

# BOOK EXCHANGE

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# BOOK EXCHANGE

- PROJECT OBJECTIVE
- REQUIREMENTS
- SYSTEM FUNCTIONS LIST
- PLATFORMS
- SYSTEM ARCHITECTURE
- SYSTEM FUNCTIONS DETAIL
- TECHNICAL
- FUTURE WORK

# PROJECT OBJECTIVE

- Book Exchange Application
- Web-Based Application
  - Database management
  - Programming
- Application working scope
  - Local Server
  - Users / Students from CSULA

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# REQUIREMENTS

- Functional Web based Application
- Users to access accounts online
  - Students from CSULA
- Exchange of Books
  - Rental / Trade
  - Students should sell and buy books
- System Functions



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# SYSTEM FUNCTIONS

- Admin Privileges
  - Delete Users
  - Increase Balance of Users
  - Users privileges and account alteration
- Cart
  - Multiple books in cart
  - Checkout
- Chat / Forum
  - Chatting / Commenting Publicly
- Profile
  - Balance
  - Book selling
  - Restriction to purchase on low balance
- Book Information
  - Detail information of Books
  - Price, Author, ISBN
  - Ability to comment and rate a book by user.

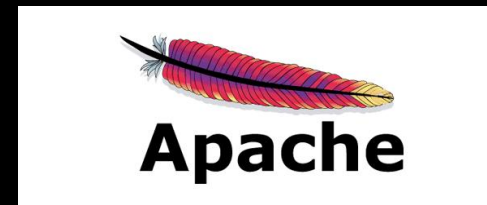
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# PLATFORMS

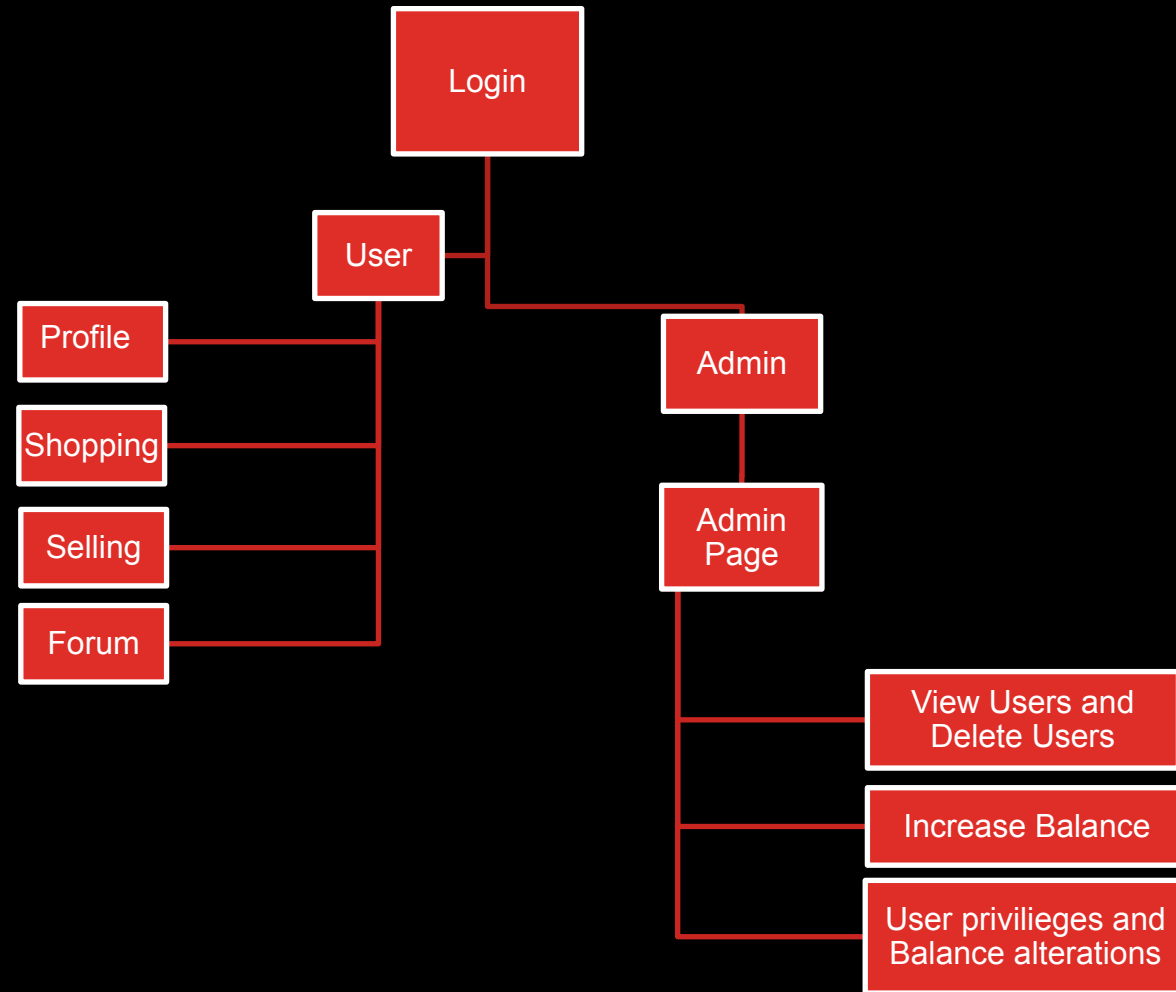
- Software
  - PHP
  - MYSQL
  - CSS
- Communication
  - APACHE SERVER
  - HTTPS PROTOCOL



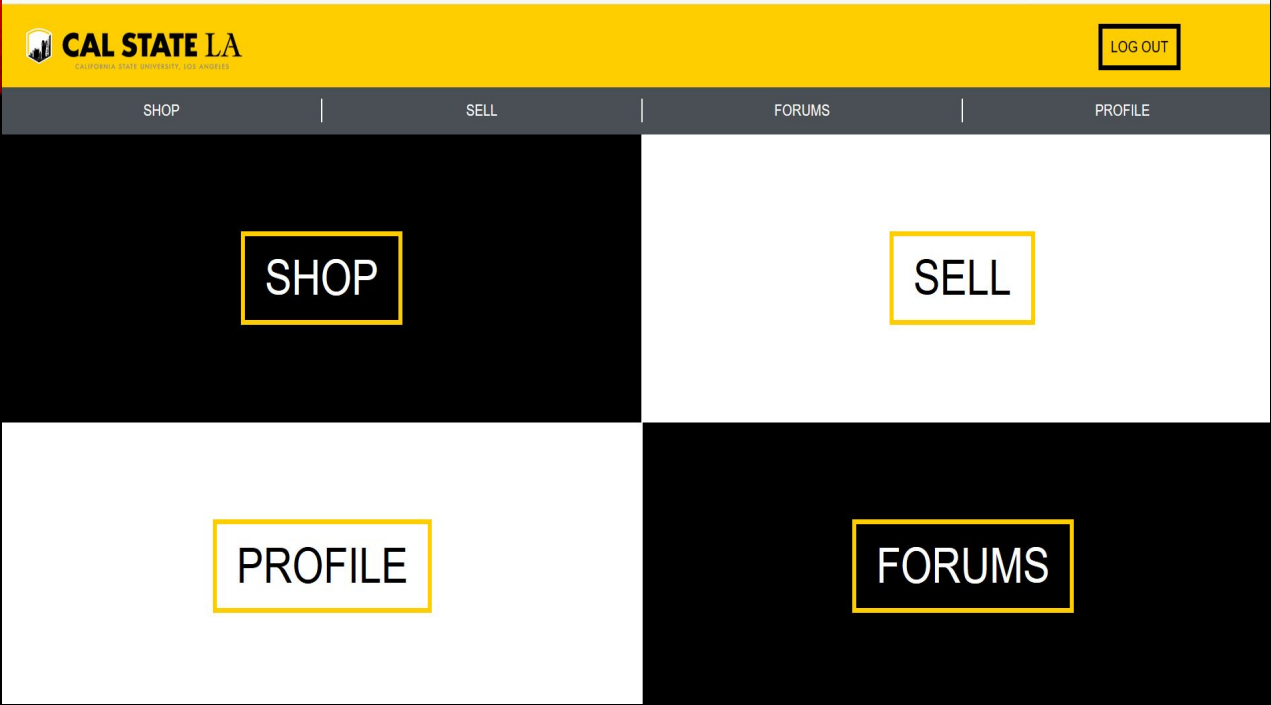
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# SYSTEM ARCHITECTURE



# SYSTEM ARCHITECTURE: MAIN FEATURES



ADMINISTRATION						
Name	Email	Delete	Increase Balance	Administrator Permissions	Status	Balance
Kevin Crespin	kcrespi@calstatela.edu	DELETE	Increase Balance	Revoke Administrator	Active	30.00, Good Standing
Admin	admin@calstatela.edu	DELETE	Increase Balance	Revoke Administrator	Active	100.00, Good Standing
Jose Rosa	jrosa@calstatela.edu	DELETE	Increase Balance	Make Administrator	Active	100.00, Good Standing
Manuel Herrera	mherrer@calstatela.edu	DELETE	Increase Balance	Make Administrator	Active	100.00, Good Standing
John Jackson	jjackson@calstatela.edu	DELETE	Increase Balance	Make Administrator	Active	197.77, Good Standing
Sandip Hodkhasa	shodkha@calstatela.edu	DELETE	Increase Balance	Revoke Administrator	Active	2.23, Good Standing
test	test@test.edu	DELETE	Increase Balance	Make Administrator	Active	10.00, Good Standing

[GO TO ENROLLMENT PAGE](#)[MAIN MENU](#)[LOGOUT](#)

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# SYSTEM FEATURE

## ADMIN PRIVILEGES

- Add user
- Delete users
- Increase balance
- Revoke and make users admin
- Set status to hold
- View Balance of each users

# SYSTEM FEATURE: ADMIN PRIVILEGES

## ADMINISTRATION

Name	Email	Delete	Increase Balance	Administrator Permissions	Status	Balance
Kevin Crespín	kcespi@calstatela.edu	DELETE	Increase Balance	Revoke Administrator	Active	30.00, Good Standing
Admin	admin@calstatela.edu	DELETE	Increase Balance	Revoke Administrator	Active	100.00, Good Standing
Jose Rosa	jrosa@calstatela.edu	DELETE	Increase Balance	Make Administrator	Active	100.00, Good Standing
Manuel Herrera	mherrer@calstatela.edu	DELETE	Increase Balance	Make Administrator	Active	100.00, Good Standing
John Jackson	jjackson@calstatela.edu	DELETE	Increase Balance	Make Administrator	Active	197.77, Good Standing
Sandip Hodkhasa	shodkha@calstatela.edu	DELETE	Increase Balance	Revoke Administrator	Active	2.23, Good Standing
test	test@test.edu	DELETE	Increase Balance	Make Administrator	Active	10.00, Good Standing

GO TO ENROLLMENT PAGE

MAIN MENU

LOGOUT

VIEW  
BALANCE

ACCOUNT  
HOLD AND  
ACTIVE

LOGOUT AND  
MAIN MENU

ADDING USER

DELETING  
USER

INCREASE  
USER  
BALANCE

USER  
PRIVILEGES

# SYSTEM FEATURE

## SELLING

- Sell books
- Rent Book
- Add Book Information
  - Title
  - Author
  - Front Page
  - ISBN10
  - Price
  - Description

# SYSTEM FEATURE: SELLING

Selling Page

localhost:8080/BookExchange/selling.php?name=admin&email=admin@calstatela.edu

**CAL STATE LA**  
CALIFORNIA STATE UNIVERSITY, LOS ANGELES

LOG OUT

SHOP | SELL | FORUMS | PROFILE

## SELL

SELLING AS	admin
TITLE	<input type="text"/>
ISBN-10	<input type="text"/>
AUTHOR	<input type="text"/>
PRICE	\$ <input type="text"/>
DESCRIPTION	<input type="text"/>
PICTURE	<input type="button" value="Browse..."/> No file selected.

ADDING  
BOOKS AND  
INFORMATION

# SYSTEM FEATURE

## SHOPPING

- List of books being sold
- Book Information being sold
  - Title
  - Author
  - Front Page
  - ISBN10
  - Price
- Ability to view book information



# SYSTEM FEATURE: SHOPPING

Shopping

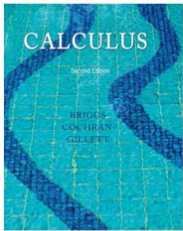
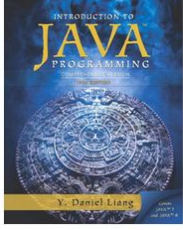

localhost:8080/BookExchange/shopping.php?name=admin&email=admin@calstatela.e

CAL STATE LA  
CALIFORNIA STATE UNIVERSITY, LOS ANGELES

LOG OUT

SHOP | SELL | FORUMS | PROFILE

## SHOP

SELLER	TITLE	PRICE	DATE POSTED	COVER
Kevin Crespin	<a href="#">Calculus 2nd Edition</a>	40.00	2019-03-10	
Admin	<a href="#">Introduction to Java Programming Comprehensive Version 10th</a>	14.00	2019-03-10	
Manuel Herrera	<a href="#">Data Structures and Algorithms in Python 1st Edition</a>	50.99	2019-03-10	

CLICK TO GO TO  
BOOK INFORMATION

# SYSTEM FEATURE

## BOOK INFORMATION

- Book Information being sold
  - Title
  - Author
  - Front Page
  - ISBN10
  - Price
- Ability to add books to cart
- Ability to add comments about the book
- Ability to rate the book
  - The average rating of the books gets updated
- Only CSULA users can comments on the books

# SYSTEM FEATURE: BOOK INFORMATION

ADD TO CART

My Bargains

localhost:8080/BookExchange/BookInformation.php?isbn10=0321954351

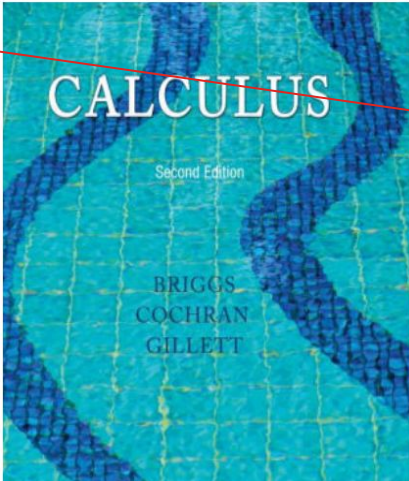
**CAL STATE LA**  
CALIFORNIA STATE UNIVERSITY, LOS ANGELES

LOG OUT

SHOP | SELL | FORUMS | PROFILE

## Calculus 2nd Edition

by William L. Briggs, Lyle Cochran, Bernard Gillett



Price  
**\$40.00**  
[Add to Cart](#)

ISBN-10:	0321954351
ISBN-13:	978-0321954351
Publication Date:	2019-03-10
Sold by:	Kevin Crespin
Book Rating:	5 Stars

Description

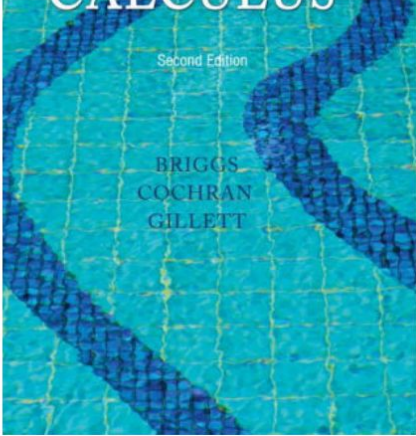
# SYSTEM FEATURE: BOOK INFORMATION

COMMENTS CAN BE  
ADDED

BOOKS CAN BE  
RATED AS WELL

My Bargains

localhost:8080/BookExchange/BookInformation.php?isbn10=0321954351



Second Edition  
BRIGGS  
COCHRAN  
GILLET

Add to Cart

ISBN-10:	0321954351
ISBN-13:	978-0321954351
Publication Date:	2019-03-10
Sold by:	Kevin Crespin
Book Rating:	5 Stars

Description

Excellent condition, used only for a semester

NAME	COMMENT	RATING
Kevin Crespin	If you are taking MATH 2010 and MATH 2020 at Cal State, you are required to have it in two semesters; so if you are a freshman is a must have	5

COMMENT

Make comments here

Rating: 1 ○ ○ ○ ● ○ ○ 5

Submit

# SYSTEM FEATURE

## USER PROFILE

- View Balance
  - View updated balance after books added to cart
  - Flag balance when low
- View Books being sold by user
- View Books added to cart
  - Add multiple books to cart
  - Prevention of adding books to cart when low balance



# SYSTEM FEATURE: PROFILE

USER NOT ALLOWED  
TO ADD BOOKS IF  
LOW BALANCE

BALANCE OF USER,  
BALANCE ALSO GETS  
UPDATED WHEN THE  
BOOK IS ADDED TO  
CART

BOOKS LISTED SOLD  
BY USER

BOOKS IN THE CART,  
MULTIPLE BOOKS  
CAN BE ADDED TO  
THE CART

The screenshot displays a user profile page for 'AL STATE LA' (California State University, Los Angeles). The page is divided into several sections:

- YOUR ACCOUNT BALANCE:** Shows a balance of \$32.26. A red callout box points to this section with the text: "USER NOT ALLOWED TO ADD BOOKS IF LOW BALANCE".
- BOOKS YOU ARE SELLING:** Lists books for sale, including "University Physics 14th Edition" for \$51.00 and "Calculus 2nd Edition" for \$40.00. A red callout box points to this section with the text: "BOOKS LISTED SOLD BY USER".
- Books in Cart:** Shows books added to the cart, including "Elementary Linear Algebra 8th Edition" for \$23.55 and "Give Me Liberty!: An American History Seagull Fifth Edition (Vol. 2)" for \$29.97. A red callout box points to this section with the text: "BOOKS IN THE CART, MULTIPLE BOOKS CAN BE ADDED TO THE CART".
- WELCOME:** A central section with a "WELCOME" message and a "BO" button.
- SHOP | SELL:** Navigation links at the top.
- PROFILE:** A link in the top right corner.

Red arrows indicate the flow of information and actions:

- From the "YOUR ACCOUNT BALANCE" section to the "BOOKS YOU ARE SELLING" section.
- From the "BOOKS YOU ARE SELLING" section to the "Books in Cart" section.
- From the "Books in Cart" section to the "Buy" button.

The "Buy" button is located at the bottom right of the page, next to the "Total: \$69.97" label.

# SYSTEM FEATURE

## FORUM

- Posting messages by users
- Messages gets added at the bottom
- Messages shows user name
- Works like open forum

# SYSTEM FEATURE: FORUM

The screenshot shows a web browser window with the address bar displaying `localhost:8080/BookExchange/forums.php`. The page features a yellow header with the **CAL STATE LA** logo and a dark navigation bar with links for **SHOP**, **SELL**, **FORUMS**, and **PROFILE**. The main content area is titled **FORUM** and contains a table of posts and a form for adding new comments.

NAME	POST
admin	This is the forum page
admin	Discussion

Posting as: admin

**COMMENTS LISTED, WITH COMMENTS AND USER NAME**

**COMMENTS CAN BE ADDED**

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# TECHNICAL: DATA

```
mysql> show tables;
+-----+
| Tables_in_cs3337 |
+-----+
| books             |
| cart              |
| comments          |
| forum             |
| users             |
+-----+
5 rows in set (0.00 sec)
```

LIST OF TABLES  
CREATED

EXAMPLES OF  
TABLES AND THEIR  
DATA FIELDS

```
mysql> describe users;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| id    | int(10) | NO | PRI | NULL | auto_increment |
| name  | varchar(50) | NO | | | |
| email | varchar(50) | NO | | | |
| is_admin | tinyint(1) | NO | | 0 | |
| balance | decimal(15,2) | NO | | 100.00 | |
| hold_status | varchar(10) | NO | | Active | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.01 sec)
```

```
mysql> describe books;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| seller_id | int(10) | NO | | | |
| isbn10 | varchar(10) | NO | | | |
| title | varchar(100) | YES | | NULL | |
| author | varchar(50) | NO | | | |
| price | decimal(15,2) | NO | | | |
| description | varchar(500) | YES | | NULL | |
| post_time | datetime | YES | | NULL | |
| pic_path | varchar(100) | YES | | NULL | |
| toc_path | varchar(100) | YES | | NULL | |
| rating | double | YES | | 0 | |
+-----+-----+-----+-----+-----+-----+
10 rows in set (0.06 sec)
```

```
mysql> describe comments;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| commenter_id | int(10) | NO | | | |
| commenter_name | varchar(50) | NO | | | |
| comment | varchar(250) | NO | | | |
| parent_isbn10 | varchar(10) | NO | | | |
| comment_rating | int(1) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.08 sec)
```



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# FUTURE WORK

## EMAIL NOTIFICATION

- Ability to send email to users
  - when low balance
  - books overdue
  - account on hold
- When required books available
- Sending confirmation of a transaction

# FUTURE WORK

## MULTIPLE DISCUSSION THREAD

- More threads in forum
- Dynamic messaging platform

# FUTURE WORK

## ADMIN PRIVILEGES EXTENDED

- Ability to delete forum messages
- Ability to send emails to users
- Ability to delete books