EBOOK STORE

A report submitted to

Techno India University, West Bengal

For the partial fulfillment of

Bachelor of Technology (B. Tech.)

Degree in

Computer Science & Engineering

By

RUPA RANI

24-May-2018

<cover page>

EBOOK STORE

Report submitted to

Techno India University, West Bengal

for the partial fulfillment

Of

Bachelor of Technology (B. Tech.)

degree in

Computer Science & Engineering

By

RUPA RANI

(Roll No. – 141001001189)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
TECHNO INDIA UNIVERSITY, WEST BENGAL, SALT LAKE, KOLKATA – 700091, INDIA

24-May-2018

<front page>

CERTIFICATE

This is to certify that the Dissertation Report entitled, "**Ebook Store**" submitted by **Ms.**"**Rupa Rani**" to Techno India University, Kolkata, India, is a record of bonafide Project work carried out by him/her under my/our supervision and guidance and is worthy of consideration for the award of the degree of Bachelor of Technology (B.Tech) in Computer science & Engineering.

Approved By:

_____

Supervisor(s)
Date:

_____

HOD, CSE, Techno India University

Date:

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to **Mr. Amit Majumder** of the department of Computer Science and Engineering, whose role as project guide was invaluable for the project.

I am extremely thankful for the keen interest he took in advising me and for the moral support extended to me.

Last but not the least I convey my gratitude to all the faculty members for providing me the knowledge that will always remain as our asset and to all technical staff members for their cordial support.

Place: Techno India University, Salt Lake

Date:

…….

…….

…….

…….

Department of Computer Science and Engineering

Techno India University, Salt Lake

Kolkata – 700091

West Bengal

India.

CONTENTS

INTRODUCTION

The business-to-consumer aspect of electronic commerce (e-commerce) is the most visible business use of the World Wide Web. The primary goal of an e-commerce site is to sell goods and services online.

This project deals with developing an e-commerce website for Online Book Sale. It provides the user with a catalog of different books available for purchase in the store. In order to facilitate online purchase a shopping cart is provided to the user. The system is implemented using a 3-tier approach, with a backend database, PHP, and a web browser as the front end client.

In order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered architecture, server and client side scripting techniques, implementation technologies such as programming language (such as PHP, JavaScript, and HTML), and relational databases (such as MySQL).

This is a project with the objective to develop a basic website where a consumer is provided with a shopping cart application and also to know about the technologies used to develop such an application.

This document will discuss each of the underlying technologies to create and implement an ebook store.

PROBLEM DEFINITION

In the world of software development there lots of improvement in the area of Architectural design and principles. The philosophies and implementation details are changing as the people guiding the development of the application. In this fantastic and yet sometimes complex world of software development there are some tried and true architecture patterns and software development guidelines employed by most architects. Also your design must have an ability to turn towards innovation instead of lending itself to common practices. Web services are one such area where architects must lean on their creative side and hope that their solutions are still successful. In this report we will explain an exciting voyage down the road of Web services application. From requirements to use cases, to database design, to component frameworks, to user interfaces, we will cover each and every aspect of system design required to build an application with collaborative Web services. The reason why we selected online Bookstore web service is everybody walking down the street has some idea about bookstores. The objective of this project is to develop an e- book store where books can be bought from the comfort of home through the Internet.

An online Book Store is a virtual store on the Internet where customers can browse the catalog and select books of interest. The selected books may be collected in a shopping cart. At checkout time, the items in the shopping cart will be presented as an order. At that time, more information will be needed to complete the transaction. Usually, the customer will be asked to fill or select a billing address, a shipping address, a shipping option, and payment information such as credit card number. An e- mail notification is sent to the customer as soon as the order is placed.

PLANNING

Electronic Commerce (e-commerce) applications support the interaction between different parties participating in a commerce transaction via the network, as well as the management of the data involved in the process.

Over three quarters of the 10,000 respondents report having purchased items online. The most cited reason for using the web for personal shopping was convenience (65%), followed by availability of vendor information (60%), no pressure from salesperson (55%) and saving time (53%).

A good e-commerce site should present the following factors to the customers for better usability

• Knowing when an item was saved or not saved in the shopping cart.

• Returning to different parts of the site after adding an item to the shopping cart.

• Easy scanning and selecting items in a list.

• Effective categorical organization of products.

• Simple navigation from home page to information and order links for specific products.

• Obvious shopping links or buttons.

• Minimal and effective security notifications or messages.

• Consistent layout of product information.

There are mainly 2 modules in this website:-

➔ Admin module
➔ User module

Admin module: Admin module is available only for the administrator persons, who will handle the Book Store. There are six sub module in Admin section for managing each entity of the Book Store as follow -

1. Book Category: List of all Book Category available is displayed in this section.

    a. Add: The admin can add a new book category to his catalog, if any new book of that category is published or books from that book category is in demand.

    b. Edit: Admin can also edit the category name if required.

    c. Deactivate: If books for any category are not in demand then the admin can deactivate that book category for the time being until required.

    d. List Logs: Admin can also check logs for any book category so that if any changes made to that particular category by some other Admin then they can verify it.

2. Book List: List of all Books available is displayed in this section.

    a. Book list: Displays the list of all the Books available, quantity of books , its author, publisher, cost of the books, to which category that book belong, and date on which the book was published.

    b. Add new Book: The admin can add a new book to his catalog, if any new book is published or that book is in demand.

    c. Edit: The admin can edit the book details if required.

    d. Update quantity: If any book is out of stock, admin can update quantity of book.

    e. List Logs: Admin can also check logs for any book so that if any changes made to that particular book by some other Admin then they can verify it.

3. Authors: List of all Authors available is displayed in this section.

    a. Add new author: If any new book is to be added of a new author and its author is not in the admin list, the admin can add that author to the list.

    b. Edit: Admin can also edit the author name if required.

c. Deactivate: If any author is not active for a long time, or its books are not in demand then the admin can deactivate that author for the time being until required.

d. List Logs: Admin can also check logs for any author so that if any changes made to that particular author by some other Admin then they can verify it.

4. Publishers: List of all publishers available is displayed in this section.

   a. Add new publisher: If any new book is to be added and its publisher is not in the admin list, the admin can add that publisher to its list.

   b. Edit: Admin can also edit the publisher name if required.

   c. Deactivate: If any publisher is not active for a long time, or its books are not in demand then the admin can deactivate that publisher for the time being until required.

   d. List Logs: Admin can also check logs for any publisher so that if any changes made to that particular publisher by some other Admin then they can verify it.

5. Users: The admin can access the list of authorized users.

   a. Create new user: Admin can create new user. User can also assign the user to become internal user so that, that user can also access the entire website as an admin.
   When a new user is created, a confirmation mail is sent to the user regarding the new account created along with the temporary password. The user can login using that password and on logged in he is asked to change his password.

   b. Deactivate a user: If any user is not active for a long time, admin has the authority to deactivate that user. Admin can also check the list of all deactivated users. User can also activate any deactivated user, if required.

   c. List Logs: Admin has the power to access the list of logs of all the users. User can also view many times any user is deactivated or activated.

6. Orders: The admin can access all the orders from different users. User can go through each order and access the order details like delivery address, list of books

ordered, price of each book, total amount payable, net balance paid or to be paid by the customer.

User module: User module is available for all the users who want to access the website to go through the available books or to purchase the books. This module contains five sub modules to ease the access of book store for the users -

1. Books : This module displays all the books available on our book store

    a. Search a book: The user can search his favourite book on our website by entering the book's name, author's name and publisher's name.

    b. Add to wishlist: If the user finds a book which he likes and wishes to buy it later, User can save that book in this wishlist; so that next time User can easily find that book and order it.

    c. Add to cart: If the user wants to buy the book, User can easily add that book to his cart and go to payment section to pay for it and buy it.

2. Best Sellers: This section displays the list of all the best seller books, i.e. the books which have been bought most frequently.

    a. Search a book: If the user wants to search for a book in best seller section, User can easily search it by entering book's name, author's name and publisher's name.

    b. Add to wishlist: If the user finds a book in the best seller section which he likes and wishes to buy it later, User can save that book in this wishlist; so that next time User can easily find that book and order it.

    c. Add to cart: If the user wants to buy the book, User can easily add that book to his cart and go to payment section to pay for it and buy it.

3. Wishlist: This section displays the list of books added to the wishlist.

    a. Remove books from wishlist: User can remove added books from the wishlist.

    b. Move to cart: User can move the added books in wishlist to cart to make payment.

4. Browse Genres: If the user loves books from any specific book category, User can easily access all the books available for that book category here. User can add the book to his wishlist or cart easily.

5. Payment: Once the book is added to cart, the user can purchase the book by making payment in PayPal gateway. User can login to PayPal, enter the address where the user wants the book to be delivered.

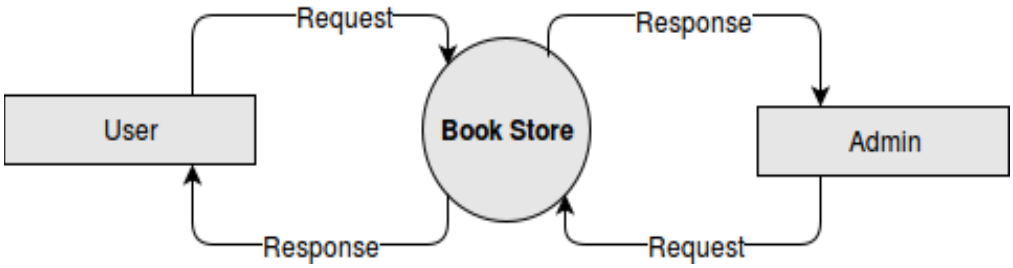
6. Order History: Order details are given in order history. User can view the list of books ordered with billing and delivery address. If any issue, user can also generate a request by sending email to support center.

7. Blogs and about us: This section includes quotations about the books, features of this website which will be very useful and ease the journey of the user on the book store.

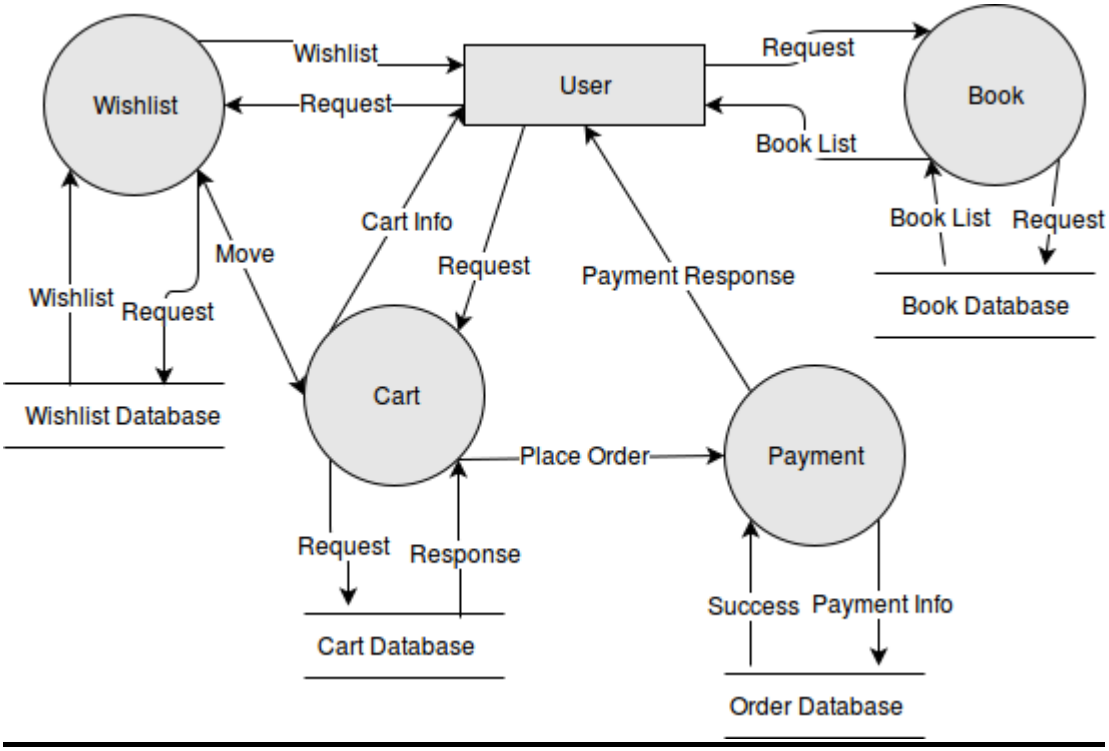
DESIGN INTERFACE

- DFD

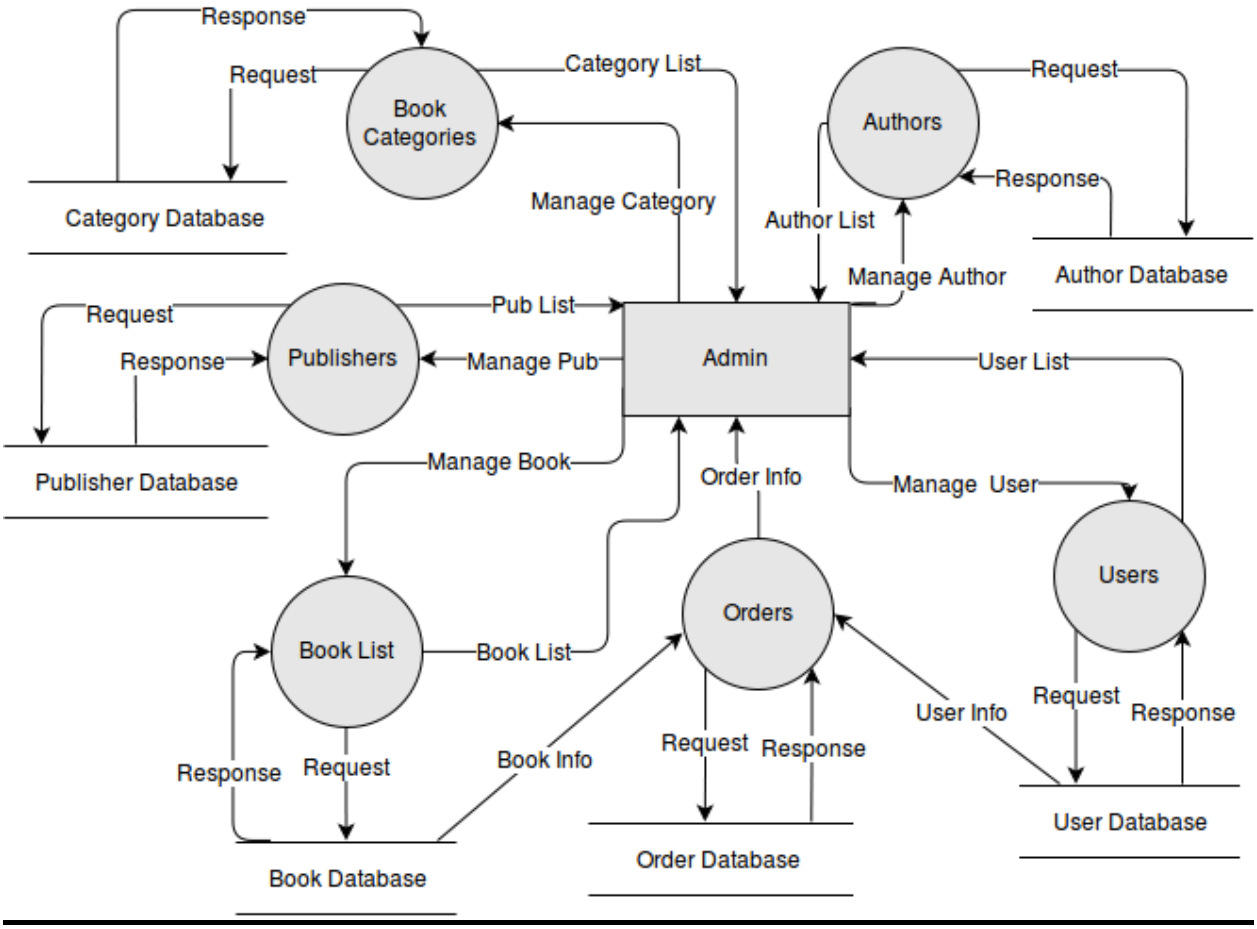
Level 0: Context Free Diagram



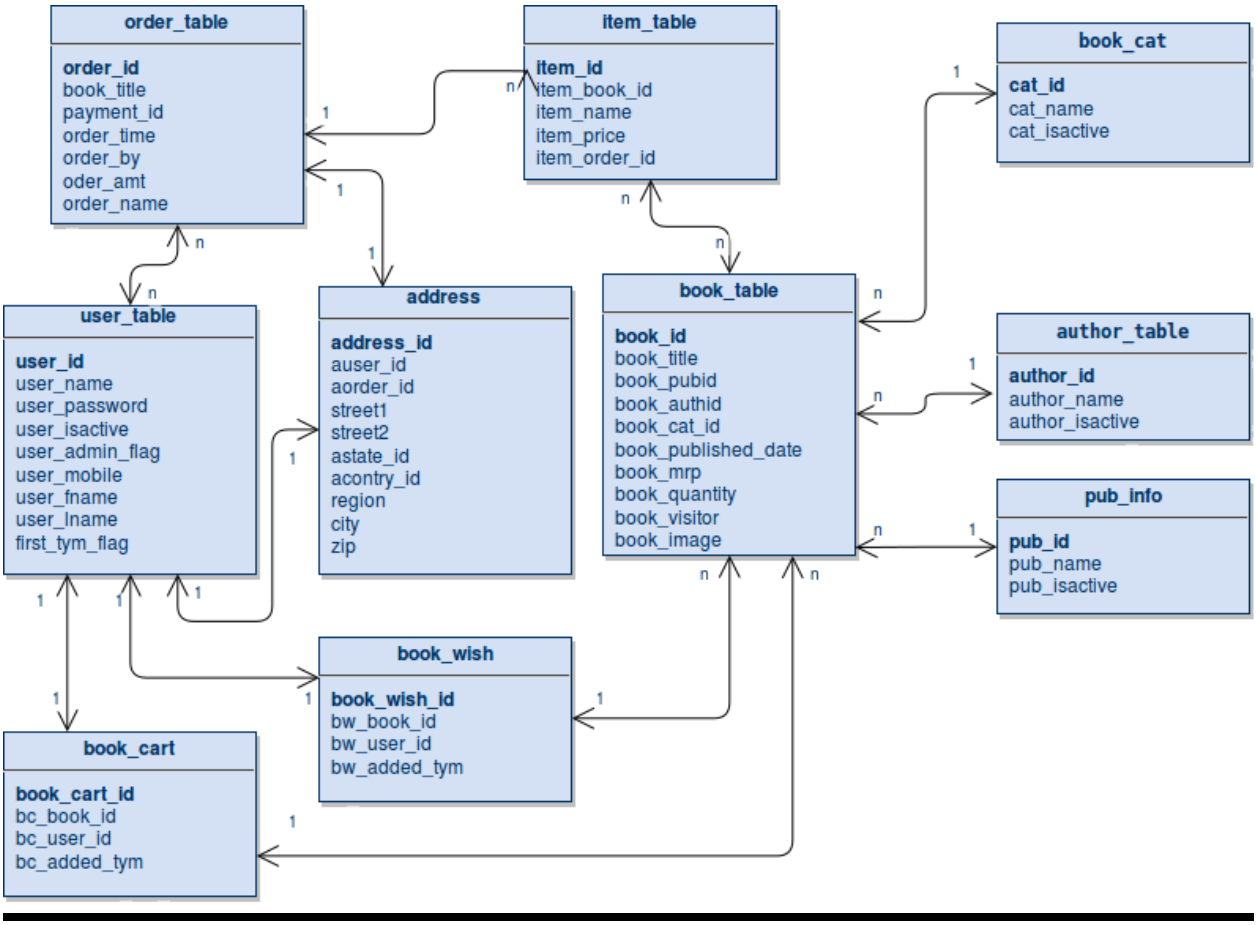
Level 1: User



Level 1: Admin

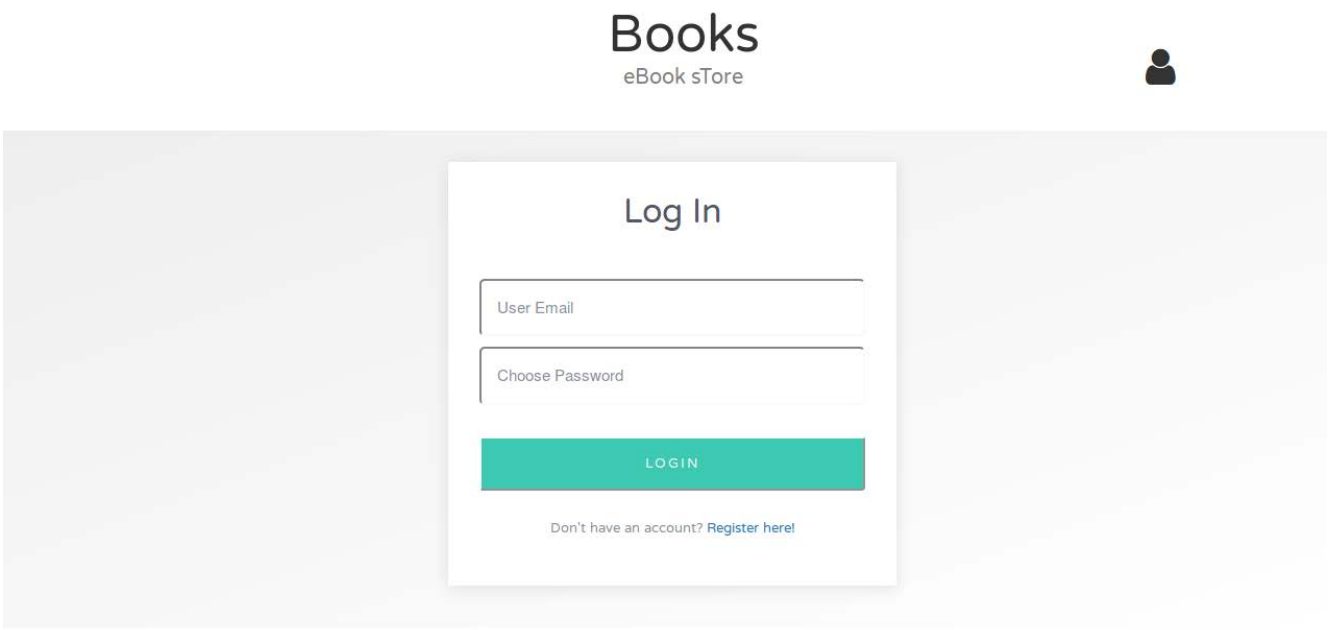


ER DIAGRAM

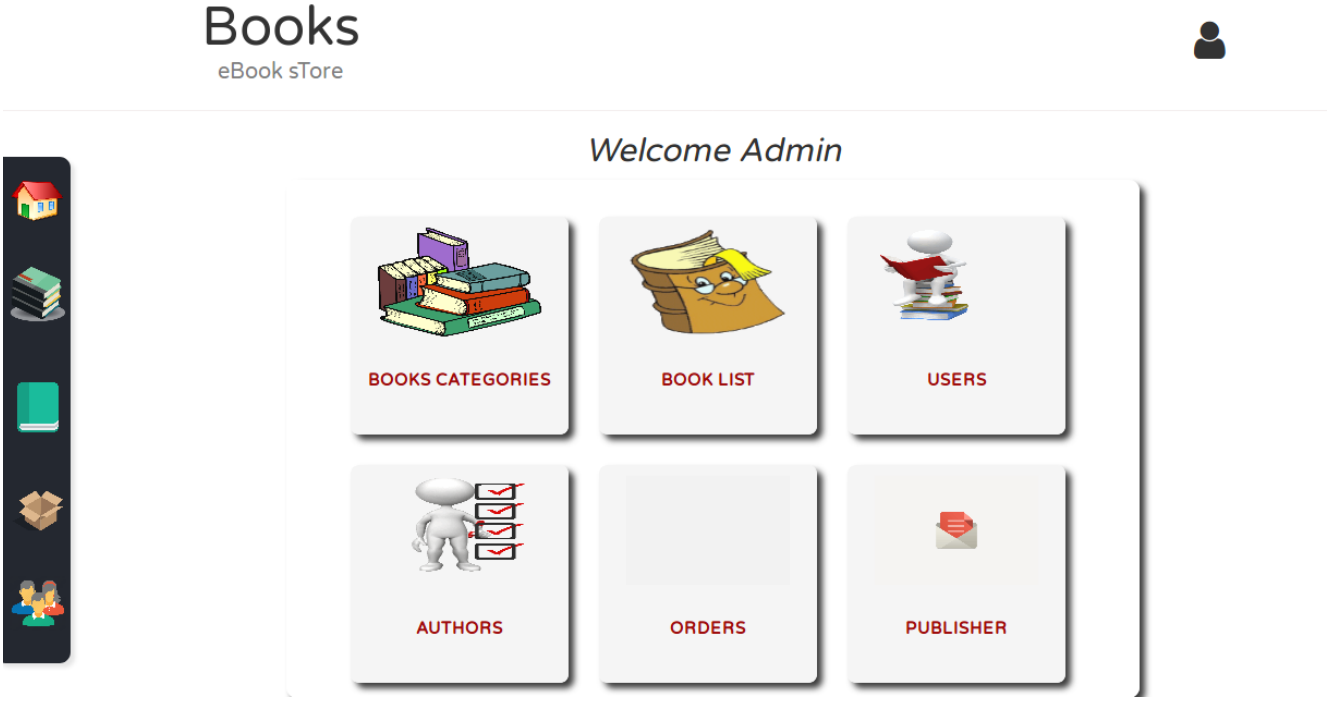


SNAPSHOTS

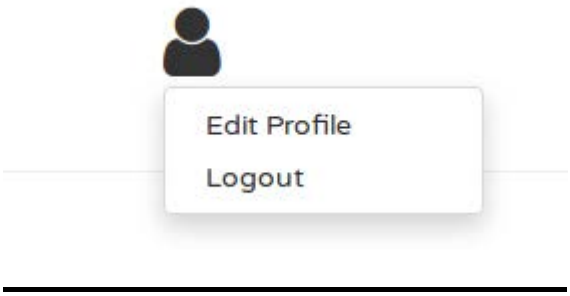
Admin Login:

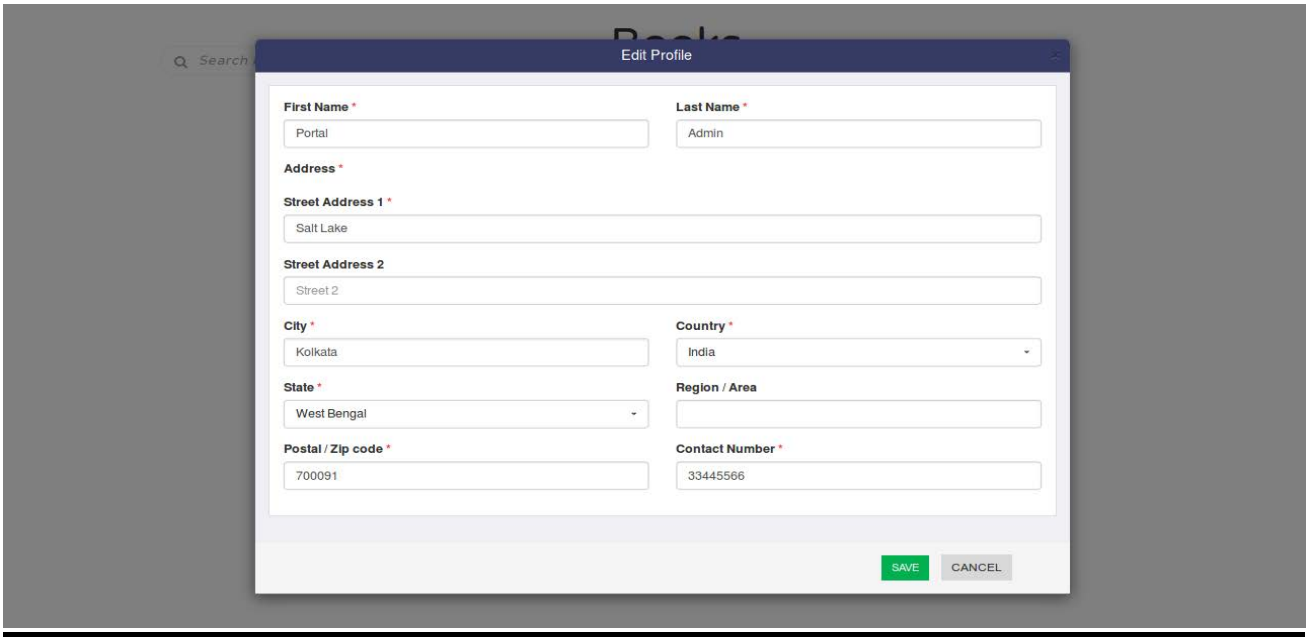


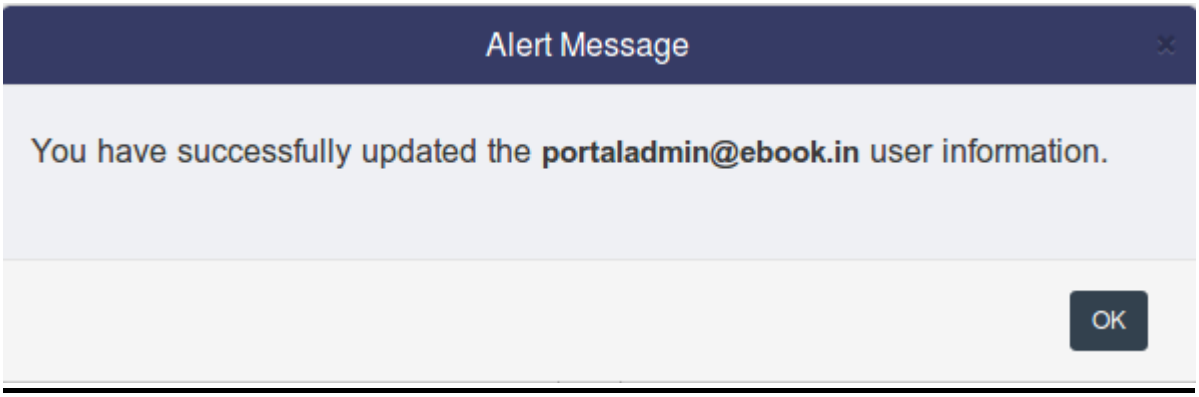
Login Success:



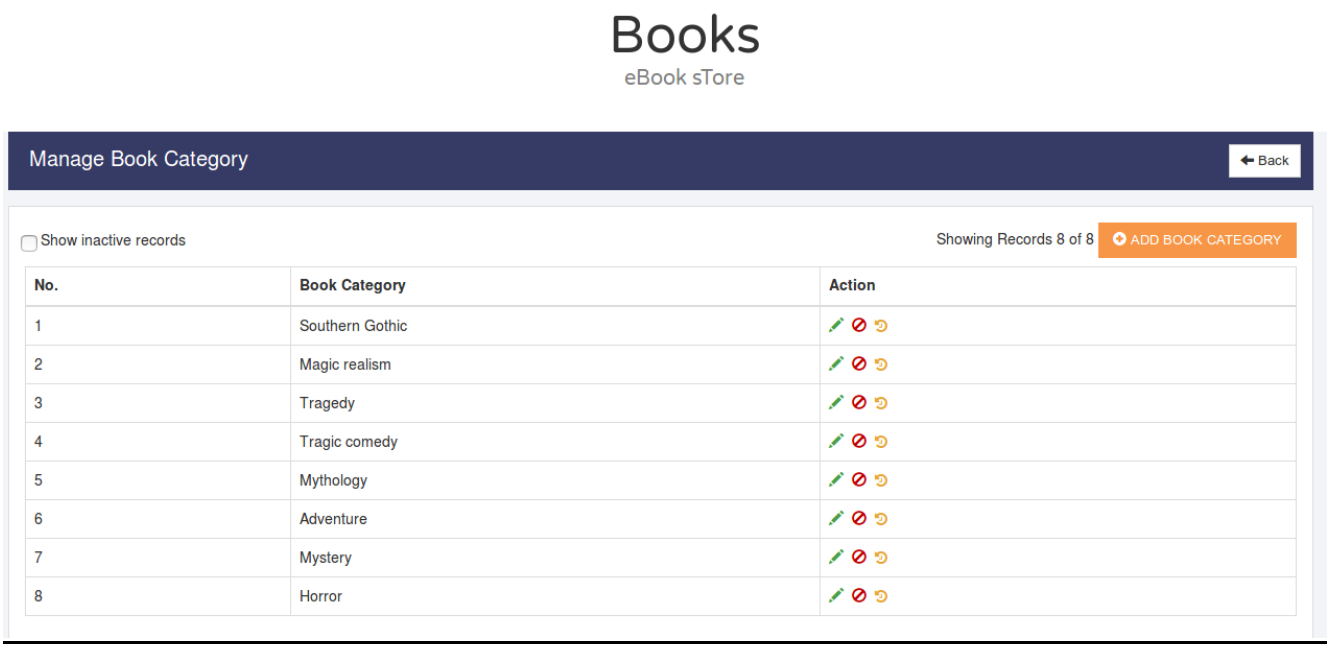
Edit Profile:



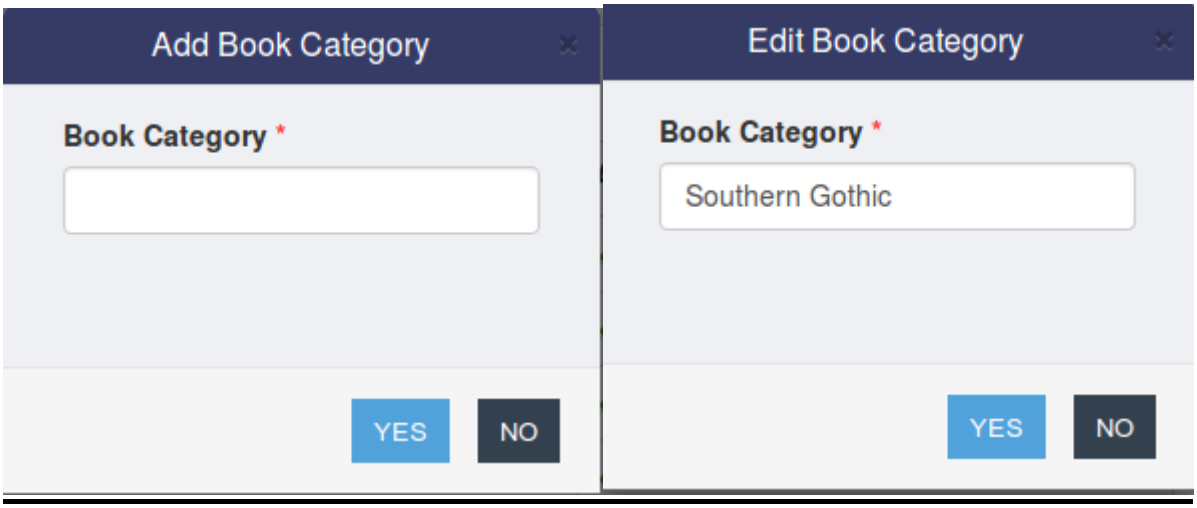




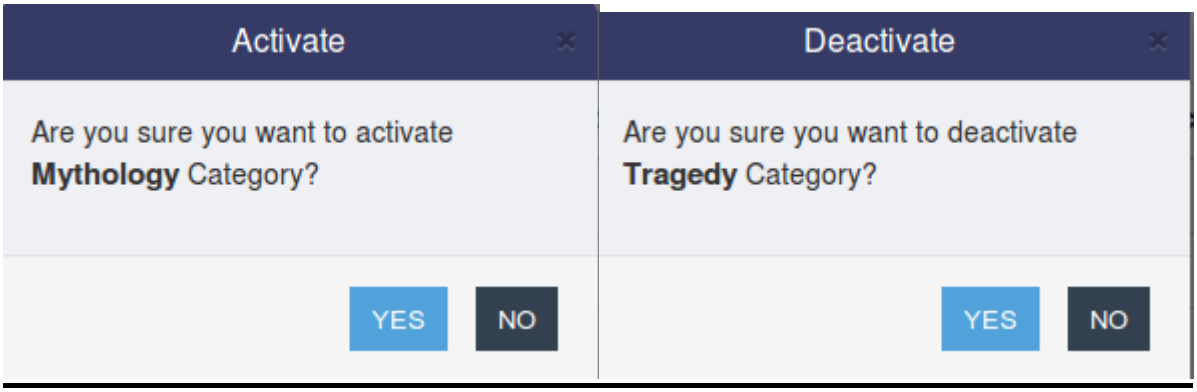
Book Category:



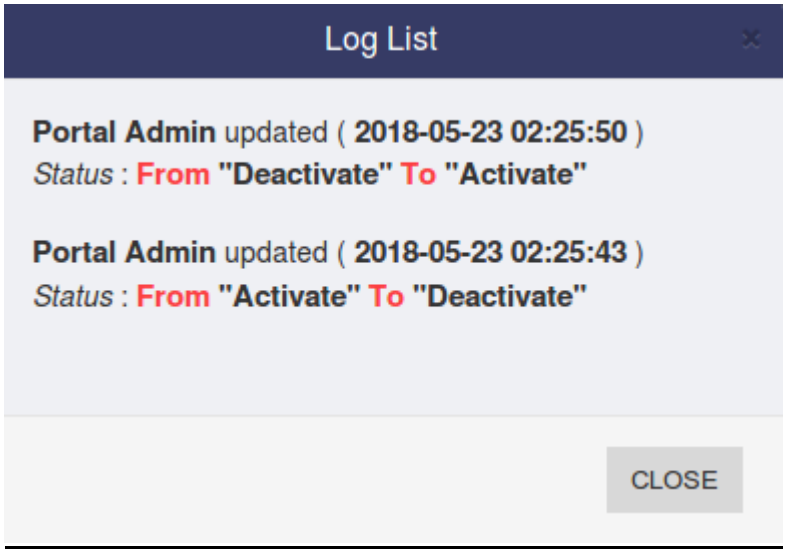
Add / Edit Book Category:



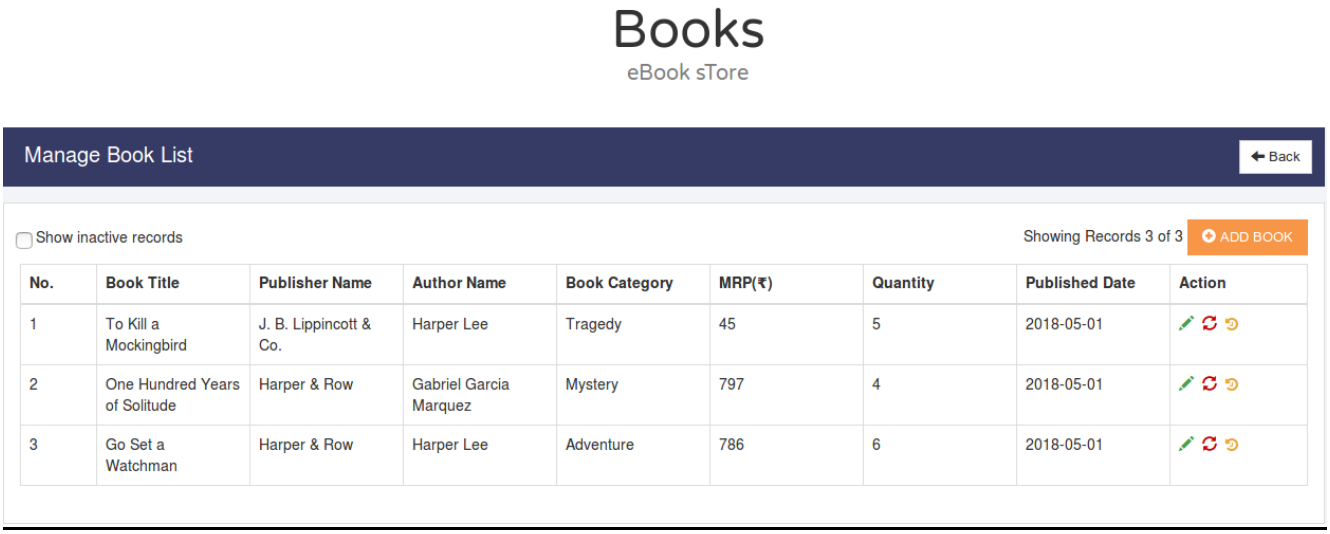
Activate / Deactivate Category:



Log List:

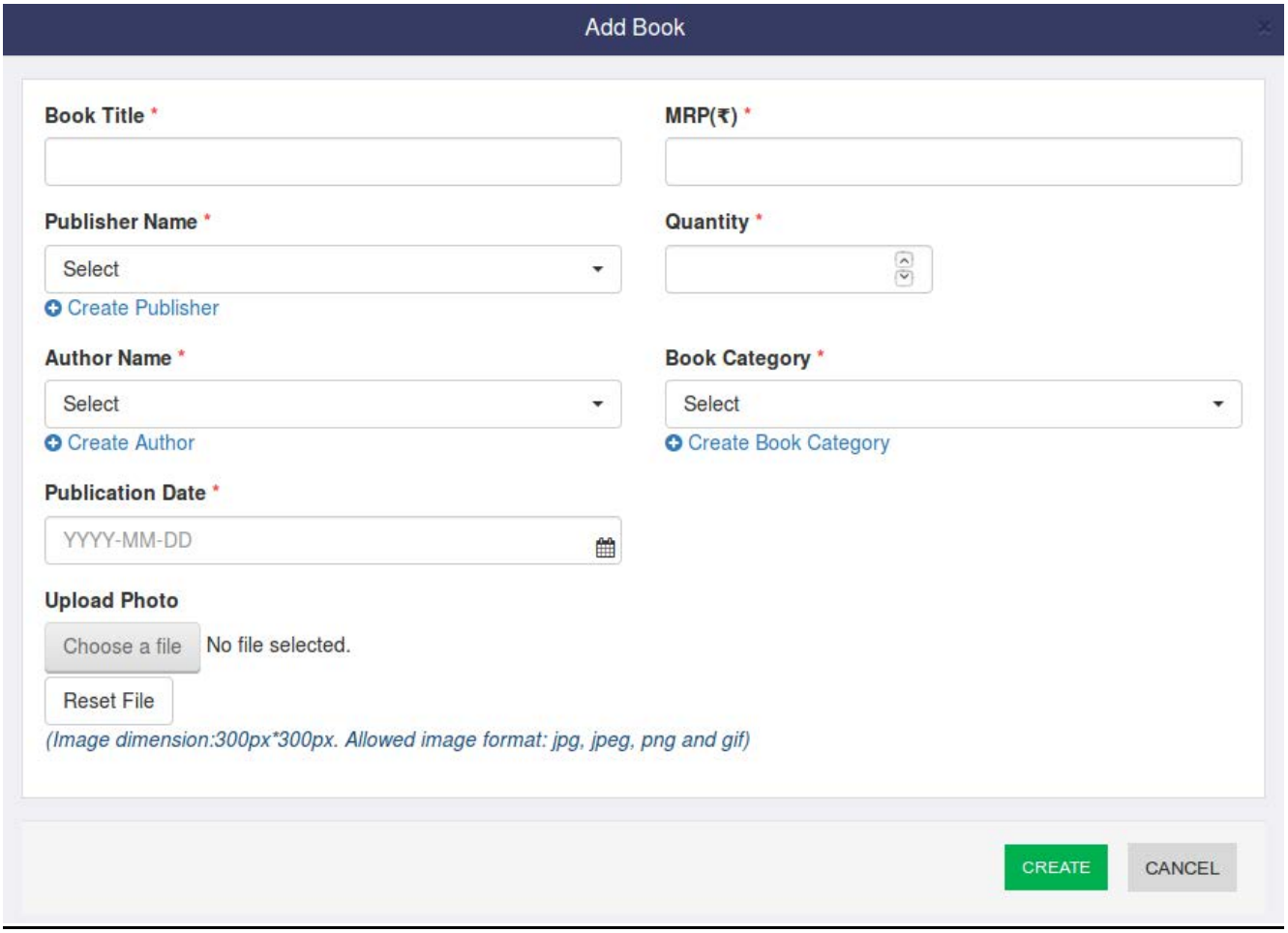


Manage Book List:

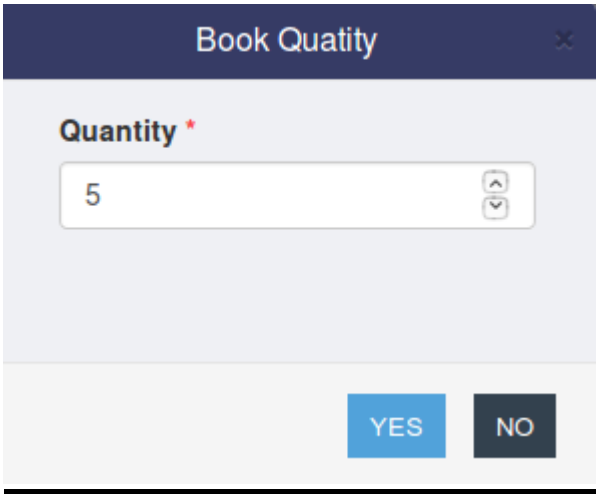


No.	Book Title	Publisher Name	Author Name	Book Category	MRP(₹)	Quantity	Published Date	Action
1	To Kill a Mockingbird	J. B. Lippincott & Co.	Harper Lee	Tragedy	45	5	2018-05-01	
2	One Hundred Years of Solitude	Harper & Row	Gabriel Garcia Marquez	Mystery	797	4	2018-05-01	
3	Go Set a Watchman	Harper & Row	Harper Lee	Adventure	786	6	2018-05-01	

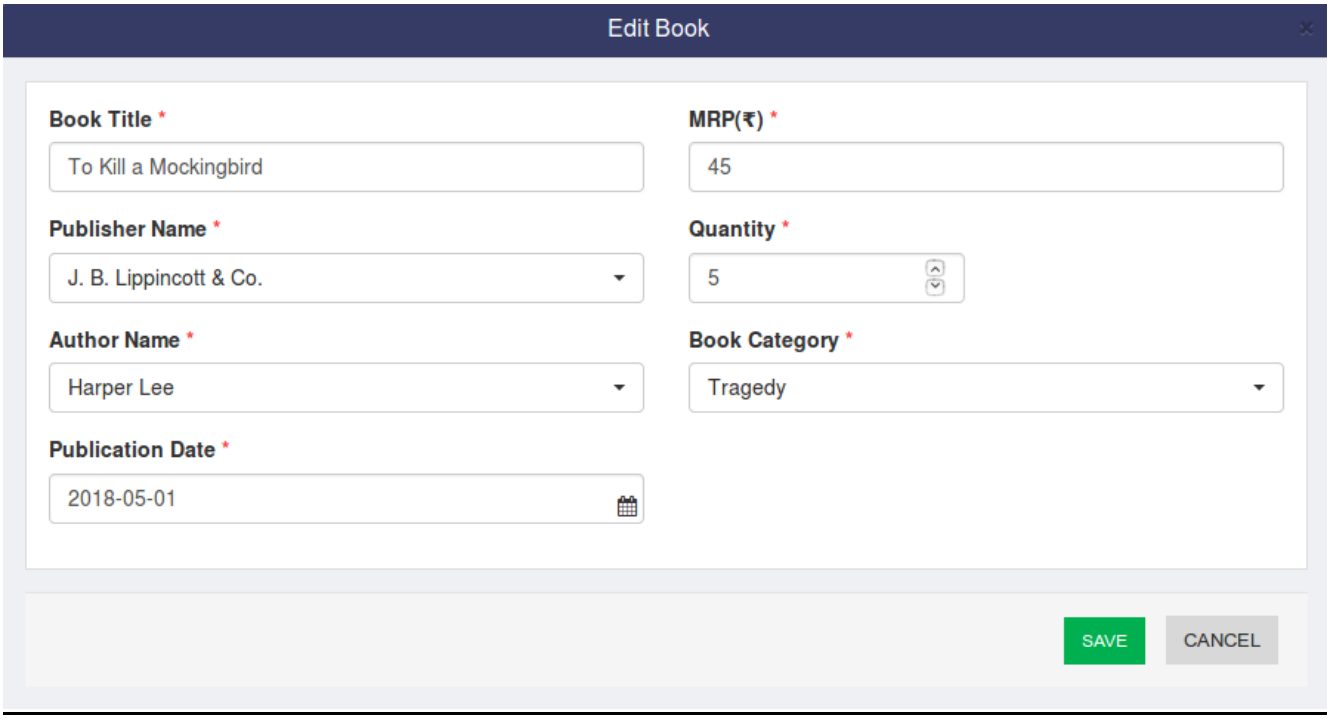
Add Book:



Update Book Quantity:

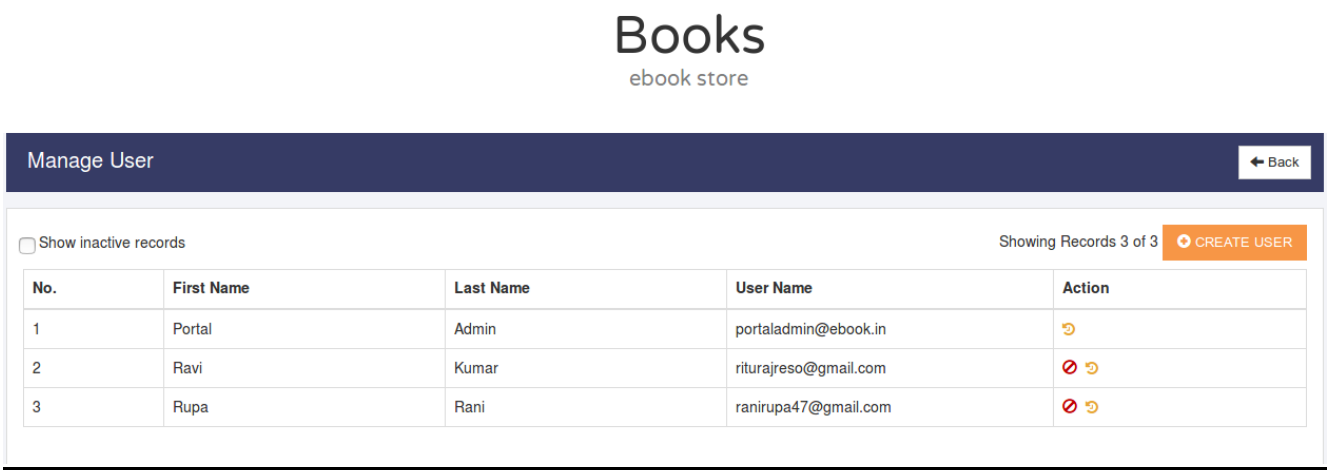


Edit Book:

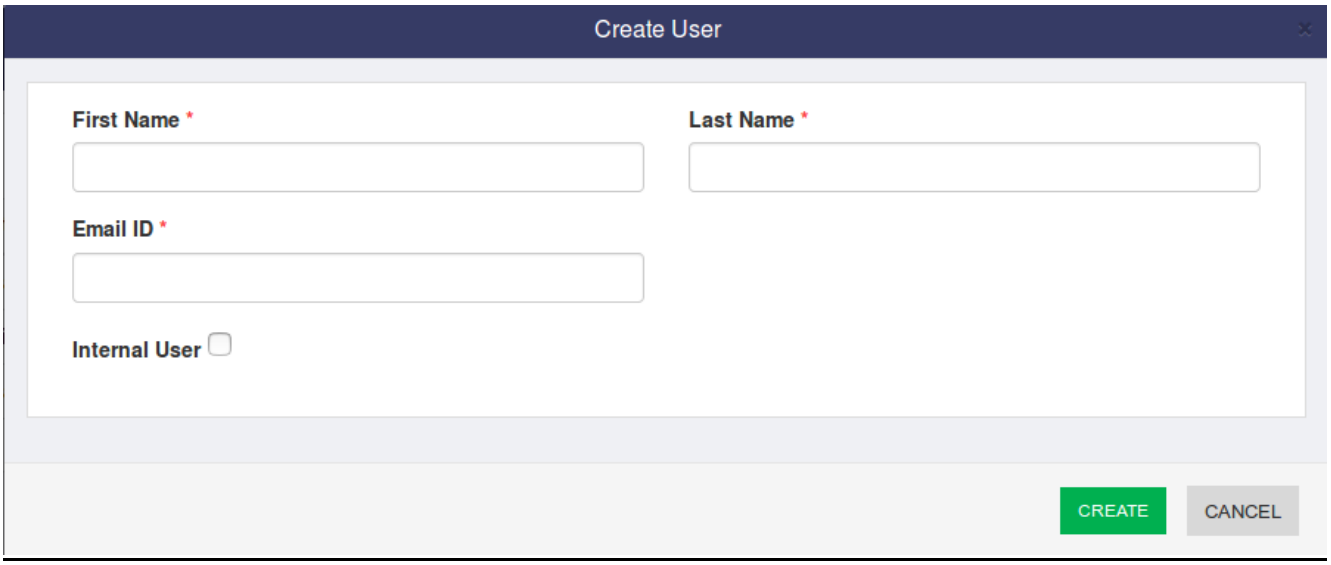


Log List:

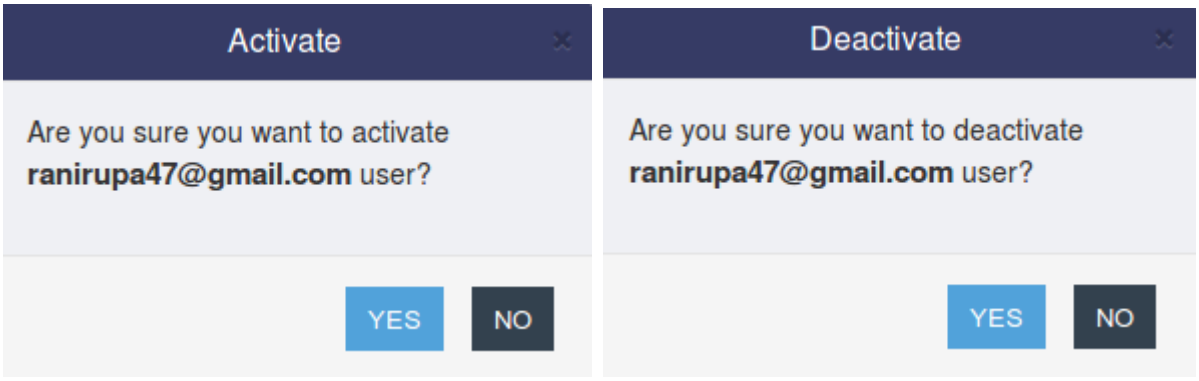
Manage User:



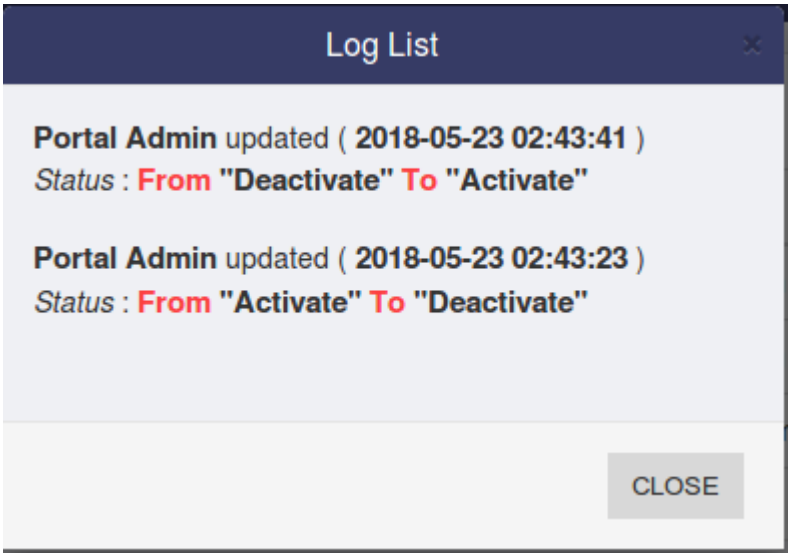
Create User:



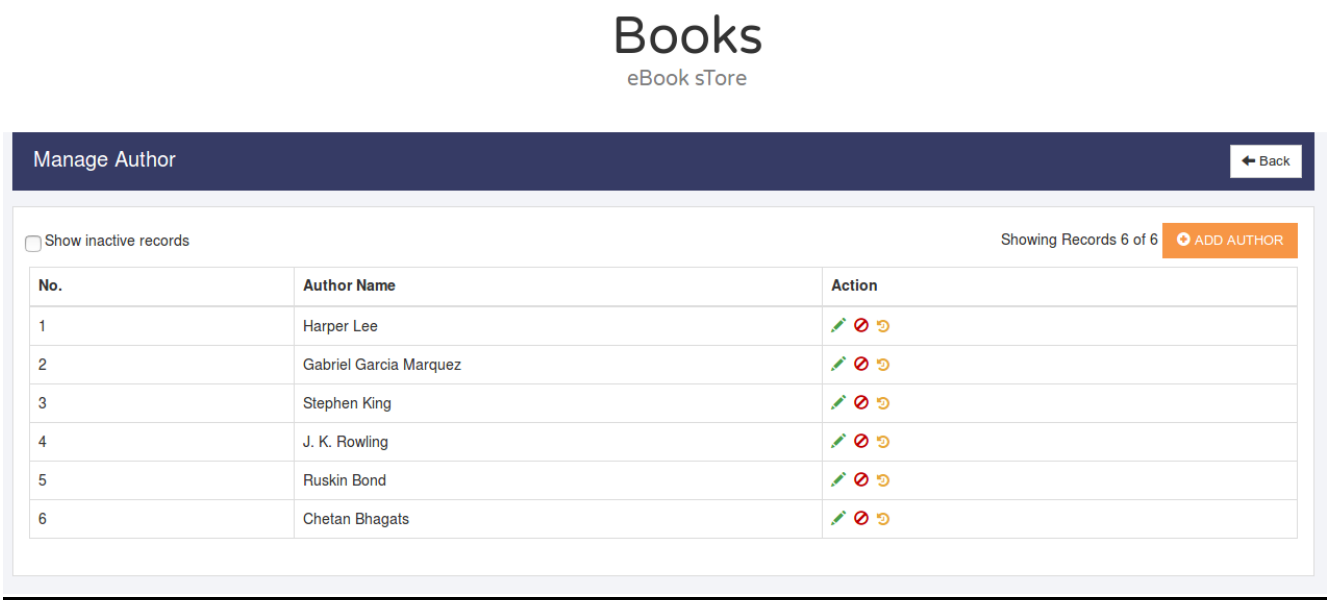
Activate / Deactivate User:



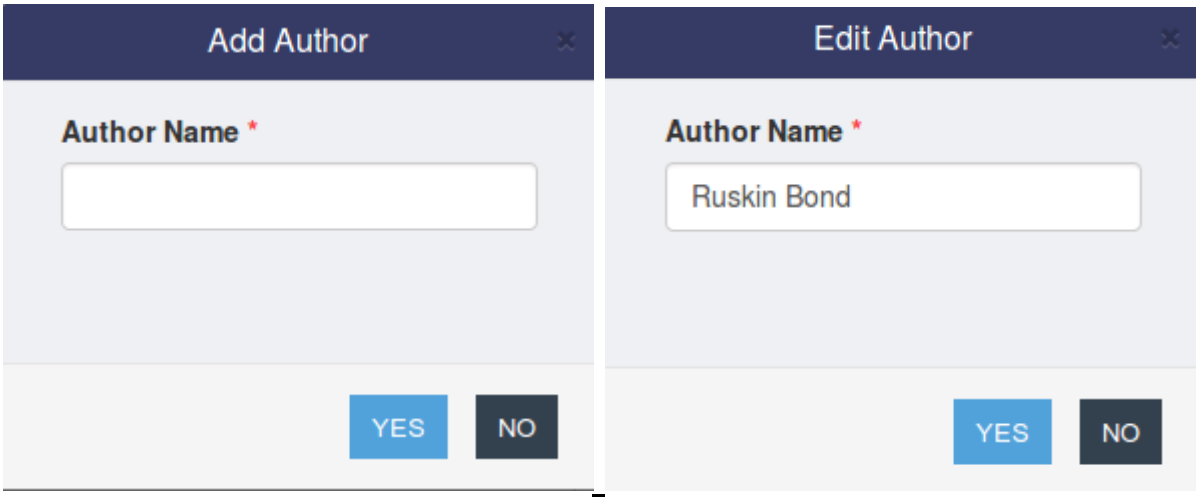
Log List:



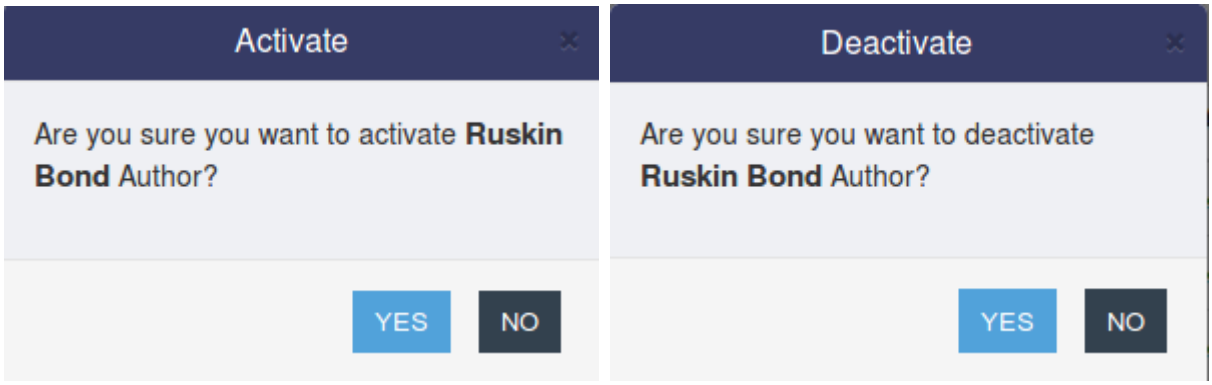
Manage Author:



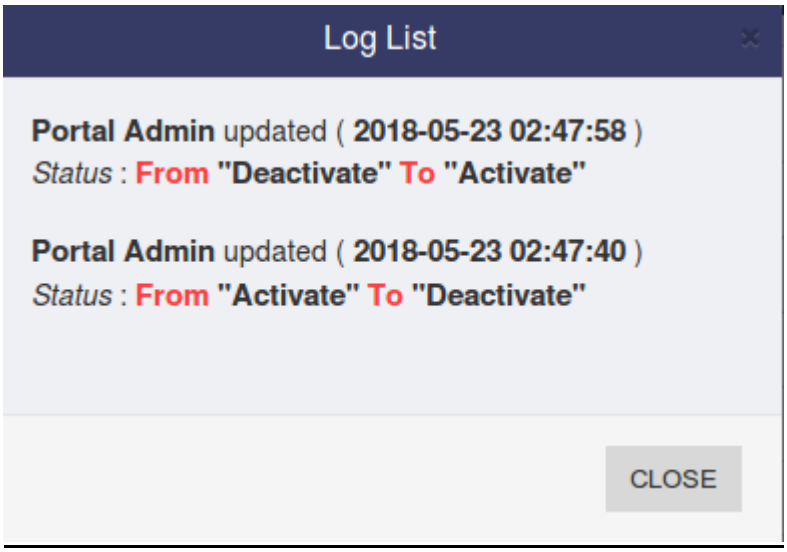
Add / Edit Author:



Activate / Deactivate Author:



Log List:



Order Report;

Books

eBook sTore

Order Report

Back

Showing Records 4 of 4

No.	Order ID	Order By	Order Recipient	Order Time	Order Amount(₹)	Action
1	PAY-6X8144519474082l8LL6JKEA	Ravi Kumar	Rupa Rani	2018-05-16 20:31:44	867.26	
2	PAY-9R3433937U0289137LL6IYMQ	Ravi Kumar	Rupa Rani	2018-05-16 19:53:52	947.6	
3	PAY-8E887336X0923293NLL6FKTQ	Ravi Kumar	Rupa Rani	2018-05-16 15:59:42	46.35	
4	PAY-8T078325DC3405401LL6FJAY	Ravi Kumar	Rupa Rani	2018-05-16 15:56:11	809.58	

Order Details:

Order Details

Delivery Address :

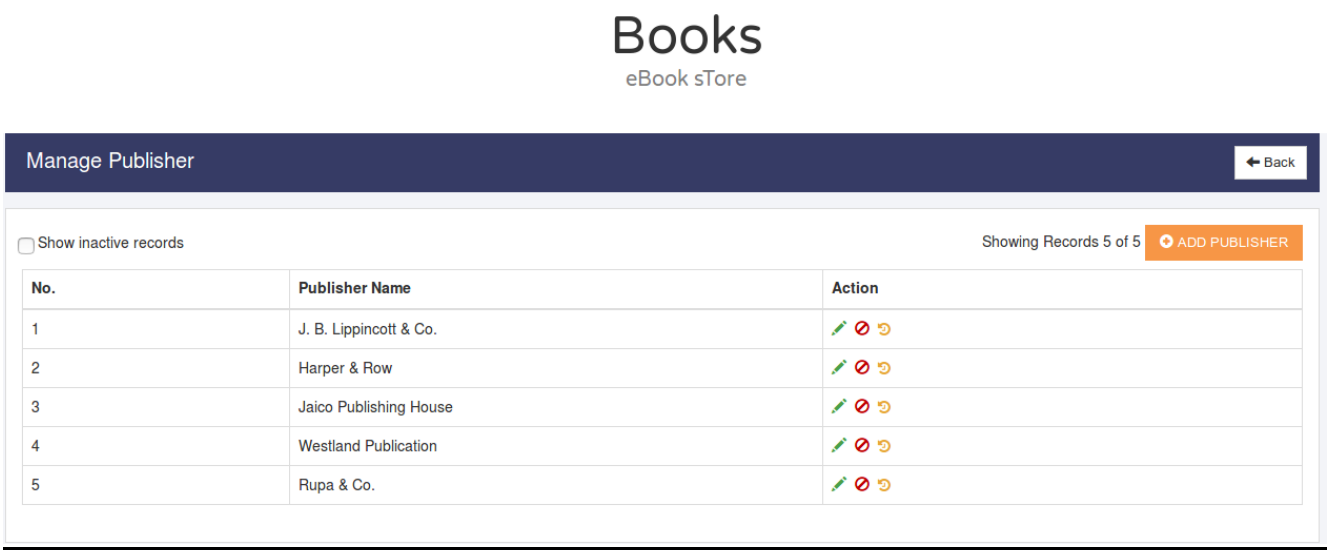
Rupa Rani
AJ-104, Salt Lake,Kolkata,
West Bengal - 700091

No.	Item Name	Item Price(₹)
1	To Kill a Mockingbird	45
2	One Hundred Years of Solitude	797

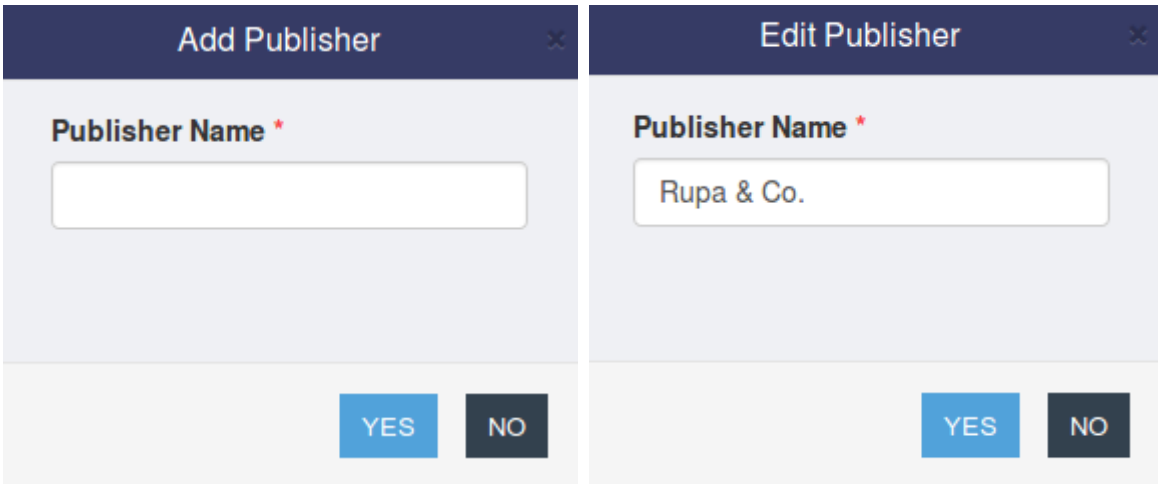
Total Amount : 842
Tax : 25.26
Net Balance : 867.26

CLOSE

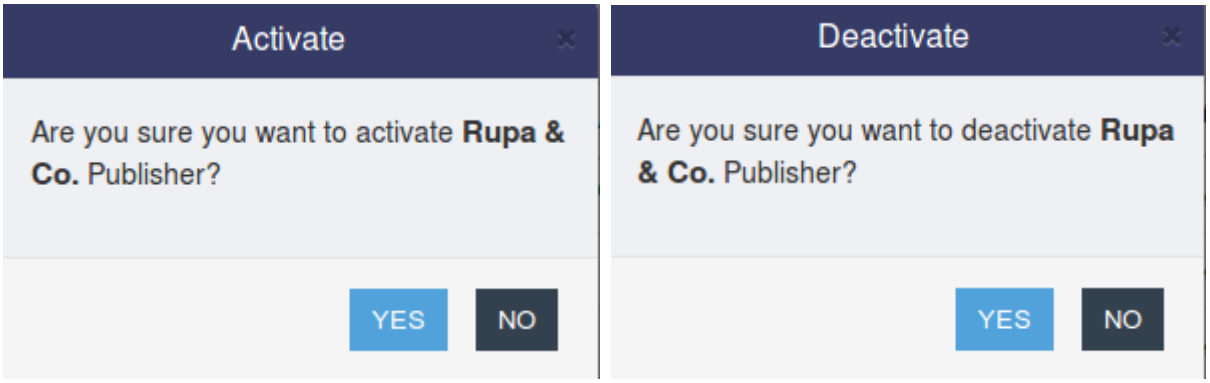
Manage Publisher:



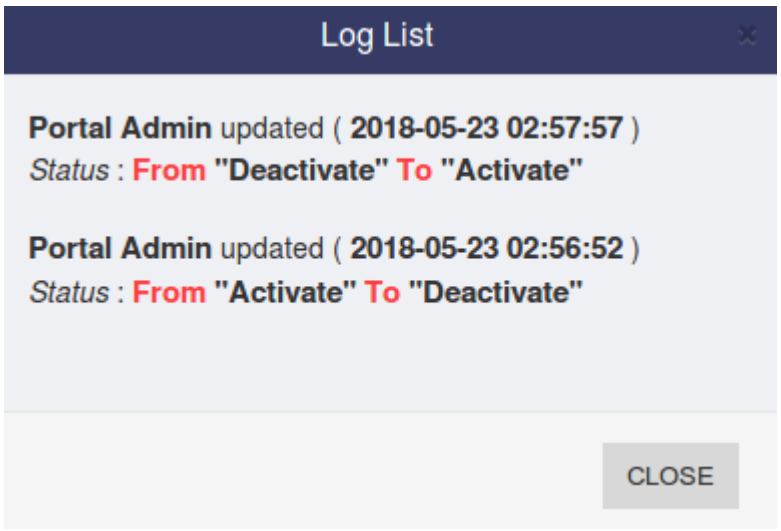
Add / Edit Publisher:



Activate / Deactivate Publisher:

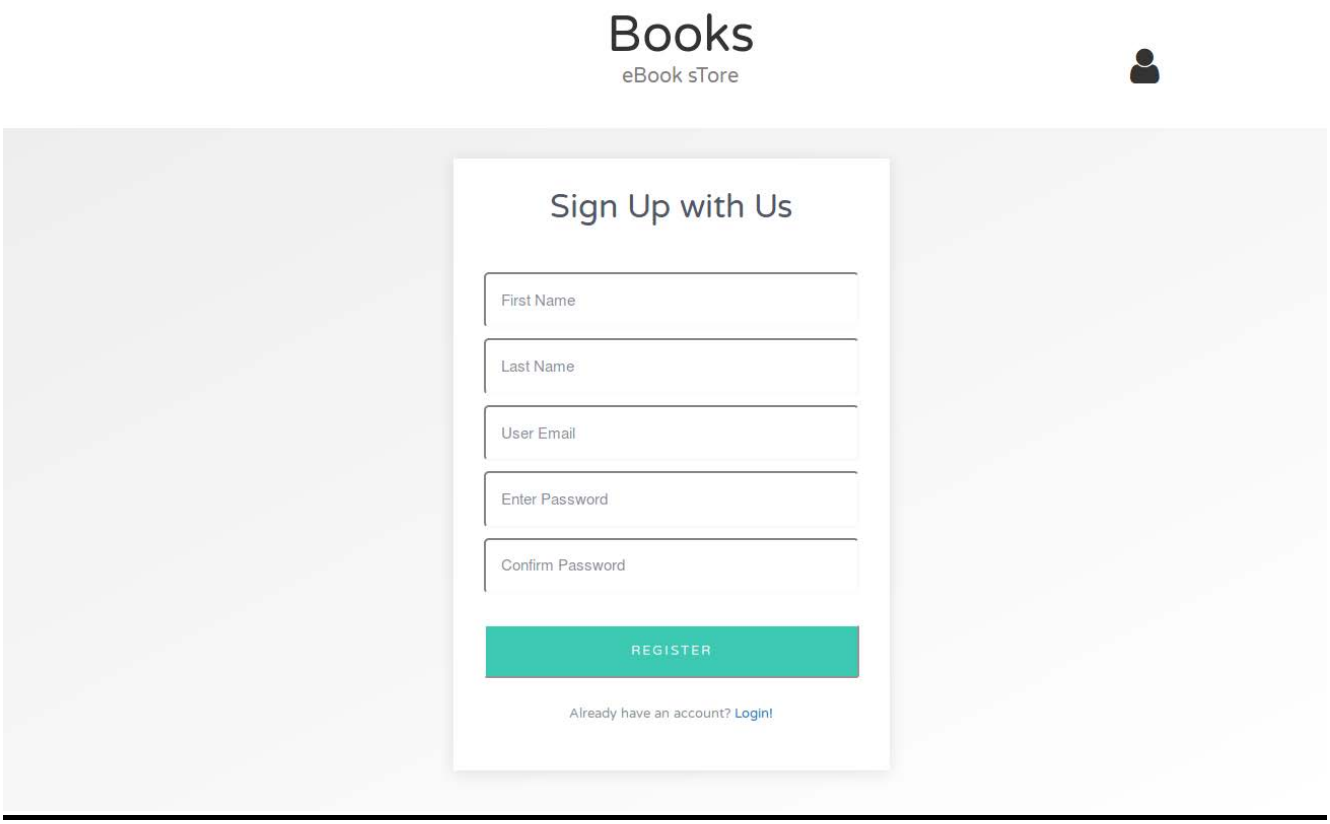


Log List:

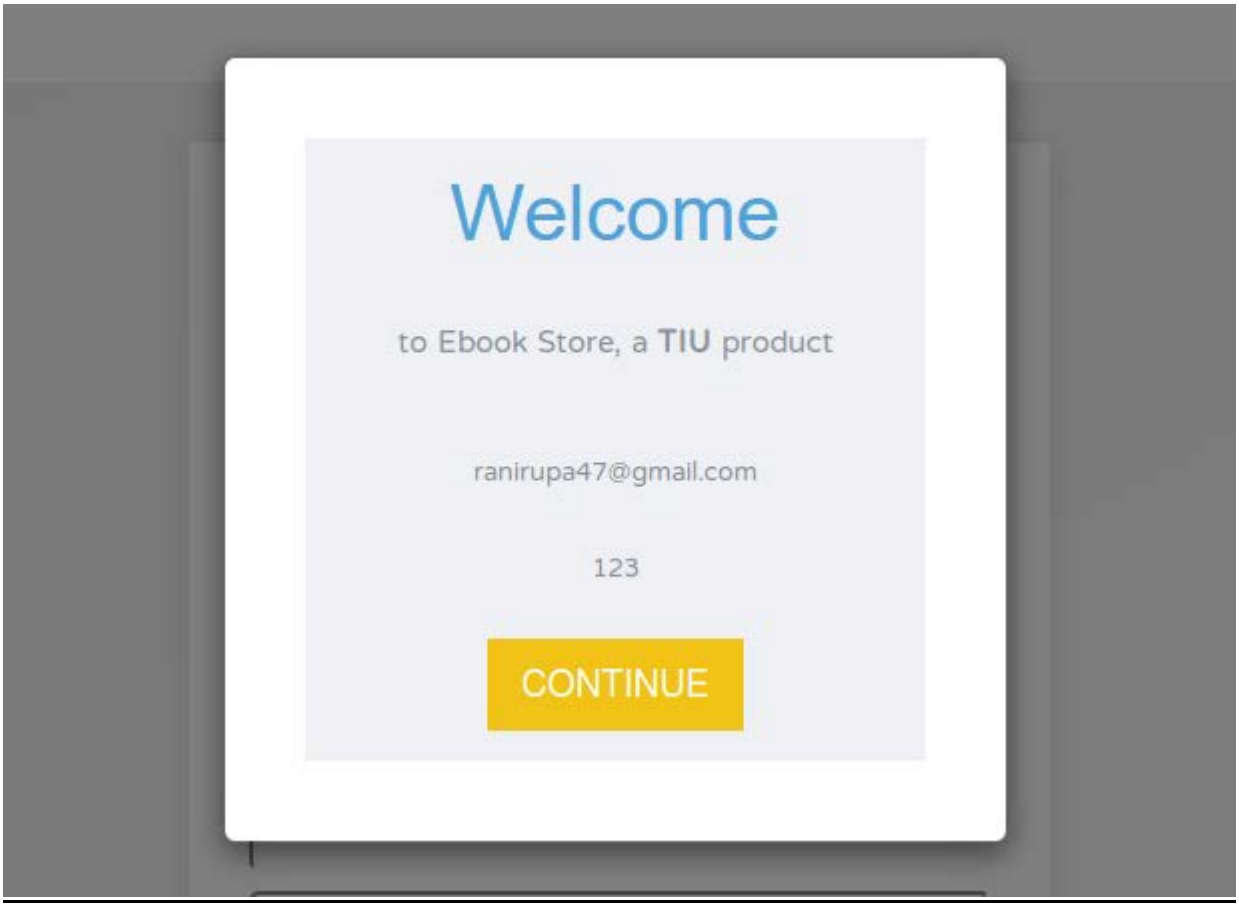


USER MODULE

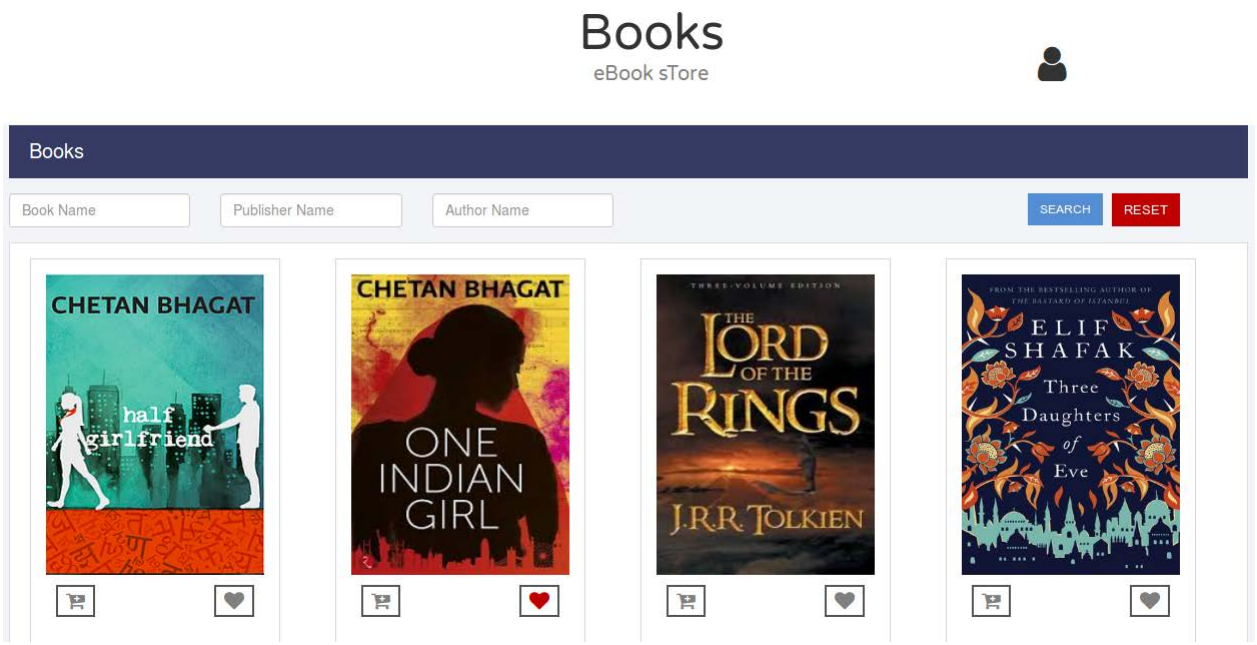
Registration:



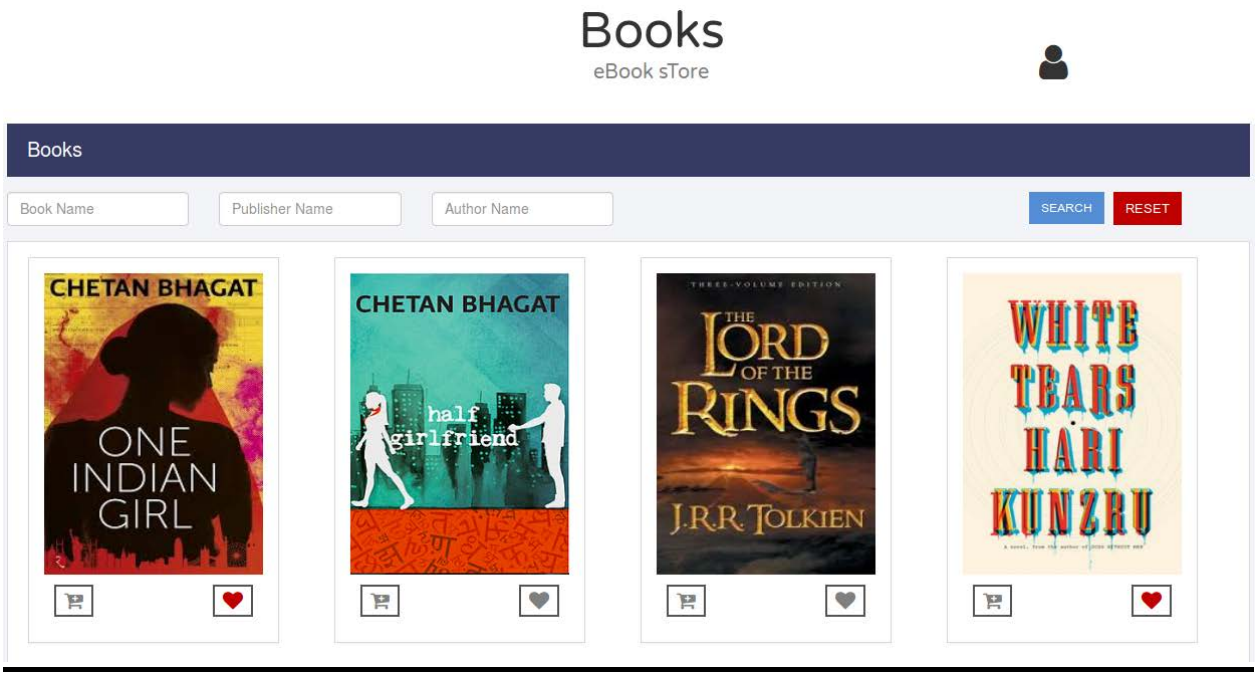
Registration Success:



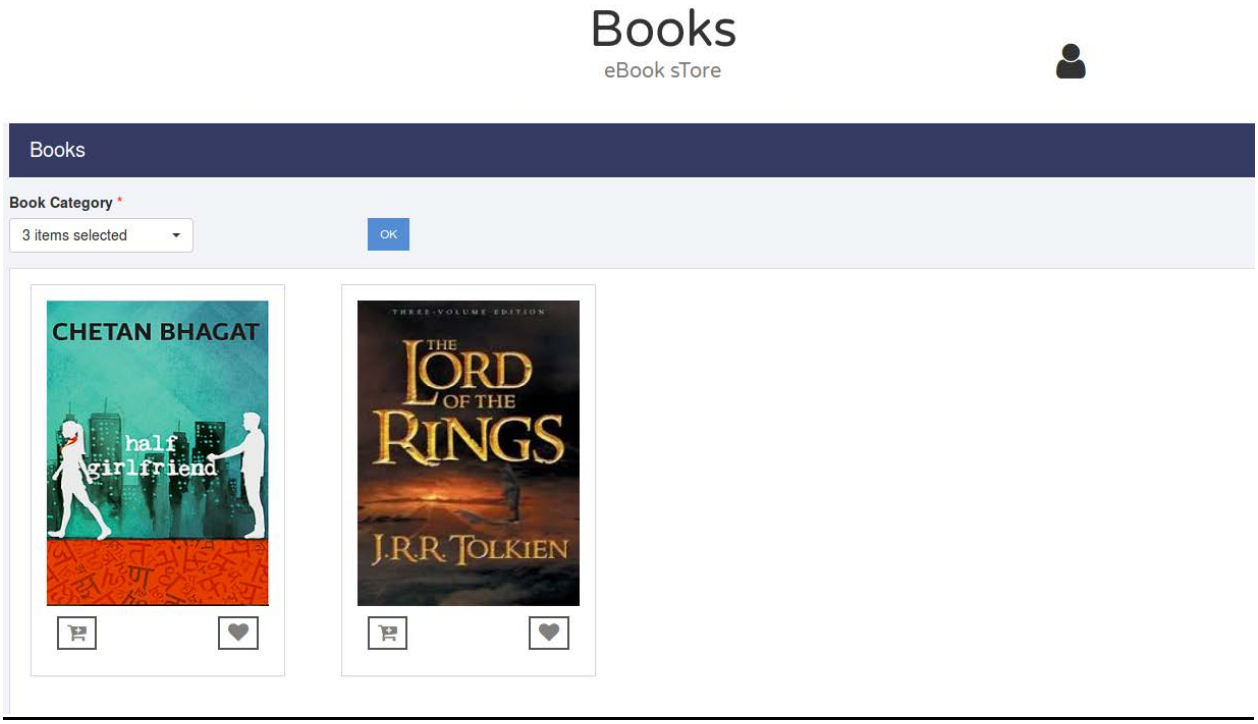
Books:



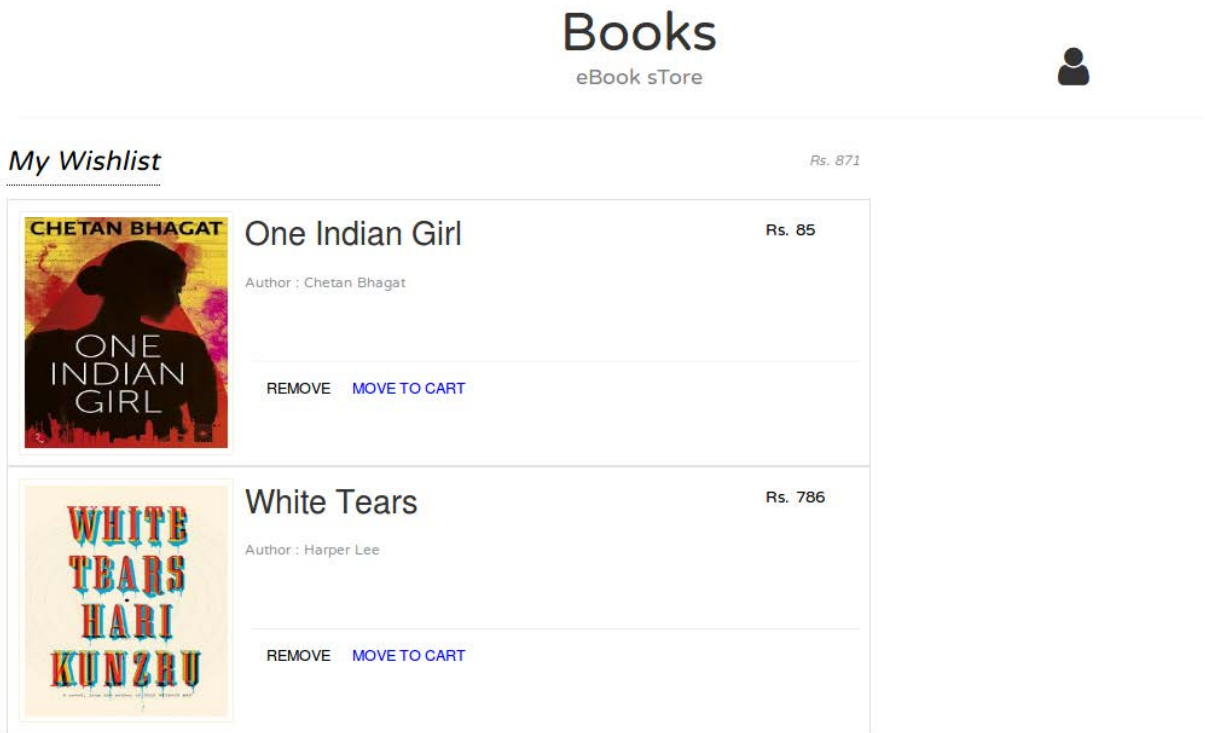
Best Seller Books:



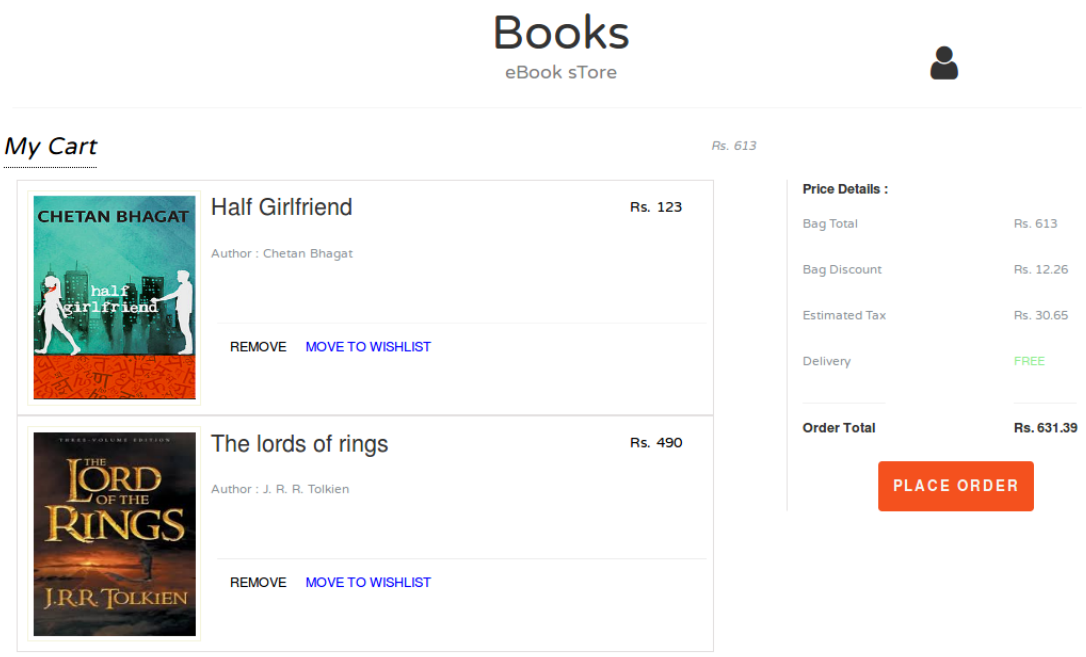
Browse Genres:



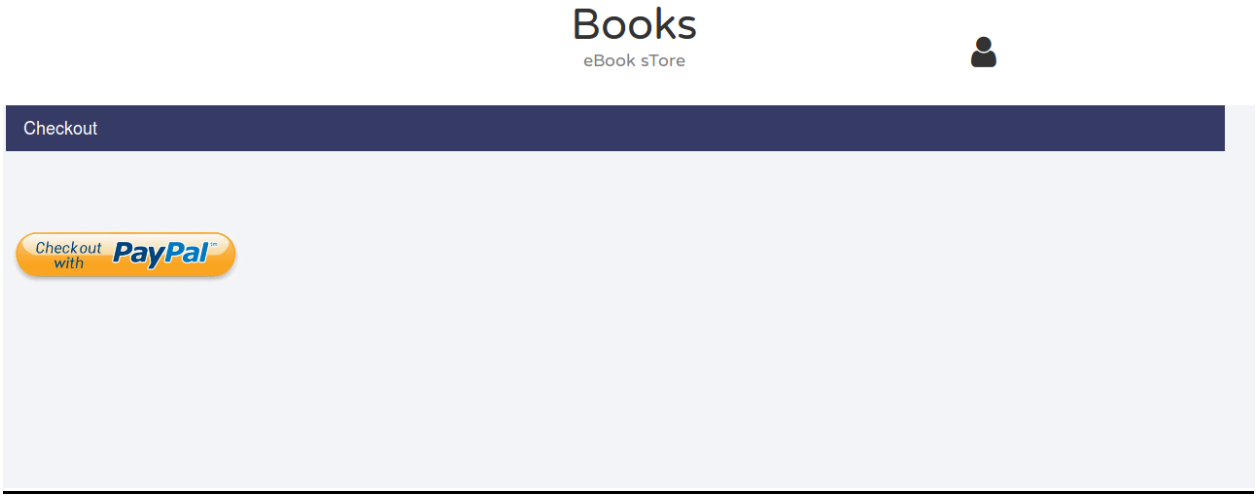
Wishlist:



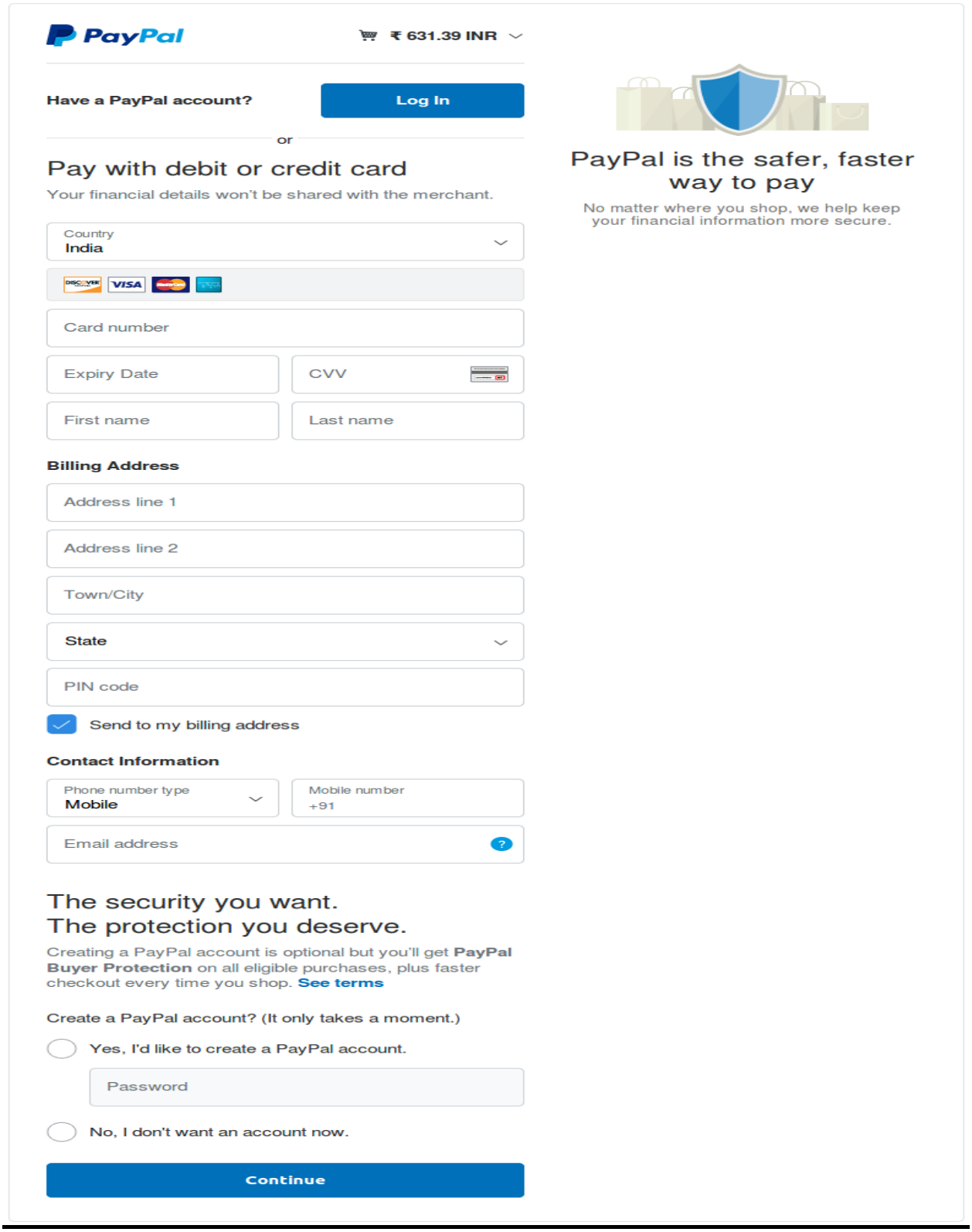
Cart:



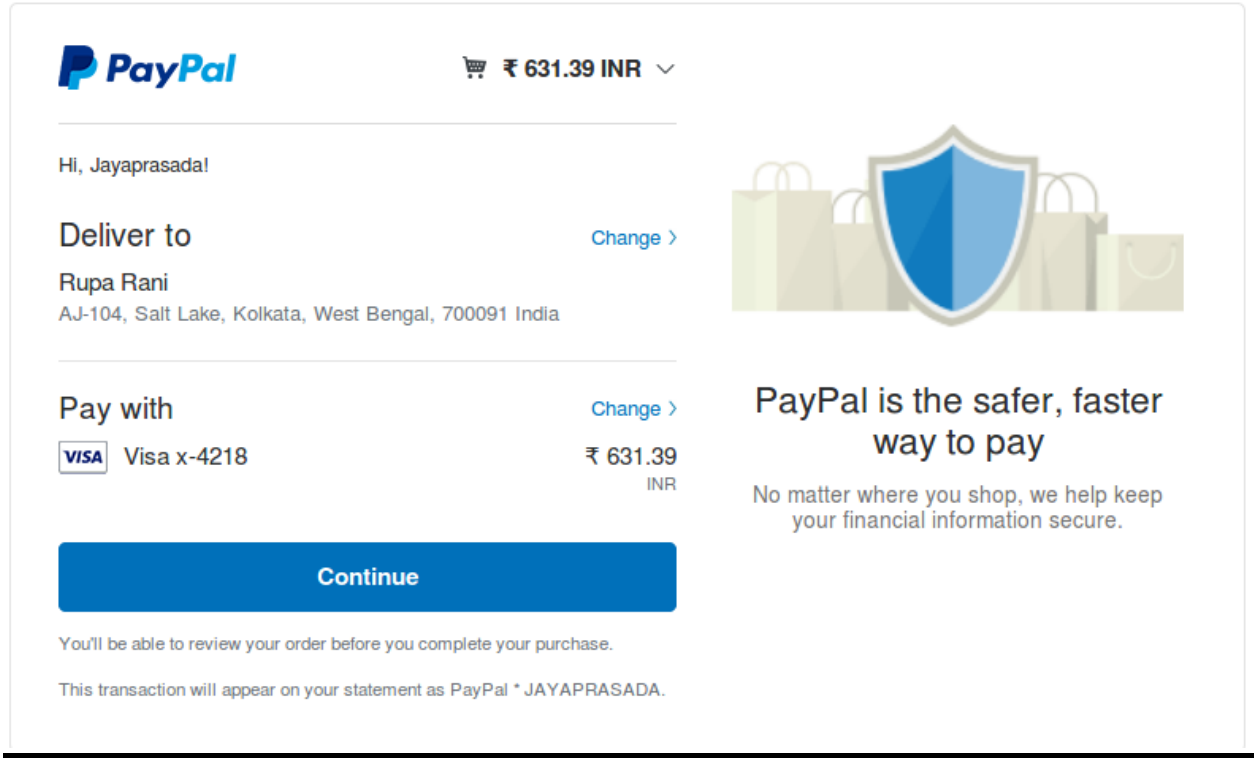
Payment:



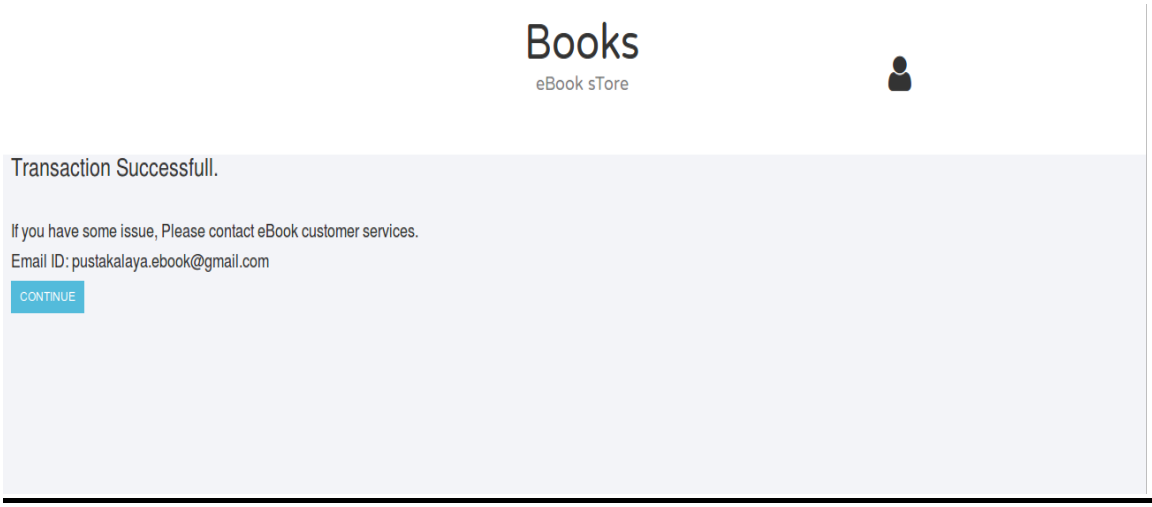
PayPal gateway:



Delivery address and Credit/debit card:



Order confirmation:



Order Confirmation mail:

Order Confirmation

Book Services <pustakalaya.ebook@gmail.com>
Reply-To: Book Services <no-reply@gmail.com>
To: riturajreso@gmail.com

Dear Reader,

We are pleased to inform you that 2 item from your order PAY-45D81189E0343801VLMB22YY has been shipped!

Delivery Address :

Rupa Rani

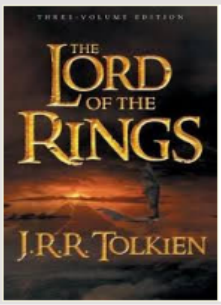
AJ-104, Salt Lake,

Kolkata,

West Bengal - 700091

Half Girlfriend

Rs. 123.00



The lords of rings

Rs. 490.00

Total : 631.39(inclusive of tax)

Thank You

This notification was automatically generated. Please do not reply to this mail.

IMPLEMENTATION

HTML:

HTML stands for Hypertext Markup Language, and it is the most widely used language to write Web Pages.

- Hypertext refers to the way in which Web pages (HTML documents) are linked together. Thus, the link available on a webpage is called Hypertext.
- As its name suggests, HTML is a Markup Language which means you use HTML to simply "mark-up" a text document with tags that tell a Web browser how to structure it to display.

Originally, HTML was developed with the intent of defining the structure of documents like headings, paragraphs, lists, and so forth to facilitate the sharing of scientific information between researchers.

Now, HTML is being widely used to format web pages with the help of different tags available in HTML language.

HTML Tags:

HTML is a markup language and makes use of various tags to format the content. These tags are enclosed within angle braces <Tag Name>. Except few tags, most of the tags have their corresponding closing tags. For example, <html> has its closing tag </html> and <body> tag has its closing tag </body> tag etc.

Some html tags are:

<!DOCTYPE> to define document type and html version,

<html> , <head>,<title>,<body> , <h1>, ,
,<hr> etc.

HTML Elements:

An HTML element is defined by a starting tag. If the element contains other content, it ends with a closing tag, where the element name is preceded by a forward slash as shown below with few tags –

 paragraph content

<h1> heading content </h1>

 division content

HTML Attributes:

An attribute is used to define the characteristics of an HTML element and is placed inside the element's opening tag. All attributes are made up of two parts − a name and a value

- The name is the property you want to set. For example, the paragraph <p> element in the example carries an attribute whose name is align, which you can use to indicate the alignment of paragraph on the page.
- The value is what you want the value of the property to be set and always put within quotations. The below example shows three possible values of align attribute: left, center and right.

Attribute names and attribute values are case-insensitive. The four core attributes that can be used on the majority of HTML elements (although not all) are −

➔ Id
➔ Title
➔ Class
➔ Style

HTML Meta Tags:

HTML lets us specify metadata - additional important information about a document in a variety of ways. The META elements can be used to include name/value pairs describing properties of the HTML document, such as author, expiry date, a list of keywords, document author etc.

The <meta> tag is used to provide such additional information. This tag is an empty element and so does not have a closing tag but it carries information within its attributes.

HTML Comments:

Comment is a piece of code which is ignored by any web browser. It is a good practice to add comments into your HTML code, especially in complex documents, to indicate sections of a document, and any other notes to anyone looking at the code. Comments help you and others understand your code and increases code readability.

HTML comments are placed in between <!-- ... --> tags. So, any content placed with-in <!-- ... --> tags will be treated as comment and will be completely ignored by the browser.

HTML Images:

Images are very important to beautify as well as to depict many complex concepts in simple way on our web page. we can insert any image in your web page by using <img> tag.

Syntax :- `<img src = "Image URL" ... attributes-list/>`

We can use PNG, JPEG or GIF image file based on our comfort but make sure we specify correct image file name in src attribute. Image name is always case sensitive.

The alt attribute is a mandatory attribute which specifies an alternate text for an image, if the image cannot be displayed.

HTML Lists:

HTML offers web authors three ways for specifying lists of information. All lists must contain one or more list elements. Lists may contain −

<ul> − An unordered list. This will list items using plain bullets.

<ol> − An ordered list. This will use different schemes of numbers to list your items.

<dl> − A definition list. This arranges your items in the same way as they are arranged in a dictionary.

HTML Links:

A webpage can contain various links that take you directly to other pages and even specific parts of a given page. These links are known as hyperlinks.

Hyperlinks allow visitors to navigate between Web sites by clicking on words, phrases, and images. Thus you can create hyperlinks using text or images available on a webpage.

A link is specified using HTML tag <a>. This tag is called anchor tag and anything between the opening <a> tag and the closing tag becomes part of the link and a user can click that part to reach to the linked document. Following is the simple syntax to use <a> tag.

Syntax: `<a href = "Document URL" ... attributes-list>Link Text</a>`

HTML Forms:

A form will take input from the site visitor and then will post it to a back-end application such as CGI, ASP Script or PHP script etc. The back-end application will perform required processing on the passed data based on defined business logic inside the application.

There are various form elements available like text fields, textarea fields, drop-down menus, radio buttons, checkboxes, etc.

The HTML <form> tag is used to create an HTML form and it has following syntax −

```
<form action = "Script URL" method = "GET|POST">
   form elements like input, textarea etc.
</form>
```

CSS:

Cascading Style Sheets, fondly referred to as CSS, is a simple design language intended to simplify the process of making web pages presentable.

CSS handles the look and feel part of a web page. Using CSS, you can control the color of the text, the style of fonts, the spacing between paragraphs, how columns are sized and laid out, what background images or colors are used, layout designs, variations in display for different devices and screen sizes as well as a variety of other effects.

CSS is easy to learn and understand but it provides powerful control over the presentation of an HTML document. Most commonly, CSS is combined with the markup languages HTML or XHTML.

Advantages of CSS:

- CSS saves time
- Pages load faster
- Easy maintenance
- Superior styles to HTML
- Multiple Device Compatibility
- Global web standards
- Offline Browsing
- Platform Independence

CSS Syntax:

A CSS comprises of style rules that are interpreted by the browser and then applied to the corresponding elements in your document. A style rule is made of three parts −

- Selector − A selector is an HTML tag at which a style will be applied. This could be any tag like <h1> or <table> etc.
- Property - A property is a type of attribute of HTML tag. Put simply, all the HTML attributes are converted into CSS properties. They could be color, border etc.
- Value - Values are assigned to properties. For example, color property can have value either red or #F1F1F1 etc.

Syntax: `selector { property: value }`

Imported CSS - @import Rule:

@import is used to import an external stylesheet in a manner similar to the <link> element. Here is the generic syntax of @import rule.

```
<head>
   <@import "URL";
</head> .
```

CSS Colors:

CSS uses color values to specify a color. Typically, these are used to set a color either for the foreground of an element (i.e., its text) or else for the background of the element. They can also be used to affect the color of borders and other decorative effects.

Format	Syntax	Example
Hex Code	#RRGGBB	p{color:#FF0000;}
Short Hex Code	#RGB	p{color:#6A7;}
RGB %	rgb(rrr%,ggg%,bbb%)	p{color:rgb(50%,50%,50%);}
RGB Absolute	rgb(rrr,ggg,bbb)	p{color:rgb(0,0,255);}
keyword	aqua, black, etc.	p{color:teal;}

CSS Fonts:

- ➢ The font-family property is used to change the face of a font.
- ➢ The font-style property is used to make a font italic or oblique.
- ➢ The font-variant property is used to create a small-caps effect.
- ➢ The font-weight property is used to increase or decrease how bold or light a font appears.
- ➢ The font-size property is used to increase or decrease the size of a font.
- ➢ The font property is used as shorthand to specify a number of other font properties.

CSS Texts:

We can manipulate text using CSS properties. We can set following text properties of an element −

- ➢ The color property is used to set the color of a text.
- ➢ The direction property is used to set the text direction.
- ➢ The letter-spacing property is used to add or subtract space between the letters that make up a word.
- ➢ The word-spacing property is used to add or subtract space between the words of a sentence.
- ➢ The text-indent property is used to indent the text of a paragraph.
- ➢ The text-align property is used to align the text of a document.
- ➢ The text-decoration property is used to underline, overline, and strikethrough text.
- ➢ The text-transform property is used to capitalize text or convert text to uppercase or lowercase letters.
- ➢ The white-space property is used to control the flow and formatting of text.
- ➢ The text-shadow property is used to set the text shadow around a text.

CSS Images:

Images play an important role in any webpage. Though it is not recommended to include a lot of images, but it is still important to use good images wherever required. CSS plays a good role to control image display. You can set the following image properties using CSS.

- ➢ The border property is used to set the width of an image border.

- The height property is used to set the height of an image.
- The width property is used to set the width of an image.

CSS Margins:

The *margin* property defines the space around an HTML element. It is possible to use negative values to overlap content.

The values of the margin property are not inherited by the child elements. Remember that the adjacent vertical margins (top and bottom margins) will collapse into each other so that the distance between the blocks is not the sum of the margins, but only the greater of the two margins or the same size as one margin if both are equal.

We have the following properties to set an element margin.

- The margin specifies a shorthand property for setting the margin properties in one declaration.
- The margin-bottom specifies the bottom margin of an element.
- The margin-top specifies the top margin of an element.
- The margin-left specifies the left margin of an element.
- The margin-right specifies the right margin of an element.

CSS Paddings:

The padding property allows you to specify how much space should appear between the content of an element and its border −

The value of this attribute should be either a length, a percentage, or the word inherit. If the value is inherit, it will have the same padding as its parent element. If a percentage is used, the percentage is of the containing box.

The following CSS properties can be used to control lists. We can also set different values for the padding on each side of the box using the following properties −

- The padding-bottom specifies the bottom padding of an element.
- The padding-top specifies the top padding of an element.
- The padding-left specifies the left padding of an element.
- The padding-right specifies the right padding of an element.
- The padding serves as shorthand for the preceding properties.

CSS Dimensions:

We have the following properties that allow controlling the dimensions of a box.

- The height property is used to set the height of a box.
- The width property is used to set the width of a box.
- The line-height property is used to set the height of a line of text.
- The max-height property is used to set a maximum height that a box can be.
- The min-height property is used to set the minimum height that a box can be.
- The max-width property is used to set the maximum width that a box can be.
- The min-width property is used to set the minimum width that a box can be.

CSS Positioning:

CSS helps you to position your HTML element. You can put any HTML element at whatever location we like. We can specify whether we want the element positioned relative to its natural position in the page or absolute based on its parent element.

Relative Positioning:

Relative positioning changes the position of the HTML element relative to where it normally appears. So "left:20" adds 20 pixels to the element's LEFT position. We can use two values *top* and *left* along with the *position* property to move an HTML element anywhere in the HTML document.

- Move Left - Use a negative value for *left*.
- Move Right - Use a positive value for *left*.
- Move Up - Use a negative value for *top*.
- Move Down - Use a positive value for *top*.

Absolute Positioning:

An element with position: absolute is positioned at the specified coordinates relative to your screen top-left corner. We can use two values *top* and *left* along with the *position* property to move an HTML element anywhere in the HTML document.

- Move Left - Use a negative value for *left*.
- Move Right - Use a positive value for *left*.
- Move Up - Use a negative value for *top*.

- Move Down - Use a positive value for *top*.

CSS Layers:

CSS gives you opportunity to create layers of various divisions. The CSS layers refer to applying the *z-index* property to elements that overlap with each other.

The z-index property is used along with the *position* property to create an effect of layers. You can specify which element should come on top and which element should come at bottom.

A z-index property can help you to create more complex webpage layouts.

CSS @ Rules:

- The @import: rule imports another style sheet into the current style sheet.
- The @charset rule indicates the character set the style sheet uses.
- The @font-face rule is used to exhaustively describe a font face for use in a document.
- The !important rule indicates that a user-defined rule should take precedence over the author's style sheets.

BOOTSTRAP:

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive designs

Advantages of Bootstrap:

- **Easy to use:** Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- **Responsive features:** Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- **Mobile-first approach:** In Bootstrap 3, mobile-first styles are part of the core framework
- **Browser compatibility:** Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Edge, Safari, and Opera).

There are two ways to start using Bootstrap on your own web site.

- Download Bootstrap from getbootstrap.com
- Include Bootstrap from a CDN.

JAVASCRIPT:

JavaScript Tutorial for beginners and professionals is a solution of client side dynamic pages.

JavaScript is *an object-based scripting language* that is lightweight and cross-platform.

JavaScript is not compiled but translated. The JavaScript Translator (embedded in browser) is responsible to translate the JavaScript code.

Where JavaScript is used:

JavaScript is used to create interactive websites. It is mainly used for:

- Client-side validation
- Dynamic drop-down menus
- Displaying data and time
- Displaying popup windows and dialog boxes (like alert dialog box, confirm dialog box and prompt dialog box)
- Displaying clocks etc.

Advantages of JavaScript:

- Less server interaction − You can validate user input before sending the page off to the server. This saves server traffic, which means less load on your server.
- Immediate feedback to the visitors − They don't have to wait for a page reload to see if they have forgotten to enter something.
- Increased interactivity − You can create interfaces that react when the user hovers over them with a mouse or activates them via the keyboard.
- Richer interfaces − You can use JavaScript to include such items as drag-and-drop components and sliders to give a Rich Interface to your site visitors.

JavaScript Form Validation:

It is important to validate the form submitted by the user because it can have inappropriate values. So validation is must.
The JavaScript provides us the facility to validate the form on the client side so processing will be fast than server-side validation. So, most of the web developers prefer JavaScript form validation.
Through JavaScript, we can validate name, password, email, date, mobile number etc fields.

Javascript events:

JavaScript's interaction with HTML is handled through events that occur when the user or the browser manipulates a page.

When the page loads, it is called an event. When the user clicks a button, that click too is an event. Other examples include events like pressing any key, closing a window, resizing a window, etc.

Developers can use these events to execute JavaScript coded responses, which cause buttons to close windows, messages to be displayed to users, data to be validated, and virtually any other type of response imaginable.

Events are a part of the Document Object Model (DOM) Level 3 and every HTML element contains a set of events which can trigger JavaScript Code.

Some events are:

OnClick event , OnSubmit event , onmouseover and onmouseout event , etc.

Javascript Dialog box:

JavaScript supports three important types of dialog boxes. These dialog boxes can be used to raise an alert, or to get confirmation on any input or to have a kind of input from the users. Here we will discuss each dialog box one by one.

Alert Dialog Box:

An alert dialog box is mostly used to give a warning message to the users. For example, if one input field requires to enter some text but the user does not provide any input, then as a part of validation, you can use an alert box to give a warning message.

Prompt Dialog Box:

The prompt dialog box is very useful when you want to pop-up a text box to get user input. Thus, it enables you to interact with the user. The user needs to fill in the field and then click OK.

This dialog box is displayed using a method called prompt() which takes two parameters: (i) a label which you want to display in the text box and (ii) a default string to display in the text box.

This dialog box has two buttons: OK and Cancel. If the user clicks the OK button, the window method prompt() will return the entered value from the text box. If the user clicks tUser cancel button, the window method prompt()returns null.

Javascript Object:

JavaScript is an Object Oriented Programming (OOP) language. A programming language can be called object-oriented if it provides four basic capabilities to developers −

- Encapsulation − the capability to store related information, whether data or methods, together in an object.
- Aggregation − the capability to store one object inside another object.
- Inheritance − the capability of a class to rely upon another class (or number of classes) for some of its properties and methods.
- Polymorphism − the capability to write one function or method that works in a variety of different ways.

PHP:

PHP, which stands for "*PHP: Hypertext Preprocessor*" is a widely-used Open Source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. Its syntax draws upon C, Java, and Perl, and is easy to learn. The main goal of the language is to allow web developers to write dynamically generated web pages quickly, but we can do much more with PHP.

PHP is an open source, interpreted and object-oriented scripting language i.e. executed at server side. It is used to develop web applications (an application i.e. executed at server side and generates dynamic page).

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use

- PHP files can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code are executed on the server, and the result is returned to the browser as plain HTML
- PHP files have extension ".php"
- PHP can generate dynamic page content
- PHP can create, open, read, write, delete, and close files on the server
- PHP can collect form data
- PHP can send and receive cookies
- PHP can add, delete, modify data in your database
- PHP can be used to control user-access

PHP Features:

There are given many features of PHP.

- **Performance**: Script written in PHP executes much faster then those scripts written in other languages such as JSP & ASP.
- **Open Source Software**: PHP source code is free available on the web, you can developed all the version of PHP according to your requirement without paying any cost.
- **Platform Independent**: PHP are available for WINDOWS, MAC, LINUX & UNIX operating system. A PHP application developed in one OS can be easily executed in other OS also.
- **Compatibility**: PHP is compatible with almost all local servers used today like Apache, IIS etc.
- **Embedded**: PHP code can be easily embedded within HTML tags and script.

PHP is an amazing and popular language!

It is powerful enough to be at the core of the biggest blogging system on the web (WordPress)!

It is deep enough to run the largest social network (Facebook)!

It is also easy enough to be a beginner's first server side language!

MySQL DATABASE:

MySQL is an open-source relational database management system (RDBMS). In July 2013, it was the world's second most widely used RDBMS, and the most widely used open-source client–server model RDBMS. It is named after Michael Widenius' (who is a co-founder of MySQL) daughter, my while "SQL" stands as the abbreviation for Structured Query Language. MySQL is a fast, easy-to-use RDBMS being used for many small and big businesses. MySQL is developed, marketed, and supported by MySQL AB, which is a Swedish company. MySQL is becoming so popular because of many good reasons:

- ➢ MySQL is released under an open-source license. So you have nothing to pay to use it.
- ➢ MySQL is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful database packages.
- ➢ MySQL uses a standard form of the well-known SQL data language.
- ➢ MySQL works on many operating systems and with many languages including PHP, PERL, C, C++, JAVA, etc.
- ➢ MySQL works very quickly and works well even with large data sets.
- ➢ MySQL is very friendly to PHP, the most appreciated language for web development.
- ➢ MySQL supports large databases, up to 50 million rows or more in a table. The default file size limit for a table is 4GB, but you can increase this (if your operating system can handle it) to a theoretical limit of 8 million terabytes (TB).
- ➢ MySQL is customizable. The open-source GPL license allows programmers to modify the MySQL software to fit their own specific environments.

HARDWARE & SOFTWARE SPECIFICATIONS

HARDWARE SPECIFICATIONS:

Computer	:	PC, Laptop, Mobile
Processor	:	Intel Pentium dual core
RAM	:	2GB
Input Device	:	Mouse, keyboard
Output Device	:	Printer, monitor

SOFTWARE SPECIFICATIONS:

Operating System	: Windows, Ubuntu
Database	: MySQL 5.7
Front End	: Html, CSS, Bootstrap, JavaScript
Back End	: MySQL 5.7, PHP

CONCLUSION

The Internet has become a major resource in modern business, thus electronic shopping has gained significance not only from the entrepreneur's but also from the customer's point of view. For the entrepreneur, electronic shopping generates new business opportunities and for the customer, it makes comparative shopping possible.

As per a survey, most consumers of online stores are impulsive and usually make a decision to stay on a site within the first few seconds. "Website design is like a shop interior. If the shop looks poor or like hundreds of other shops the customer is most likely to skip to the other site". Hence we have designed the project to provide the user with easy navigation, retrieval of data and necessary feedback as much as possible.

In this project, the user is provided with an e-commerce web site that can be used to buy books online. To implement this as a web application we used PHP as the Technology. PHP has several advantages such as enhanced performance, scalability, built- in security and simplicity. To build any web application using PHP we need language such as HTML ,CSS, Bootstrap, Javascript and so on for designing the front-end.

MySQL and PHP was used as back-end database since it is one of the most popular open source databases, and it provides fast data access, easy installation and simplicity.

A good shopping cart design must be accompanied with user-friendly shopping cart application logic. It should be convenient for the customer to view the contents of their cart and to be able to remove or add items to their cart. The shopping cart application described in this project provides a number of features that are designed to make the customer more comfortable. 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.

LIMITATIONS and FUTURE DEVELOPMENT

There are some limitations for the current system to which solutions can be provided as a future development:

1. The system is not configured for multi- users at this time. The concept of transaction can be used to achieve this.

2. The Website is not accessible to everyone. It can be deployed on a web server so that everybody who is connected to the Internet can use it.

3. Credit Card validation is not done. Third party proprietary software can be used for validation check.

As for other future developments, the following can be done:

1. The Administrator of the web site can be given more functionality, like looking at a specific customer's profile, the books that have to be reordered, etc.

2. Multiple Shopping carts can be allowed.

BIBLIOGRAPHY

During the development of the project, we have used many resources and for that we are grateful to all the people concerned.

Given below are the names of some, which we have used during development and Documentation of the project.

Useful sites for this project are as follows:

- www.w3school.com
- www.codepen.com
- www.stackoverflow.com
- www.php.net