

# Final Project Readme

## Final Project : Online Library Management System

### Project Summary

The project is mainly to identify the business problem corresponding to managing a library. On this business area, the project is mainly focusing on two main roles concerning with the library Management system - Admin and Users.

### Design:

The library management system has the following roles and the screen casts are below.

### Roles:

**Admin**- who manages the library management work like adding users(referred to as e-readers in this project), Vendors(referred to as e-vendors in this project) , creating book purchase and general search of books

**Users**(referred to as e-readers in this project) - has the privilege to login to his portal using the admin assigned username and password and will be able to search the available books and borrow the book, view the list of books in their login.

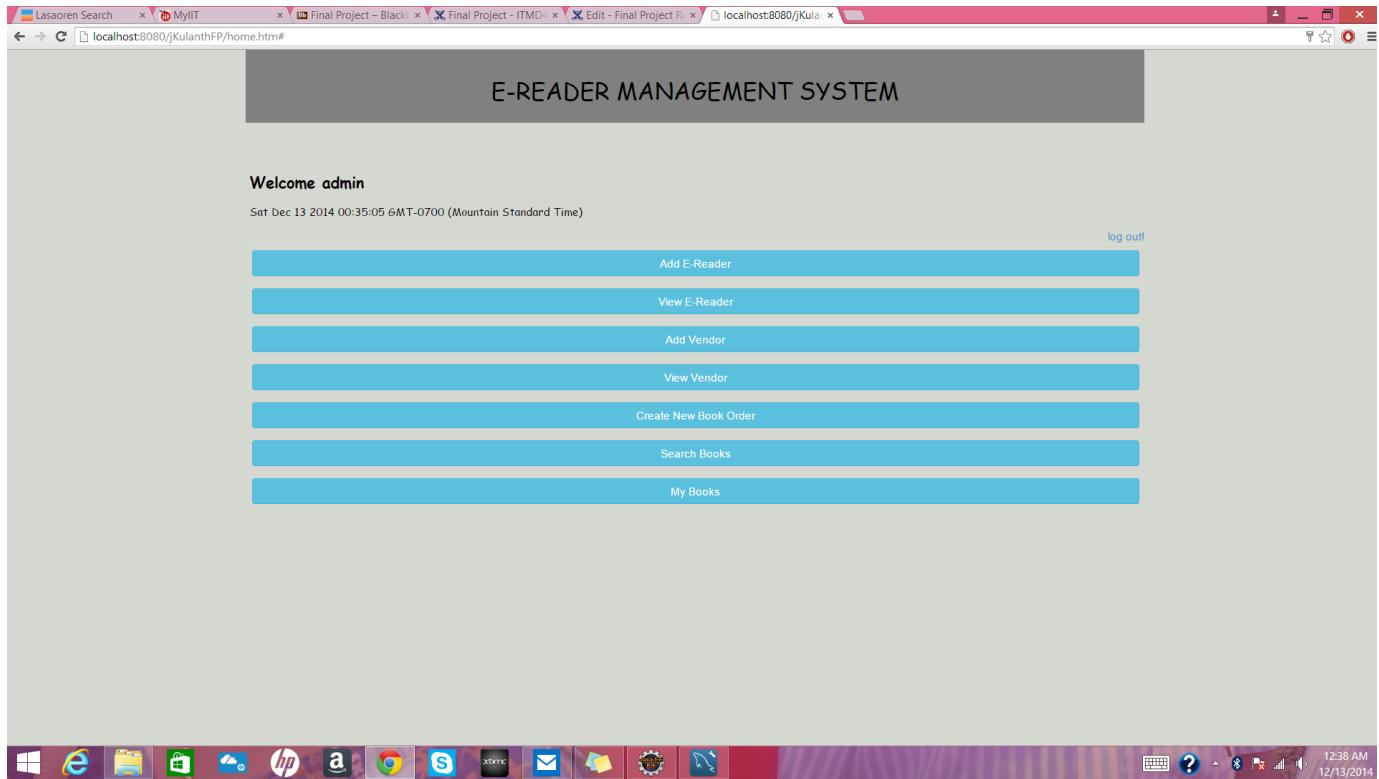
### Screenshots:

#### **General login page:**



### Admin related pages:

#### **Admin login home page:**



#### Adding E-READERS:

The screenshot shows the "Create E-Reader" form page. The title "E-READER MANAGEMENT SYSTEM" is at the top. The form fields include:  
- E-READER USER NAME: janani2389  
- PASSWORD: janani2389  
- Role: Admin (dropdown menu)  
- FIRST NAME: janani  
- LAST NAME: kulanthaiswamy  
- EMAIL ID: janani2389@yahoo.co.in  
- CONTACT NUMBER: 3124781428  
- ADDRESS: janani2389@gmail.com  
- DATE OF BIRTH: 01/02/2000  
- DATE OF JOINING: 12/20/2014  
- CUSTOMER TYPE: GOLD (dropdown menu)  
At the bottom, there are "Save" and "Reset" buttons, and a "Back to home" link in the bottom right corner. The background is light gray with some yellow highlights on certain input fields.

#### Viewing Existing e-readers:

Lasaoren Search Final Project – Black Final Project - ITMD Edit - Final Project localhost:8080/jKula

## E-READER MANAGEMENT SYSTEM

### View E-READER

User Name	First Name	Last Name	Role	Edit	Delete
admin	admin	admin	ADMIN	<a href="#">Edit</a>	<a href="#">Delete</a>
janani2389	janani	kulanthaismamy	READER	<a href="#">Edit</a>	<a href="#">Delete</a>
john123	jonathan	james	READER	<a href="#">Edit</a>	<a href="#">Delete</a>

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## E-READER MANAGEMENT SYSTEM

### Create E-VENDOR

E-VENDOR Name:

FIRST NAME:

LAST NAME:

EMAIL ID:

CONTACT NUMBER:

ADDRESS:

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**Viewing the E-vendors:**

Lasaoren Search Final Project – Black Final Project - ITMD Edit - Final Project R localhost:8080/jKular

localhost:8080/jKulanthFP/admin/viewVendor.htm

## E-READER MANAGEMENT SYSTEM

### View Vendor

E Vendor User Name	First Name	Last Name	Edit	Delete
vendor1	jan	jimmy	Edit	Delete
Vendor2	yash	yash	Edit	Delete

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#### Creating new book order:

Lasaoren Search Final Project – Black Final Project - ITMD Edit - Final Project R localhost:8080/jKular

localhost:8080/jKulanthFP/admin/createOrder.htm

## E-READER MANAGEMENT SYSTEM

### Create Book Order

BOOK Title: computer basics

Version: 2002

BOOK PUBLISHER: PEARSON

Category: SCIENCE

Sub Category: COMPUTERS

Author name: EDISON

QUANTITY: 7

VENDOR ID: vendor1

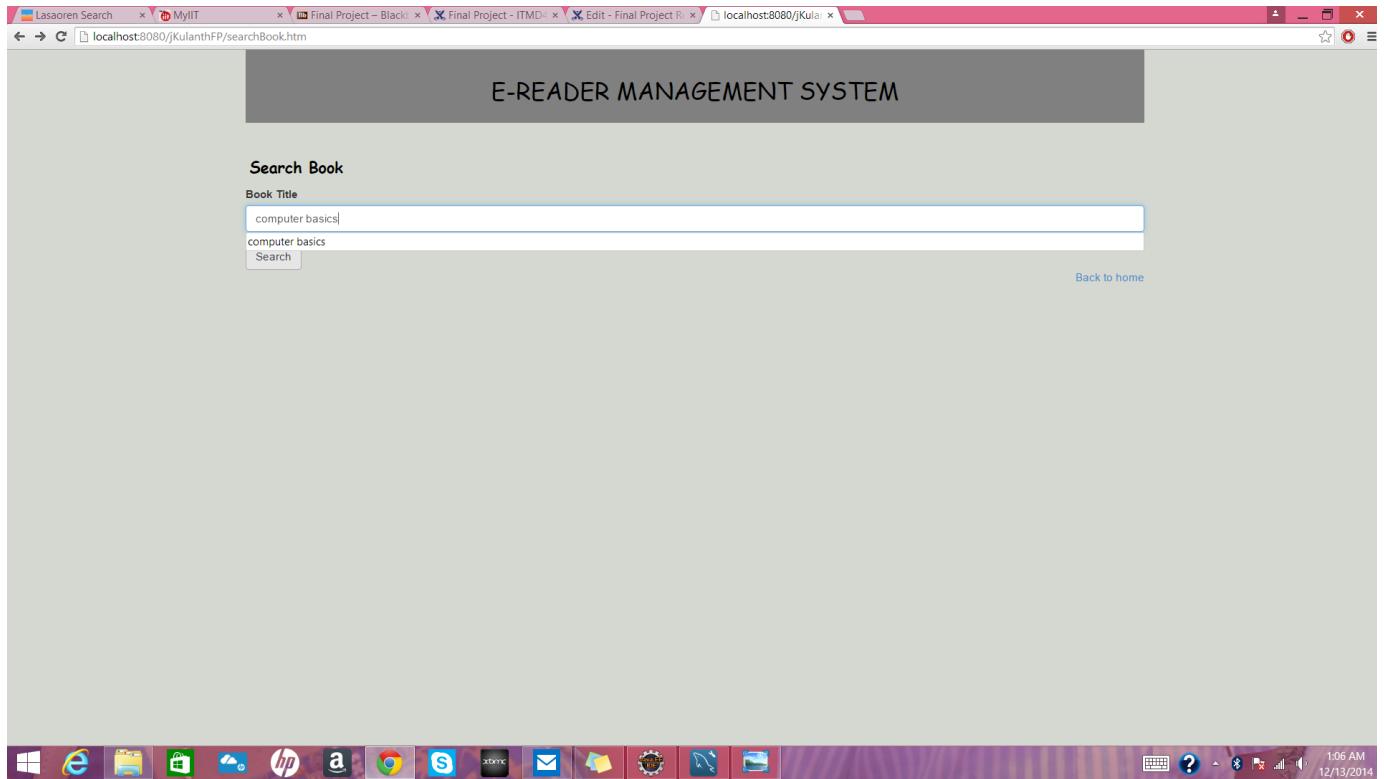
Place Order: vendor2

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#### Searching books:



**Search would result in the following page:**

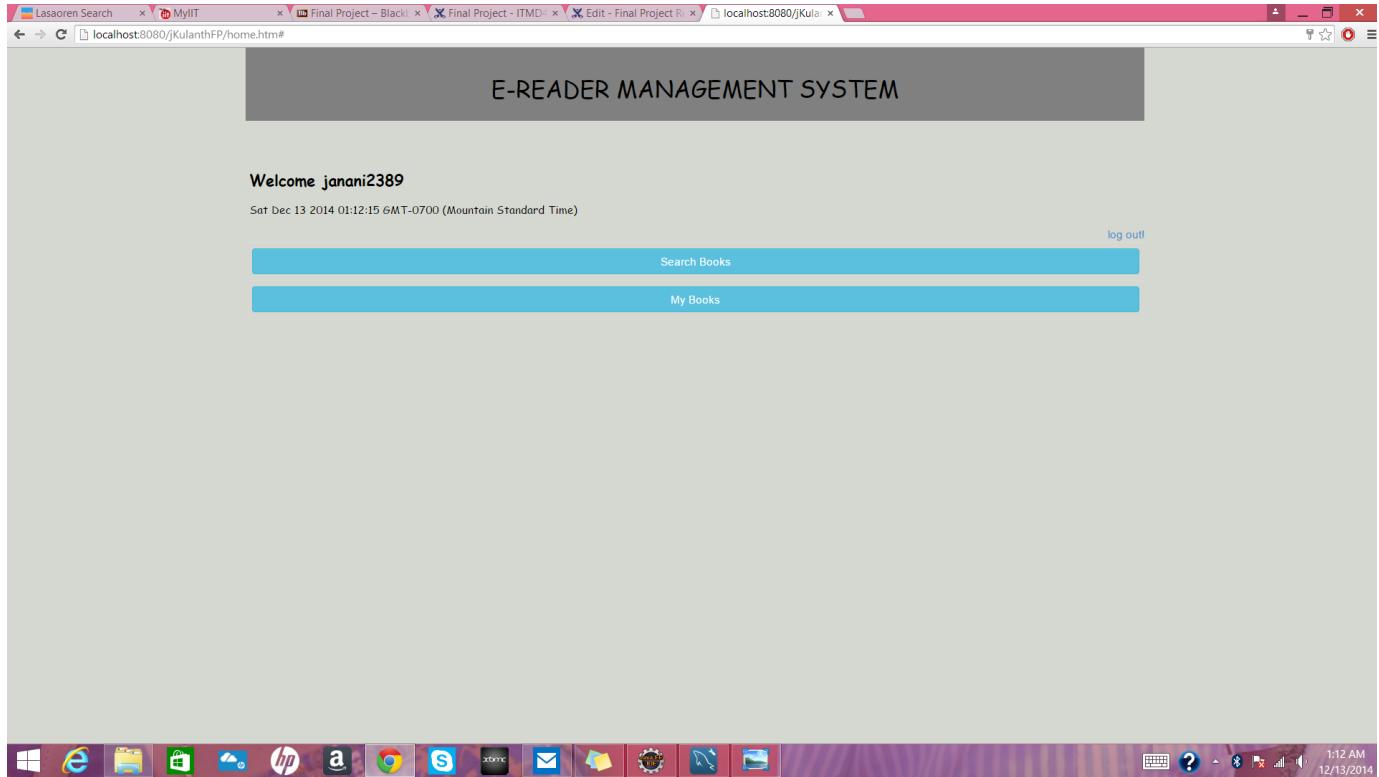
A screenshot of a web browser window showing the search results page. The title bar reads 'localhost:8080/jKulanthFP/searchBook.htm'. The main content area has a dark grey header with the text 'E-READER MANAGEMENT SYSTEM'. Below it, a section titled 'Available Books' displays a table of search results. The table has columns: Book title / Name, Version, Author, Category, Sub Category, and Publisher. There are eight rows, all of which show 'computer basics' in the Book title / Name column. The other columns contain values like '1.2', 'edision', 'computers', 'science', and 'pearson'. At the bottom of the table is a 'Back to home' link. The status bar at the bottom shows various icons and the time '1:08 AM 12/13/2014'.

Book title / Name	Version	Author	Category	Sub Category	Publisher
computer basics	1.2	edision	computers	science	pearson
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON

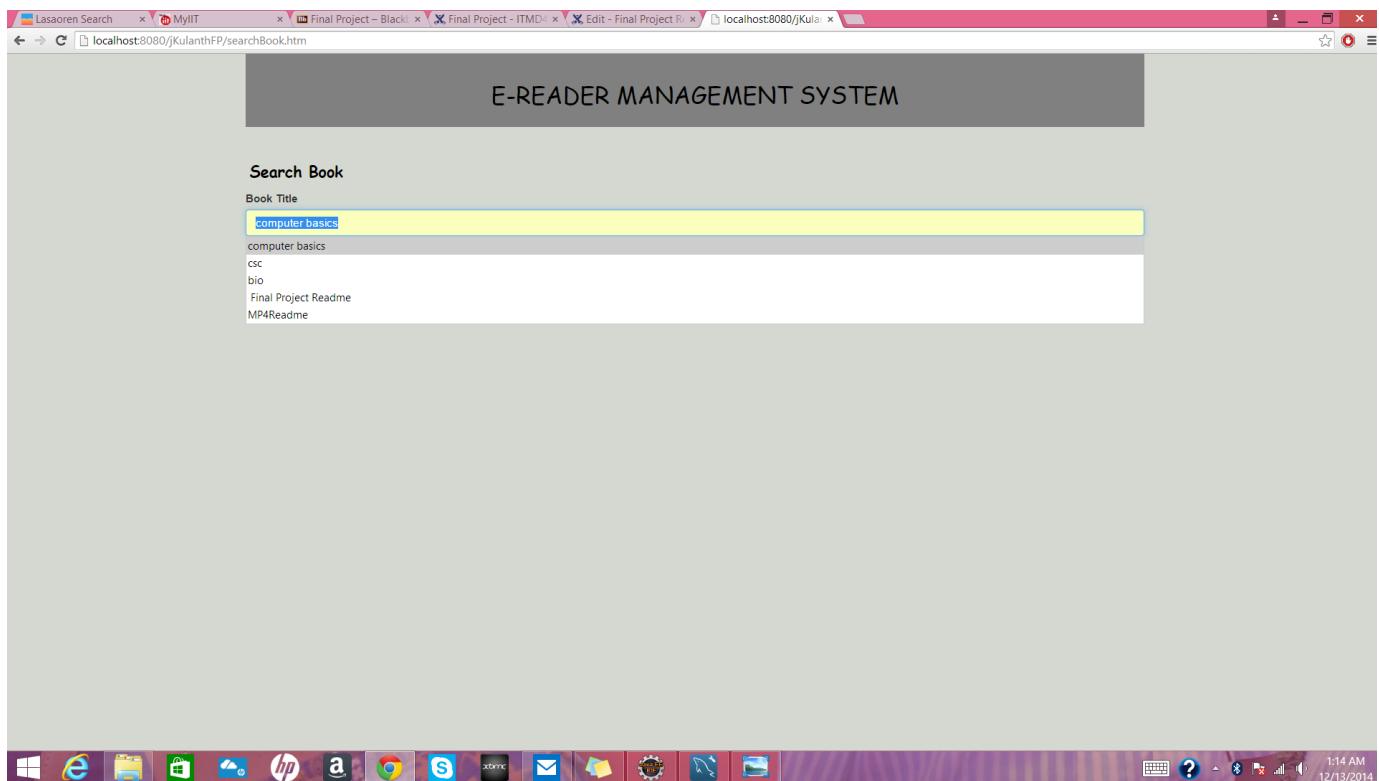
**Users related page:**

Login page is common to both admin as well as users

**User Home page:**



User search page:



User book borrowing page:

Lasaoren Search × MyIT Final Project – Black Final Project - ITMD Edit - Final Project R localhost:8080/jKular

localhost:8080/jKulanthFP/searchBook.htm

## E-READER MANAGEMENT SYSTEM

### Available Books

[Submit](#)

Book title / Name	Version	Author	Category	Sub Category	Publisher	Borrow
computer basics	1.2	edision	computers	science	pearson	<input checked="" type="radio"/>
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON	<input type="radio"/>
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON	<input type="radio"/>
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON	<input type="radio"/>
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON	<input type="radio"/>
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON	<input type="radio"/>
computer basics	2002	EDISON	SCIENCE	COMPUTERS	PEARSON	<input type="radio"/>

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**Users taken book's list page:**

Lasaoren Search × MyIT Final Project – Black Final Project - ITMD Edit - Final Project R localhost:8080/jKular

localhost:8080/jKulanthFP/myBooks.htm

## E-READER MANAGEMENT SYSTEM

### My Books

Book Title	Book Author	Start Date	Return Date
computer basics	edision	2014-12-13 01:17:19.0	2015-01-02 01:17:19.0
bio	janani	2014-12-13 01:17:28.0	2015-01-02 01:17:28.0

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**Error handling pages - common to users as well as admin screen shots:**



The screenshot shows a web browser window with the title "Create E-READER". The main form has fields for "E-READER USER NAME:", "PASSWORD:", "Role:" (set to "Admin"), "FIRST NAME:", "LAST NAME:", "EMAIL ID:", "CONTACT NUMBER:", "ADDRESS:", "DATE OF BIRTH:", "DATE OF JOINING:", and "CUSTOMER TYPE:" (set to "SILVER"). A modal dialog box titled "STEM" displays an error message: "The page at localhost:8080 says: Please correct below Errors Enter E-READER ID Enter Password for new E-READER Enter First Name Enter Last Name Enter Email Id Enter Contact Number Enter Contact Address". There is an "OK" button at the bottom of the dialog.

Lasaoren Search × MyIT Final Project – Black Final Project - ITMD Edit - Final Project R localhost:8080/jKular

localhost:8080/jKular/admin/createVendor.htm

The page at localhost:8080 says:

Please correct below Errors  
Enter E-VENDOR USER NAME  
Enter First Name  
Enter Last Name  
Enter Email id  
Enter Contact Number  
Enter Contact Address

**E-REA**

**Create E-VENDOR**

**E-VENDOR Name:**  
Enter E-VENDOR USER NAME

**FIRST NAME:**  
Enter First Name

**LAST NAME:**  
Enter Last Name

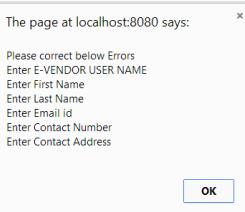
**EMAIL ID:**  
Enter Email id

**CONTACT NUMBER:**  
Enter Contact Number

**ADDRESS:**  
Enter Contact Address

**Save** **Reset**

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Lasaoren Search × MyIT Final Project – Black Final Project - ITMD Edit - Final Project R localhost:8080/jKular

localhost:8080/jKular/admin/createOrder.htm

The page at localhost:8080 says:

Please correct below Errors  
Enter Book name  
Enter version  
Enter Publisher Name  
Enter book edition  
Enter book edition  
Enter version  
Enter Email id

**E-REA**

**Create Book Order**

**BOOK Title:**  
Enter Book name

**Version:**  
Enter version

**BOOK PUBLISHER:**  
Enter Publisher Name

**Category:**  
Enter book edition

**Sub Category:**  
Enter book edition

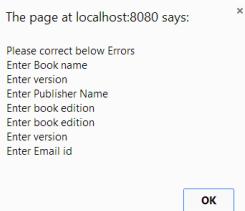
**Author name:**  
Enter version

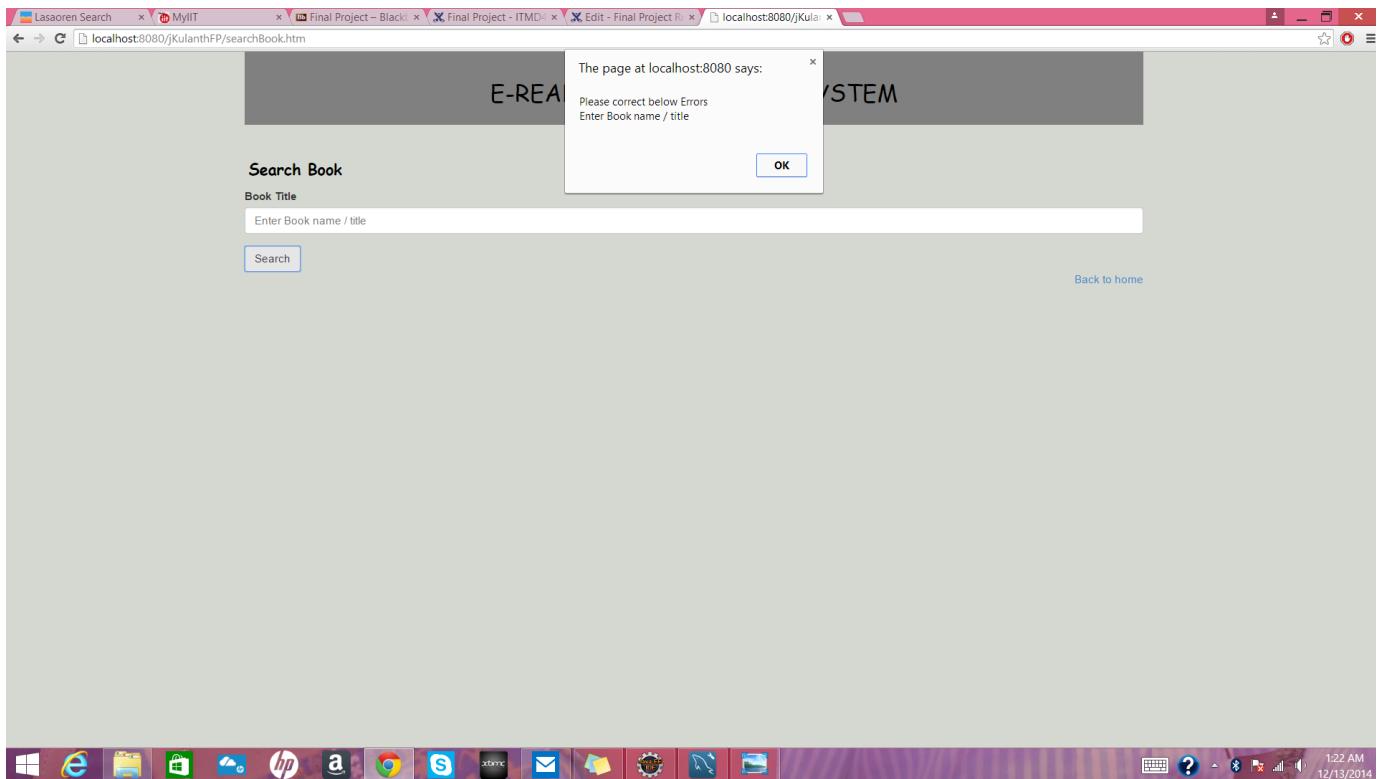
**QUANTITY:**  
Enter Email id

**VENDOR ID:** vendor1 ▾

**Place Order** **reset**

[Back to home](#)





### Navigations:

#### **Admin:**

Step 1:

When you login as admin, using the below credentials, there will be no existing e-readers or vendors. Both has to be created.

username: admin

password: admin

Step 2:

After assigning e-readers and e-vendors, you will be able to view the corresponding entities onclick of their respective buttons.

Step 3:

Creating a new book orders will only be possible after the vendor is created prior to creating a new book order. Once the new order and the quantity of books is specified, the no of entries are formed corresponding to that book.

Step 4:

On searching the particular book, it will list the number of entries corresponding to book orders quantity. For example, if the admin creates a book "computer science" with quantity 10, then 10 computer science books will be available.

Step 5:

Navigation is given to the main home page of admin for any existing page. Log out link is also provided.

#### **Users:**

Step 1:

Please login as the user with the user name and password created by you as admin.

Step 2:

the books available on the search box

Step 3:

View the total books which are available for search and choose the book by clicking the "borrow" button

Step 4:

List of borrowed books will appear on "My books" section

Step 5:

Navigation is provided to return back to the user's home page and log out functionality is also provided.

**Extra credit part:**

- the admin has the privileges to create the user name and password and henceforth has the rights to create n no of users(e-reader)

**Development Insights**

An excellent learning about the following concepts

--Spring mvc

--hibernate

--spring security roles

Lots of errors were faced during the development of this project, which helped me to learn lots of the above mentioned concepts.

**Requirements:**

1.Eclipse Juno

2. Java 1.6 or greater

3. Tomcat 8(same which comes with the net beans installation)

4. My sql 5.6(same which comes with the netbeans installation)

Please follow the following steps to run the project:

1. Import the project as a normal project.( the project is basically a maven project which has all the required jars already)

2. Right click on the project->Maven-> Update project

3. Please add the following scripts in the tomcat:

**CONTEXT.XML (add the below line in this xml)**

```
<Resource auth="Container" driverClassName="com.mysql.jdbc.Driver" maxActive="50" maxIdle="4" name="jdbc/EREADERDATASOURCE" password="itmd4515" type="javax.sql.DataSource" url="jdbc:mysql://localhost:3306/itmd4515" username="itmd4515"/>
```

**server.xml: ( in this file ensure that the below mentioned path is given correctly-context path)**

```
<Context docBase="JkulanthFP" path="/JkulanthFP" reloadable="true" source="org.eclipse.jst.j2ee.server:JkulanthFP"/></Host>
```

4. Add the project to the tomcat folder.

5. Clean and Start the server. In case, if there are any issues or exception thrown, kindly follow the following steps. Its also advisable to perform this step even before starting the server.

Open the project's properties (e.g., right-click on the project's name in the project explorer and select "Properties").

Select "Deployment Assembly".

Click the "Add..." button on the right margin.

Select "Java Build Path Entries" from the menu of Directive Type and click "Next".

Select "Maven Dependencies" from the Java Build Path Entries menu and click "Finish".

6. After the server start up, kindly execute the following sql insert scripts

```
Insert into MEMBERSHIP_TABLE (MEMBERID,DUE,PENALTY,PREMIUM,TYPE) values (1,10,3,10,'Silver');  
Insert into MEMBERSHIP_TABLE (MEMBERID,DUE,PENALTY,PREMIUM,TYPE) values (2,20,2,20,'Platinum');  
Insert into MEMBERSHIP_TABLE (MEMBERID,DUE,PENALTY,PREMIUM,TYPE) values (3,30,1,30,'Gold');
```

Insert into USER\_DETAILS

```
(USERID,ACTIVE,ADDRESS,CONTACTNO,CREATEDDATE,DATEOFBIRTH,DATEOFJOINING,EMAIL,FIRSTNAME,LASTNAME,MEMBERSH  
IPID,PASSWORD,ROLE,USERNAME) values (1,0,'dfffdsg','34534',null,'2014-12-15','2014-12-09','admin@gmail.com','admin','admin',2,'admin')
```

ADMIN','admin');

7. The application can be accessed through the following url if your port no is 8080

<http://localhost:8080/jKulanthFP/>

8. After executing, kindly login as the user using the below credentials:

Username: admin

Password: admin

9. Refer to the above screen shots for the operations corresponding to the users and admin.

**Technical Aspects:**

Spring mvc 3.2.3

Hibernate 4.2.2

View- jsp

logs - a seperate log will be formed in your c drive which will be located under a shared folder and the log file is formed.

Spring security - 3.0.7 is used.

The project navigation starts from the controller-> manager-->service--> dao classes. This is the flow of the project. Spring security is incorporated to ensure that admin defined loading pages are different from the users page.

Code reusability is followed for the search functionalites corresponding to the users and admin searches.

**The following were the requirements given by professor:**

servers - apache tomcat 8

Mysql db schema - itmd4515

Project name - JkulanthFP

Context path - jKulanthFP

Provide functionality to create users - yes-> here admin creates the users

Provide navigation to the pages--yes-> navigation and log out functionalities are provided.

Validations - yes-> corresponding to login error page and the each field in the ui is validated.

logs - yes

basic css - yes incorporated

java comments - yes given

2 security roles - yes - admin, users

4 entities should be present - yes more than 4 are present