALTER TABLE `publisher`
 ADD PRIMARY KEY (`publisherid`);
-- AUTO_INCREMENT for dumped tables
-- AUTO_INCREMENT for table `customers`
ALTER TABLE `customers`
 MODIFY `customerid` int(10) UNSIGNED NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=4;
-- AUTO INCREMENT for table `orders`
ALTER TABLE `orders`
 MODIFY `orderid` int(10) UNSIGNED NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=5;
-- AUTO_INCREMENT for table `publisher`
ALTER TABLE `publisher`
 MODIFY `publisherid` int(10) UNSIGNED NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=7;
COMMIT;
```

3.4 Front End Implementations

3.4.1 Header

```
<!DOCTYPE html>
<html lang="en">
 <head>
  <meta charset="utf-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title><?php echo $title; ?></title>
  k href="./bootstrap/css/bootstrap.min.css" rel="stylesheet">
  k href="./bootstrap/css/bootstrap-theme.min.css" rel="stylesheet">
  k href="./bootstrap/css/jumbotron.css" rel="stylesheet">
 </head>
 <body>
  <nav class="navbar navbar-light" style="background-color: #E1F5FE;">
   <div class="container">
     <div class="navbar-header">
     <button type="button" class="navbar-toggle collapsed" data-toggle="collapse" data-target="#navbar" aria-
expanded="false" aria-controls="navbar">
      <span class="sr-only">Toggle navigation</span>
      <span class="icon-bar"></span>
      <span class="icon-bar"></span>
       <span class="icon-bar"></span>
     </button>
     <a class="navbar-brand" href="index.php"><span class="glyphicon glyphicon-home"></span>&nbsp; Book-
IS</a>
    </div>
    <!--/.navbar-collapse -->
    <div id="navbar" class="navbar-collapse collapse">
     <!-- link to books.php -->
         <a href="books.php"><span class="glyphicon glyphicon-book"></span>&nbsp; Books </a>
        <!-- link to publiser_list.php -->
         <a href="publisher_list.php"><span class="glyphicon glyphicon-pencil"> </span> &nbsp;
        Publisher</a>
        <!-- link to myList -->
        <a href="myList.php"><span class="glyphicon glyphicon-book"></span>&nbsp; Wish List</a>
        <!-- link to admin login -->
        <a href="admin.php" title="Admin Settings"><span class="glyphicon glyphicon-cog"></a>
</span>&nbsp;</a>
```

```
<!-- link to contacts.php -->
       <a href="contact.php" title="Contacts"><span class="glyphicon glyphicon-phone-alt"></a>
</span>&nbsp;</a>
      </div>
   </div>
  </nav>
  <?php
   if(isset($title) && $title == "Index") {
  ?>
  <!-- Main jumbotron for a primary marketing message or call to action -->
  <div class="jumbotron" style="background-color: #e3f2fd;">
   <div class="container" >
    <h1>Book Information System</h1>
    This site has been made using PHP with MYSQL (procedure functions)!
    The layout use Bootstrap to make it more responsive. It's just a simple web!
   </div>
  </div>
  <?php } ?>
  <div class="container" id="main">
```

3.4.2 Index

```
<?php
 session_start();
 Scount = 0;
 $title = "Index";
 require_once "./template/header.php";
 require_once "./functions/database_functions.php";
 $conn = db_connect();
 $row = select4LatestBook($conn);
?>
   Latest books
   <div class="row">
    <?php foreach($row as $book) { ?>
    <div class="col-md-3">
     <a href="book.php?bookisbn=<?php echo $book['book_isbn']; ?>">
      <img class="img-responsive img-thumbnail" src="./bootstrap/img/<?php echo $book['book_image']; ?>">
     </a>
    </div>
    <?php } ?>
   </div>
<?php
 if(isset($conn)) {mysqli_close($conn);}
 require_once "./template/footer.php";
```

3.4.3 Admin

```
<?php
  $title = "Administration section";
  require_once "./template/header.php";
?>
  <form class="form-horizontal" method="post" action="admin_verify.php">
    <div class="form-group">
      <lase| col-md-4">Name</label>
      <div class="col-md-4">
         <input type="text" name="name" class="form-control">
      </div>
    </div>
    <div class="form-group">
      <label for="pass" class="control-label col-md-4">Pass</label>
      <div class="col-md-4">
         <input type="password" name="pass" class="form-control">
      </div>
    </div>
    <div class="text-center">
      <input type="submit" name="submit" value="Login" class="btn btn-primary">
    </div>
  </form>
<?php
  require_once "./template/footer.php";
?>
```

RESULT ANALYSIS

4.1 Snapshots

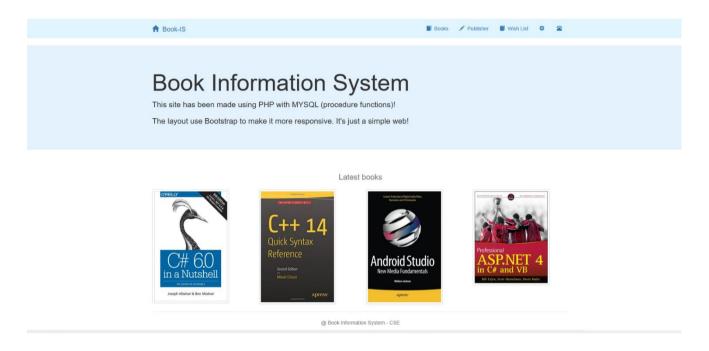


Fig 4.1.1 Home Page



Fig 4.1.2 Admin Login Page

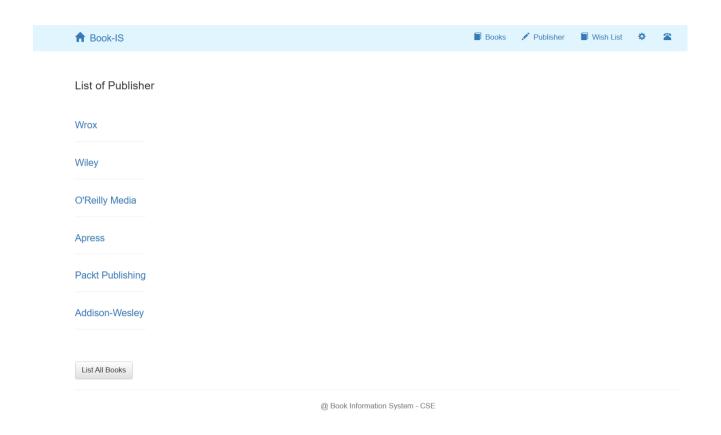


Fig 4.1.3 List of Publishers

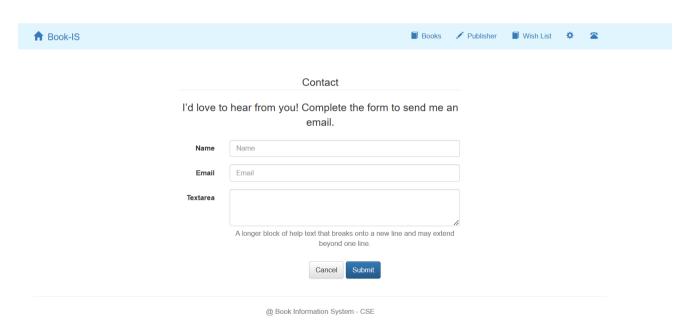


Fig 4.1.4 Helpline

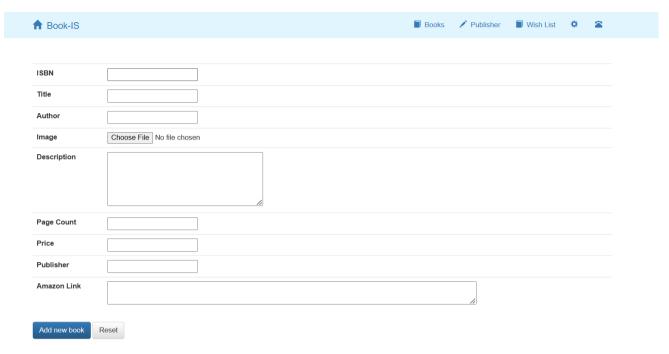


Fig 4.1.5 Book Registration Form

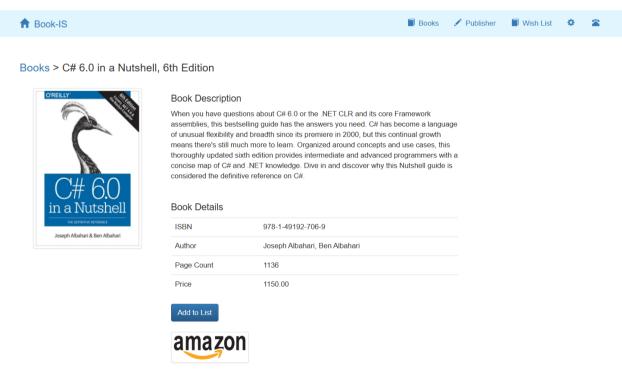


Fig 4.1.6 Book Details

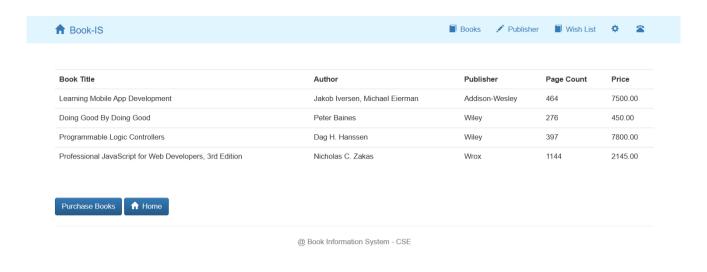


Fig 4.1.7 Wishlist

4.2 Discussion:

☐ Home Page:

Here users can access many domains like, books, publishers, admin login, Contact us, About us etc.

Fig 4.1.1 Home Page.

☐ Admin Login:

Here the admin can login to the admin section and can add or delete the information of the books.

Fig 4.1.2 Admin Login Page.

☐ Contact Page:

Here users can contact the owner by entering their name and email addresses.

Fig 4.1.4 Helpline.

☐ Book Registration Page:

Here the admin can add books by entering the basic details like title, author, publisher, Price etc.

Fig 4.1.5 Book Registration Page.

☐ Book Information Page:

All the information of the books like title, author and publisher details, description of the book and price. And also, the link to purchase the book.

Fig 4.1.6 Book Details.

☐ Wishlist Page:

Here all the books added to the cart/ wish list will be displayed.

Fig 4.1.7 Wishlist Page.

4.3 Test Case

Test Case ID	est Case ID Action		Actual Output	Status
TC1	Login with wrong Admin name and wrong password	Invalid username or password	Invalid username or password	Pass
TC2	Sign up with correct Admin name and wrong password	The confirmation password does not match	Invalid username or password	Pass
TC3	User wants to see all the books	List of books will be displayed	List of books will be displayed	Pass
TC4	User click-on a particular book image/name	The book details are displayed	The book details are displayed	Pass
TC5	Admin Selects Add_new_book	A form for adding book information is displayed	A form for adding book information is displayed	Pass

Table 4.3 Test Cases

CONCLUSION AND FUTURE WORK

5.1 Conclusion

The package was designed in such a way that future modifications can be easily made. The website has a very user friendly with an interactive graphic user interface. Book information allows book enthusiasts to access information of the books needed and also buy then.

This project helps in understanding the creation of an interactive web page and the technologies used to implement it. The design of the project which includes Data Model and Process Model illustrates how the database is built with different tables, how the data is accessed and processed from the tables. The building of the project has given me a precise knowledge about how PHP is used to develop a website, how it connects to the database to access the data and how the data and web pages are modified to provide the user with a shopping cart application.

5.2 Future Enhancement

The project has a lot of room for future environment. And the implementation is beginner friendly. This allows new developers to understand and develop the website by using their own styles.

REFERENCES

HTML reference - https://www.w3schools.com/html/

CSS Reference - https://www.w3schools.com/css/

PHP Reference - https://www.w3schools.com/php/