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# **BOOKSHARE**

**REQUIREMENTS AND DESIGN DOCUMENT**

05/02/2017

# 1 PROJECT OVERVIEW

## 1.1 INTRODUCTION

Bookshare is a web application built specifically to help students to buy, rent or sell textbooks. Using Bookshare, a student can either buy or rent a textbook by viewing the ads or can play the role of a seller and post an ad of the textbook for sale. Bookshare works in the similar line of Craigslist where any user can advertise his/her book that he wants to sell or lease and users who are interested in these ads can request to get in touch with the advertiser/seller.

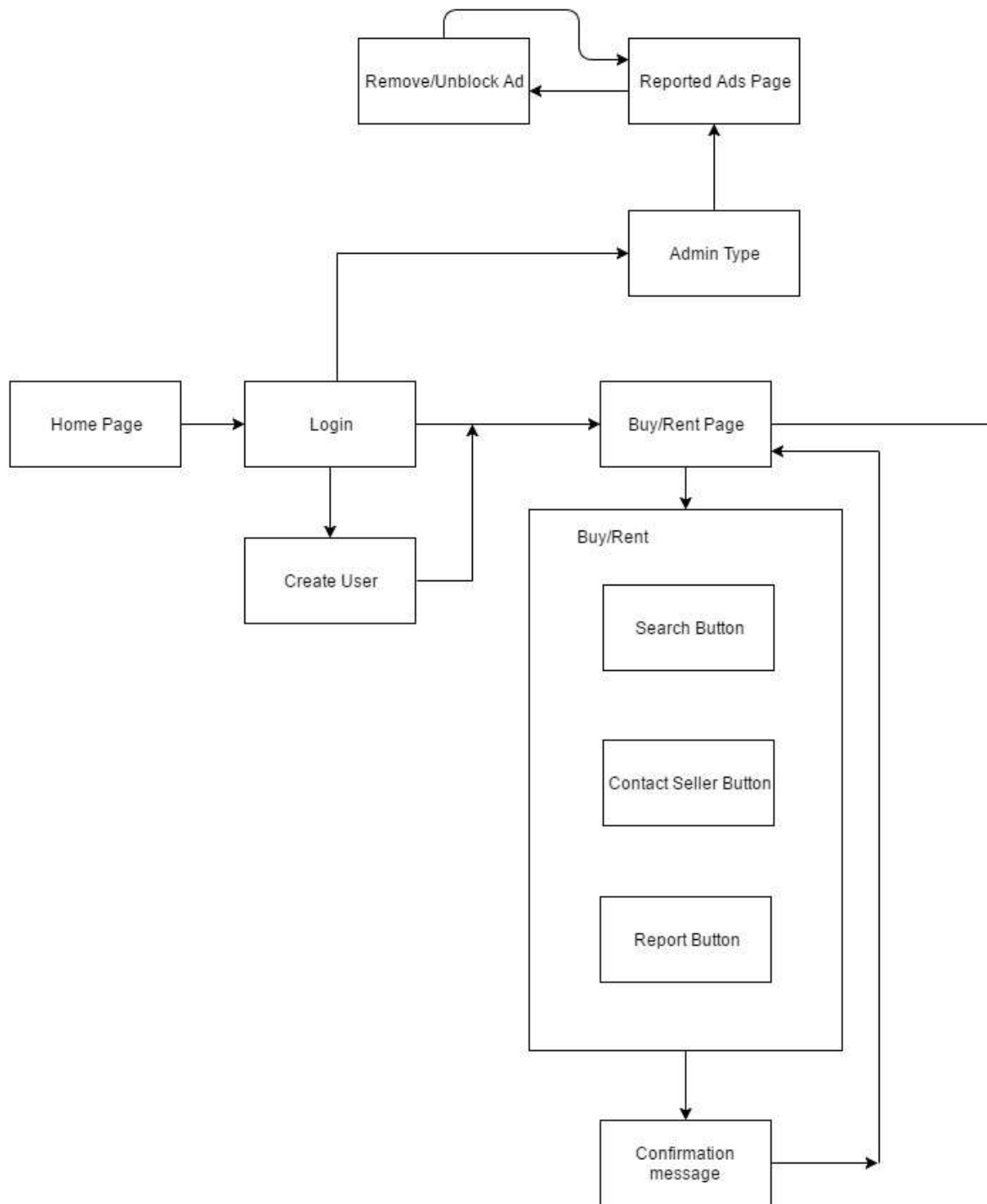
## 1.2 APPLICATION USE

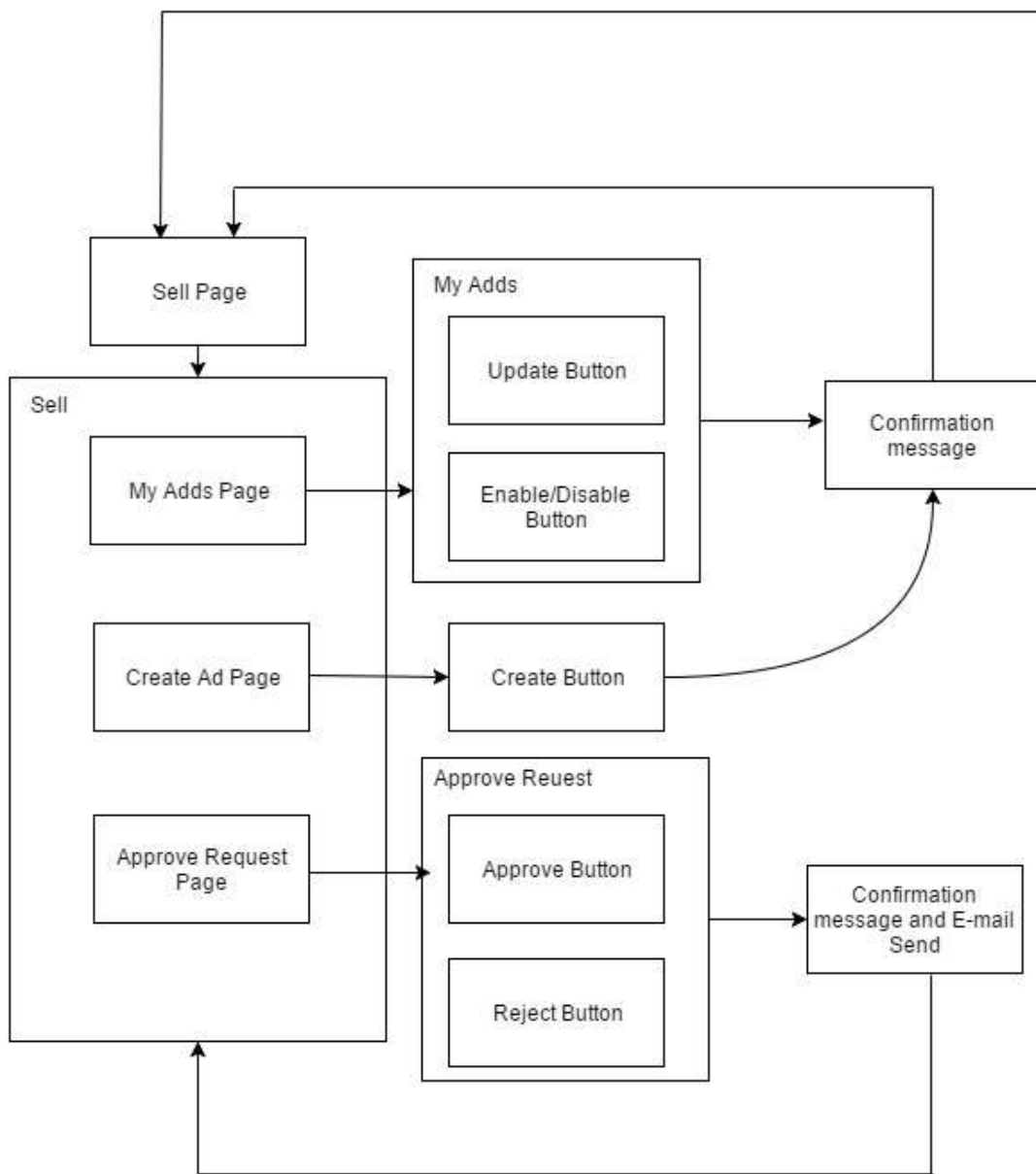
Bookshare acts as an exchange for students who wants to sell or rent out Text Books. Here are the actions user can perform within the application

USER:

- 1) Create Ad
  - Lets the user create a new Ad for renting or selling a Text Book
- 2) Edit Ad
  - Lets the user edit his current Ad to update any information
- 3) Enable/Disable Ad
  - Allows User to temporarily block and unblock his listing from other users to view
- 4) Approve or reject request for contact
  - Allows User to approve or reject and request for contact
  - Approve action will trigger email notification to the requester with the contact information of the seller.
  - Reject action will trigger email notification informing the requester that seller do not wish to be contacted.
- 5) View all Ad listing
  - User can view all listed Ads that are not blocked or reported to Admin
  - User has option to filter the listings for specific choice. The options for filter are based on
    - i. Subject
    - ii. Buy or Rent
    - iii. On Listing user has expressed interest in
- 6) Express Interest in any Listing
  - User can express interest which will push the request in sellers queue.
- 7) Report inappropriate request to Admins
  - User can report any Ads that are inappropriate

## 2 SITE MAP





### 3 PAGE DESIGN

This section outlines the page design and describes the purpose of each page in the application.

All the pages in the Bookshare application include a header and footer page.

#### 3.1 HEADER PAGE

**Name of Page:** header.jsp

**Purpose of Page:** The header page is created as a separate JSP file. Maintaining a separate page helps to avoid repetitive code in all pages and saves time and effort.

**Audience of Page:** All users who use the application will be able to view the header section in the pages that are accessible to them.

**What data (fields) will be presented on the page based on what logic:** The header page includes the name of the application and Login option for users. If the user logs in to the application, the header panel is modified to display the username and also add a Logout option.

**What validations (if any) will exist on page:** No validation required.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** A login option is available in the header section of the Home Page which when clicked navigates to the Login Page. In all the other pages, there will be a Logout link which when clicked Logs out the user and goes back to the Home Page of the application.

#### 3.2 FOOTER PAGE

**Name of Page:** footer.jsp

**Purpose of Page:** The footer page is created as a separate JSP file. Maintaining a separate page helps to avoid repetitive code in all pages and saves time and effort.

**Audience of Page:** All users who use the application will be able to view the footer section in the pages that are accessible to them.

**What data (fields) will be presented on the page based on what logic:** The footer page includes the name of the application and owner name.

**What validations (if any) will exist on page:** No validation required.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** No button or links available.

#### 3.3 HOME PAGE

**Name of Page:** home.jsp

**Purpose of Page:** The first page that appears on the screen is the Home Page of the Bookshare web application.

**Audience of Page:** All users who tries to assess the Bookshare application will be re-directed to the Home page.

**What data (fields) will be presented on the page based on what logic:** The home page just consists of an image.

**What validations (if any) will exist on page:** No validation required.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** No button or links available.

### 3.4 LOGIN PAGE

**Name of Page:** login.jsp

**Purpose of Page:** The login page enables users to login to the application and use all the featres provided.

**Audience of Page:** All users who tries to assess the Bookshare application will be re-directed to the Home page.

**What data (fields) will be presented on the page based on what logic:** This page consists of a login form where users are asked to enter their email address in a text box, password in another text box and submit the information using a Log in Button provided in the page.

**What validations (if any) will exist on page:** At the JSP side, all the text boxes in the page has been made required. Also the syntax of user entered email is validated which is also handled at JSP side. At the server side, the servlets get the user entered password and compare it with the password stored in DB for that user. If they do not match an error message is thrown.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** A Log in button in the page sets an action parameter and invokes the controller which later sets the url for the next page to be displayed. A link to create a new user account is also provided in this page. This link invokes the Controller and similarly depending on the action the Controller handles the request and later sets url to display Sign Up page.

### 3.5 SIGNUP PAGE

**Name of Page:** signup.jsp

**Purpose of Page:** The signup page enables non-registered users to create a new account.

**Audience of Page:** New users to the application needs to Sign up ad create a new email id and password to login to the application.

**What data (fields) will be presented on the page based on what logic:** This page consists of a form where users are asked to enter their name in a text box, email address in a text box of type email, password in a text box of type password, confirm

password in a text box of type password and submit the information using a Create Account Button provided in the page.

**What validations (if any) will exist on page:** At the JSP side, all the text boxes in the page has been made required. Also the syntax of user entered email is validated which is also handled at JSP side. When a user enters an email address, the controller checks to see if the email address already exists in the database. If it exists the user is asked to enter a new email address. At the server side, the servlets get the user entered password and confirm password and them to make sure that they match.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** Create Account button is present in the Signup page which invokes the controller by setting an action parameter. The controller redirects the user to the main page of the application once the user has been created.

### 3.6 BUY/RENT PAGE

**Name of Page:** buy-rent.jsp

**Purpose of Page:** The buy/rent page provides options to users to buy or rent out a textbook.

**Audience of Page:** All users who has logged in the application is taken to the Buy/Rent page which is the landing page or main page of the application.

**What data (fields) will be presented on the page based on what logic** In the Buy/Rent page, you will find a list of filters provided to narrow down your search option. There are 3 filters as shown in Figure 5 below.

1. The Subject filter is used to search for textbooks belonging to a subject.
2. The Choose Option filter is to search for textbooks that are available for Buying, Renting or both.
3. The Show Ads filter is to search for ads that you have shown interest in or to display all ads in the portal.

Below the search option, a table can be found which displays all the ads matching your search criteria. By default, the table lists down all the ads available.

**What validations (if any) will exist on page:** No validations performed.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** The search button enables users to list out ads according to their search criteria. A Contact Seller button is present which enables users to notify seller about their interest and on clicking the button the user will receive a confirmation message. A Report button is available which enables users to report any inappropriate ad found in the website.

### 3.7 SELL PAGE/ MY ADS PAGE

**Name of Page:** sell.jsp

**Purpose of Page:** The sell page provides options to users to create a new ad to sell a textbook. In the Sell page, you will have options to

1. View or edit ads created by you.
2. Enable or Disable an ad created by you.
3. Create new ad
4. Approve or Reject Contact Request Send for your ad by interested users.

**Audience of Page:** All users who has logged in the can access the sell page to post an ad of their textbook.

**What data (fields) will be presented on the page based on what logic** In the sell page, you will find few more menu options like – My Ads, Create Ad, Approve Request. When you navigate to Sell page, the My Ads page is displayed by default. A table lists out all the ads created by the specific user who has currently logged in to the application.

**What validations (if any) will exist on page:** No validations performed.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** An edit button is available which re-directs to a form prepopulated with the ad which can be edited as necessary. The Enable or Disable button is chosen to enable or disable ads created by the user who has logged in. If users ad is currently Enabled he/she will find a “Disable” button next to their ad. Similarly, if the ad is currently Disabled, they will find the “Enable” button beside the ad.

### 3.8 CREATE AD

**Name of Page:** newad.jsp

**Purpose of Page:** The create ad page is used by user to create a new ad to be posted in the application.

**Audience of Page:** All users who has logged in the can access the create ad page to create an ad of their textbook.

**What data (fields) will be presented on the page based on what logic** In create ad page a form is displayed which asks the users to enter the information required to create an ad. The form includes a textbox for Book name, drop down with subject names to choose from, textbox to enter ad url, textbox to enter image path, textbox to enter price details, drop down to choose if they are planning to rent or sell the book.

**What validations (if any) will exist on page:** No validations performed.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** The Create button invokes the controller which in turn saves all the user entered values and inserts it into the database. A confirmation message is also displayed to the users once a ad is successfully created.



### 3.9 APPROVE REQUEST

**Name of Page:** approverrequest.jsp

**Purpose of Page:** The Approve Request page enables users to view all the interests shown on your ads by users.

**Audience of Page:** All users who has logged in the can access the create ad page to create an ad of their textbook.

**What data (fields) will be presented on the page based on what logic** In create ad page a form is displayed which asks the users to enter the information required to create an ad. The form includes a textbox for Book name, drop down with subject names to choose from, textbox to enter ad url, textbox to enter image path, textbox to enter price details, drop down to choose if they are planning to rent or sell the book.

**What validations (if any) will exist on page:** No validations performed.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** The Create button invokes the controller which in turn saves all the user entered values and inserts it into the database. A confirmation message is also displayed to the users once a ad is successfully created.

### 3.10 ADMIN PAGE

**Name of Page:** admin-bs.jsp

**Purpose of Page:**

**Audience of Page:** Only accessible to admin.

**What data (fields) will be presented on the page based on what logic** In create ad page a form is displayed which asks the users to enter the information required to create an ad. The form includes a textbox for Book name, drop down with subject names to choose from, textbox to enter ad url, textbox to enter image path, textbox to enter price details, drop down to choose if they are planning to rent or sell the book.

**What validations (if any) will exist on page:** No validations performed.

**What buttons or hyperlinks will exist, and what actions will be taken when clicked:** The Create button invokes the controller which in turn saves all the user entered values and inserts it into the database. A confirmation message is also displayed to the users once a ad is successfully created.

## 4 DATABASE ER DIAGRAM

