



# Northeastern University

## **INFO 6250 Web Development Tools & Methods**

### **Project Report**

### **Bookshelf**

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## Short summary of the project

- Bookshelf is an online portal for buying and selling of used books
- Owners (registered student) can put his/her book for sell
- The advertisement goes through a screening process to ensure the quality of book(s) before being visible to buyers
- Buyer can browse through "Bookshelf" or can quickly find the required book using the search option
- Using google books api, user can perform certain keyword searches and retrieve book information and viewability

## Summary of the Functionality Performed

- Hibernate and Spring MVC Architecture
- Hashing is used to store password of registered users
- Email to user if registered successfully
- Programmatic security has been used
- Filters
- AbstractXlsView and AbstractPdfView
- Pagination
- multipart/form-data to upload images
- Ajax and rest API calls (Google Books api)
- SimpleFormController with validations
- Angular JS
- JQuery for search functionality

## Summary of the technologies used

### Development tools

- STS
- MySQL database

### Techniques used

- Spring MVC
- Hibernate
- Angular JS
- REST API
- JQuery
- AJAX

## Brief list and description of the roles, and tasks each role could perform

### Customer/Seller

- Register and login to the website
- Receive email upon successful registration
- Post and buy books
- Generate pdf receipts and list of order books as excel sheets
- search more books through Google books api

### Admin

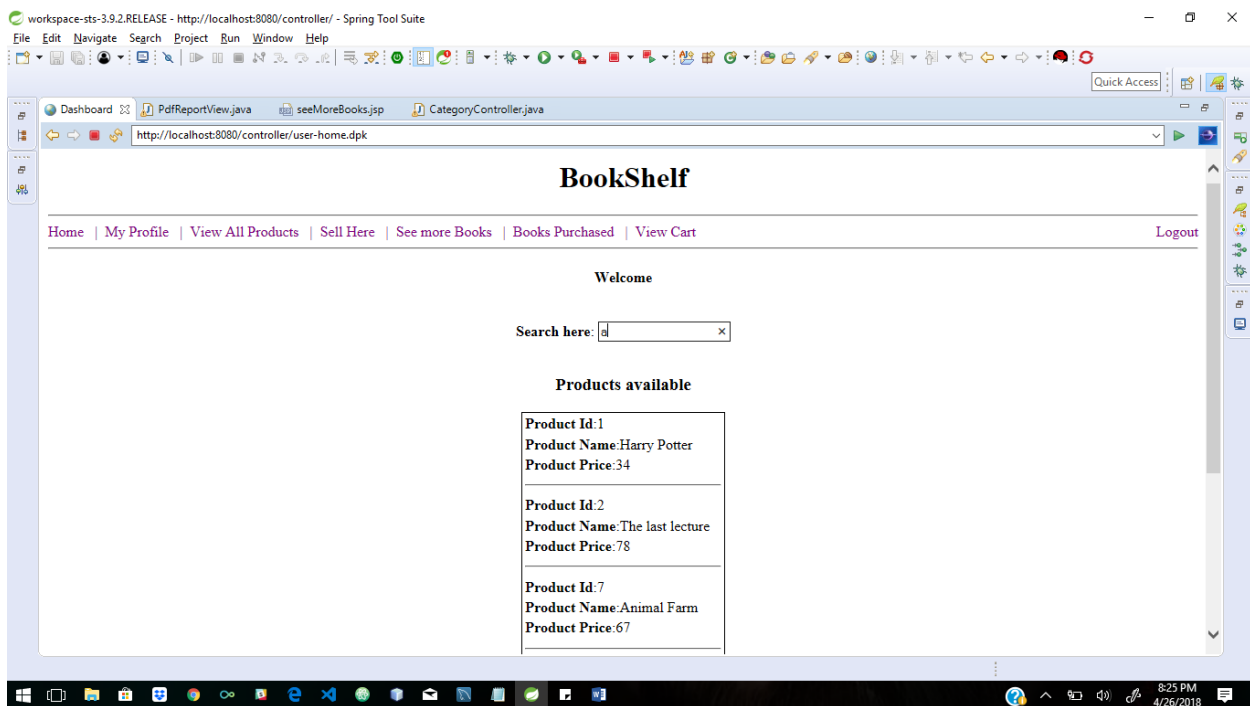
- Add new categories of the books.

### Quality Assurance

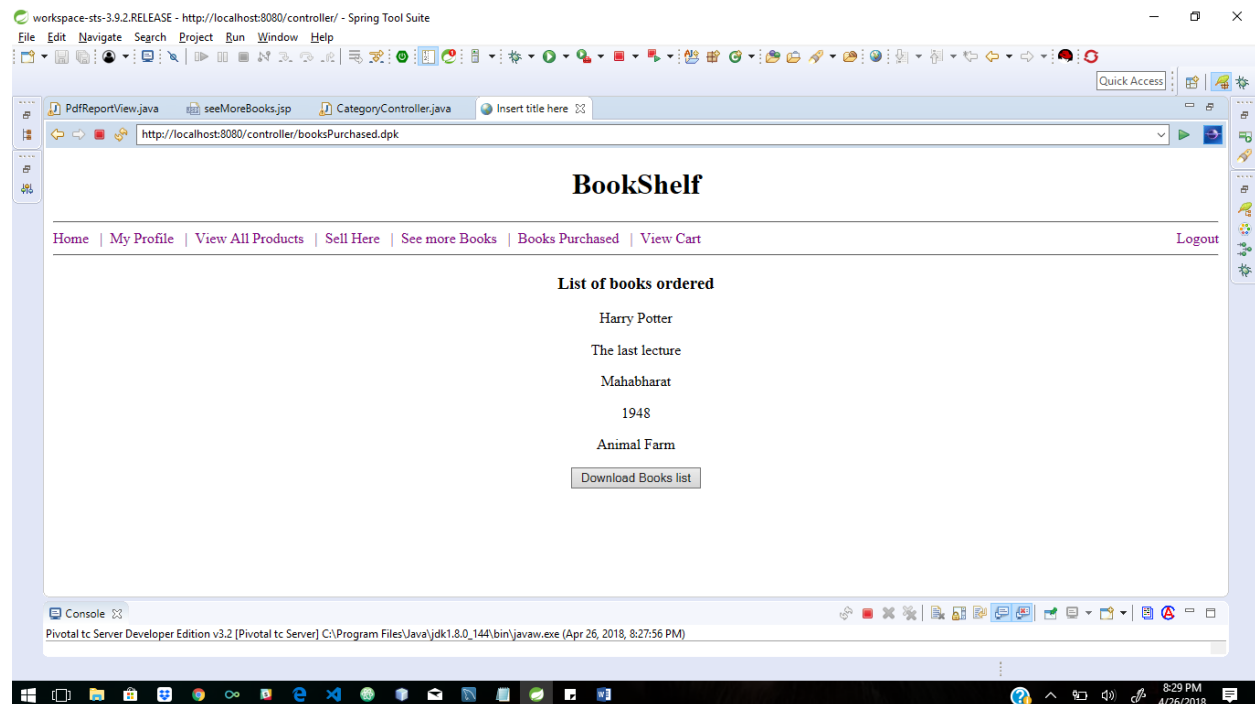
- Approve or reject the request of the seller to add new books to the website

## Screenshots of key screens

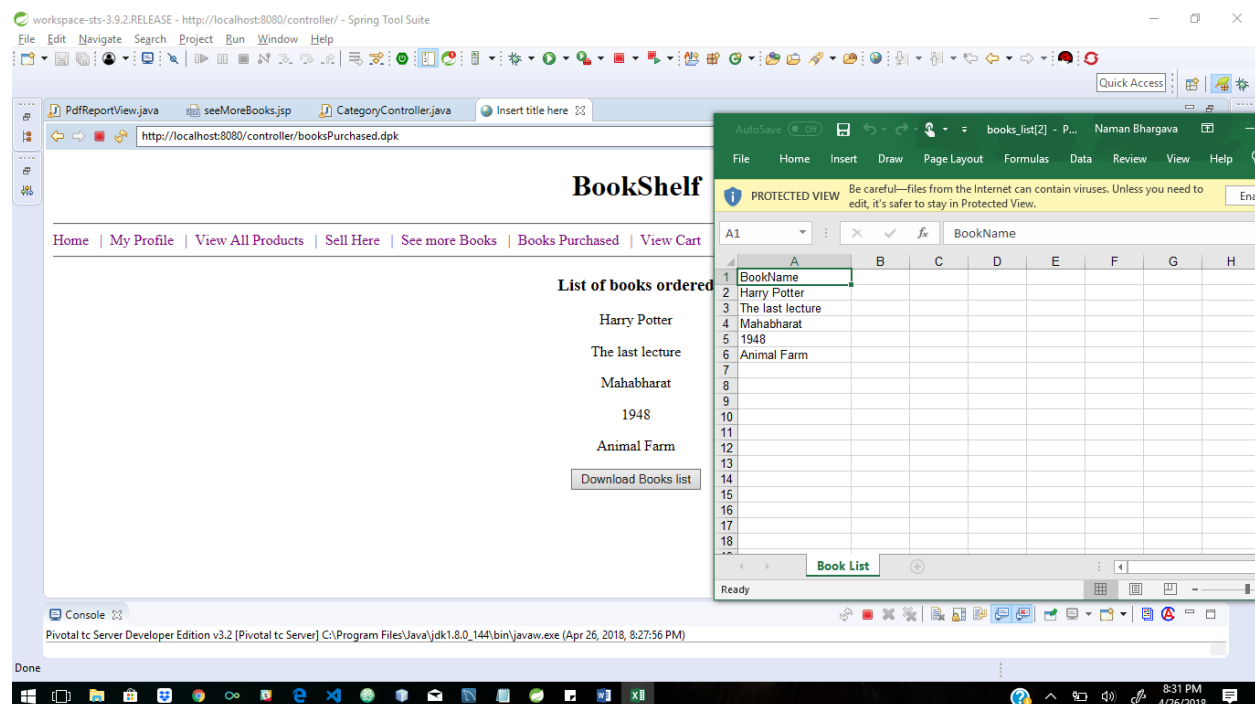
Home Page of the user with ability to search for books available in the database. This uses jquery to display results on press of every key



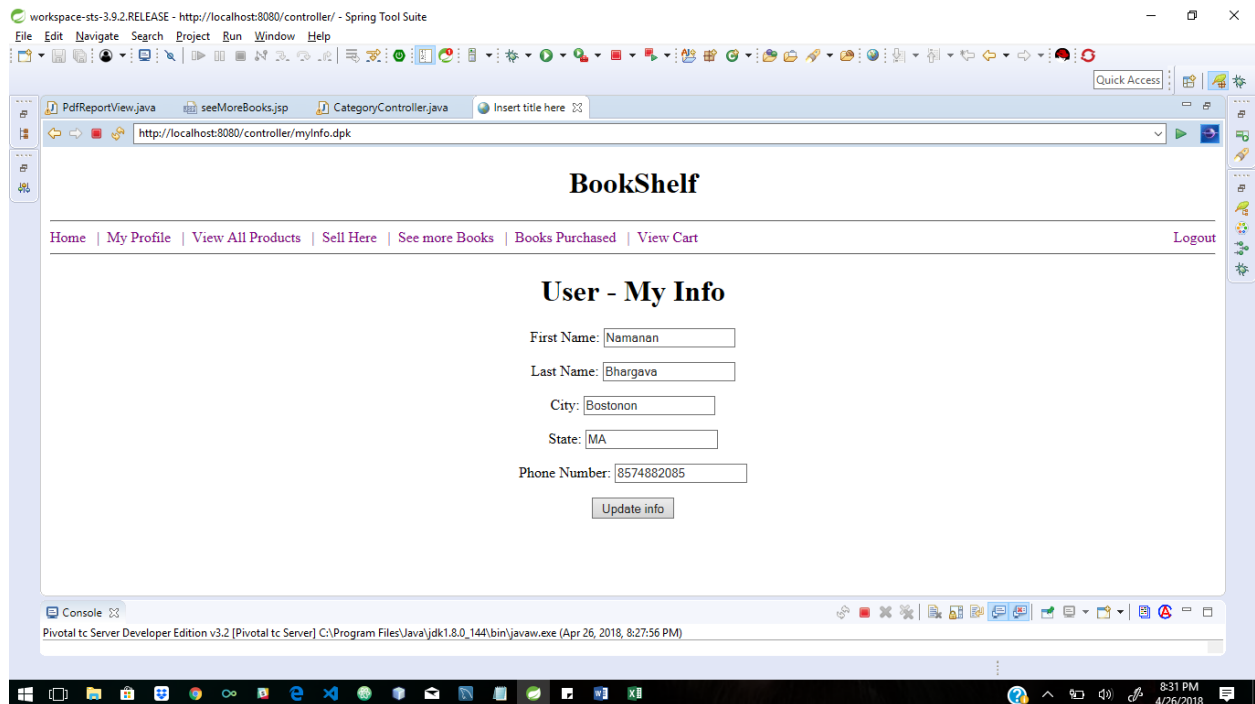
List of books that have been ordered by the user from the website. They can also download the list of books as excel workbook.



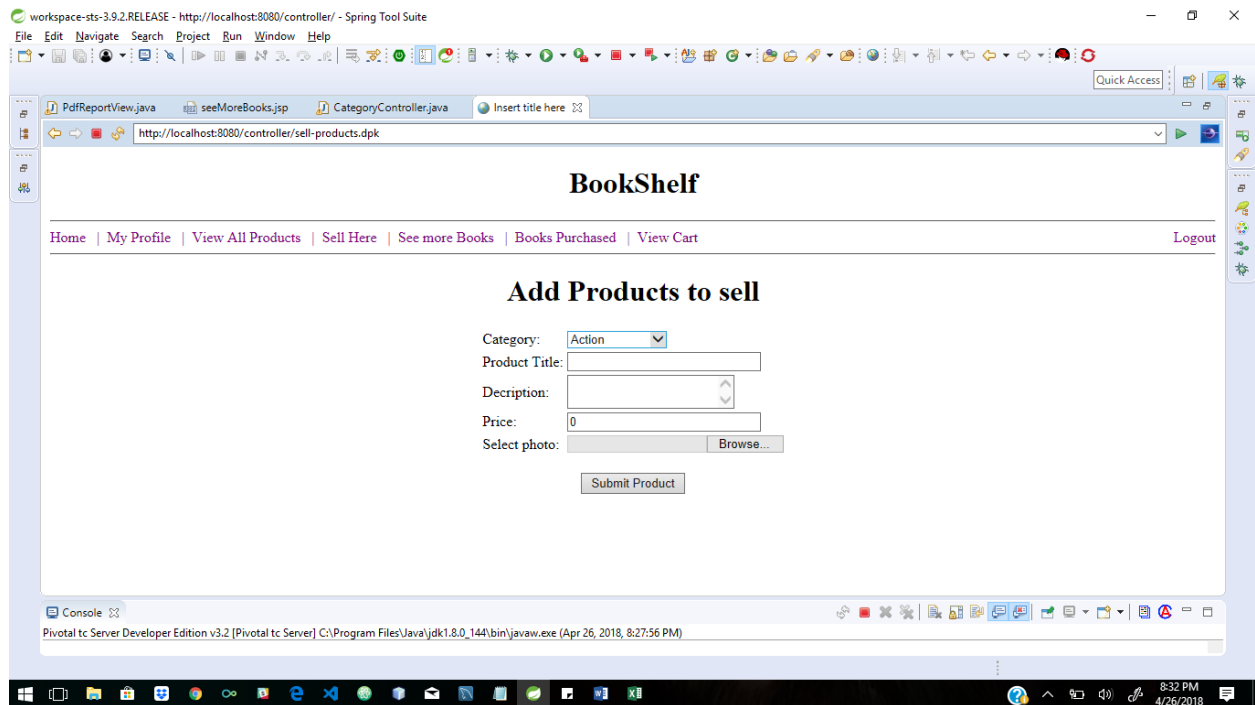
Downloaded excel sheet



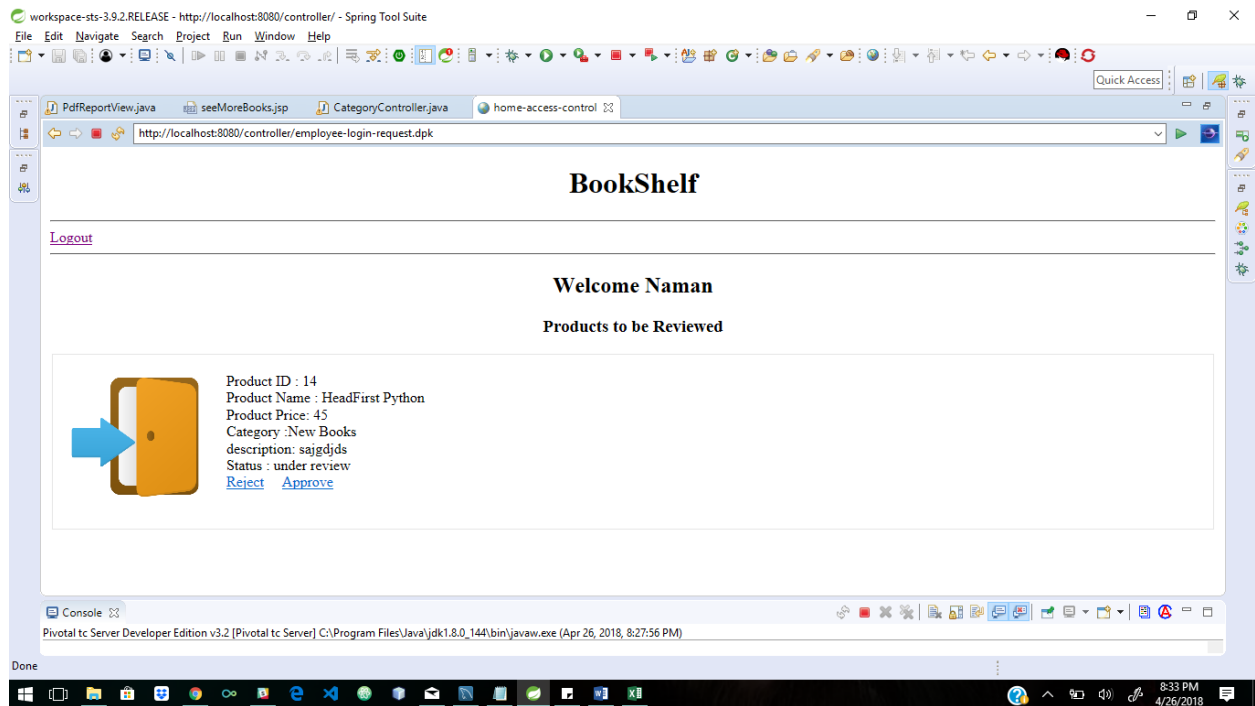
Update user details . This uses filter to add updated values to database.



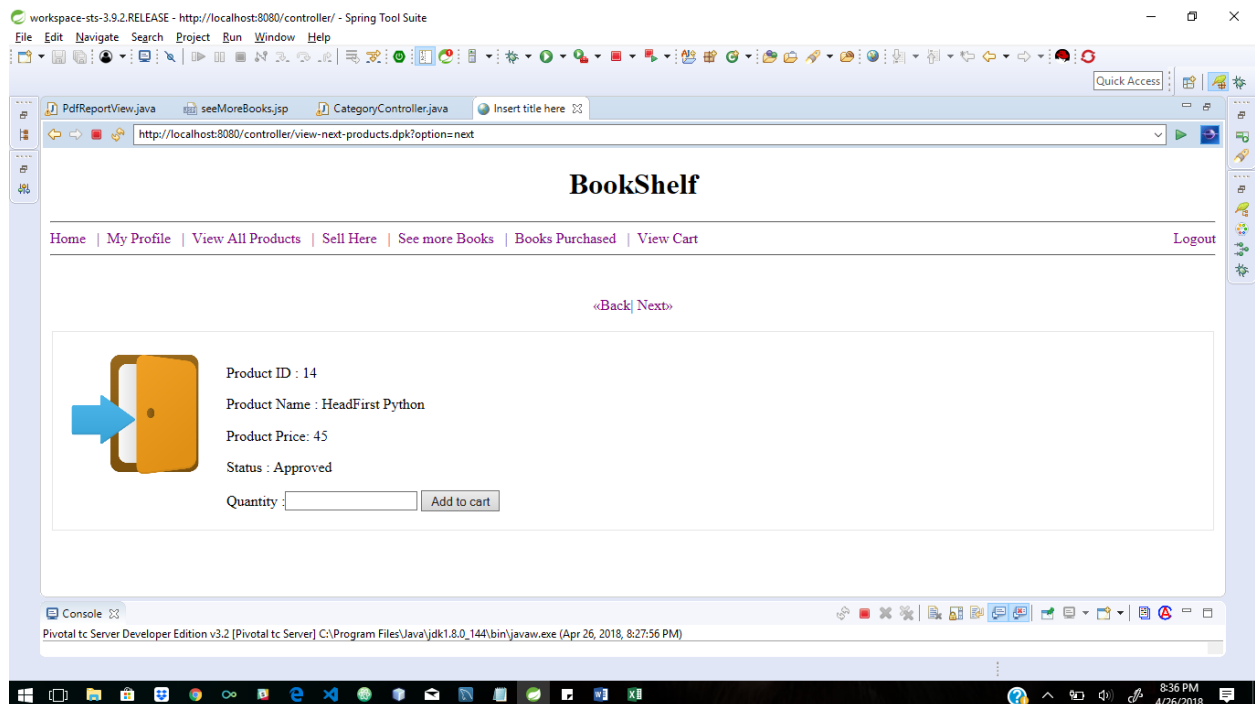
Seller can add a post by filling the below form



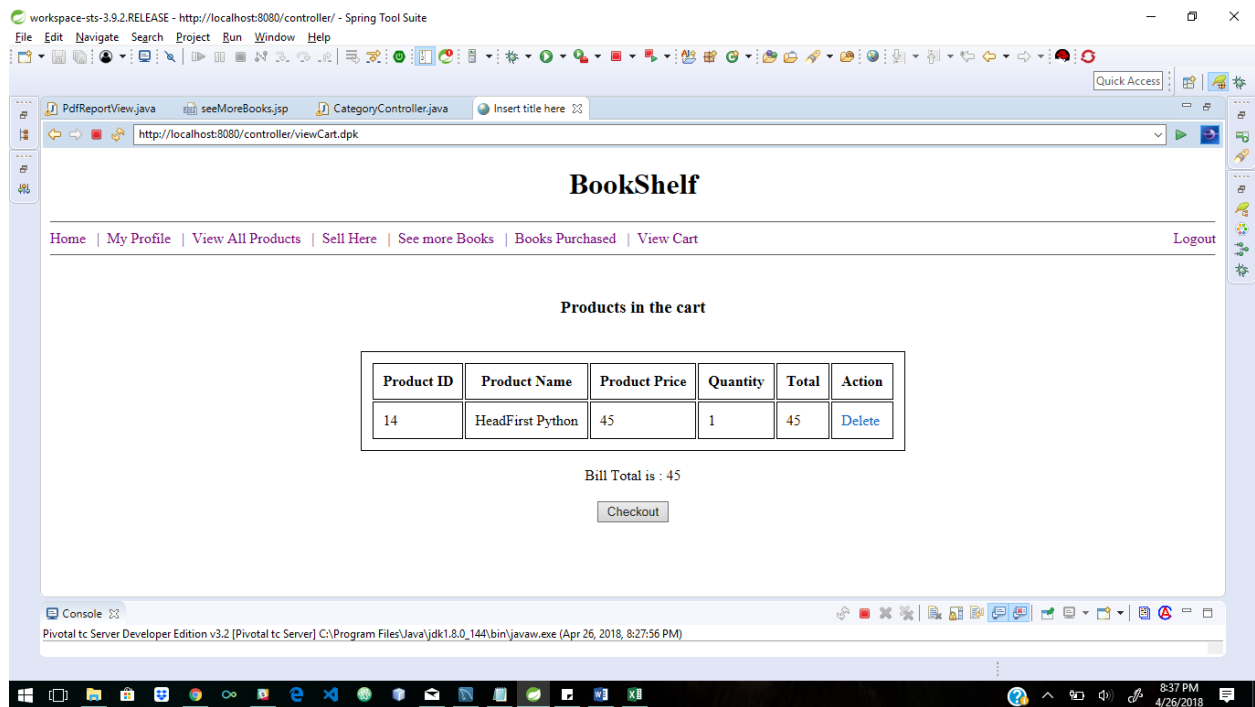
Quality assurance team approves/ rejects the request made by the seller. If the request is approved it appears in the books list available for the user to buy



The product approved by Quality assurance is visible in the list of books available for the user to buy in View All Products tab.



## The products added to cart

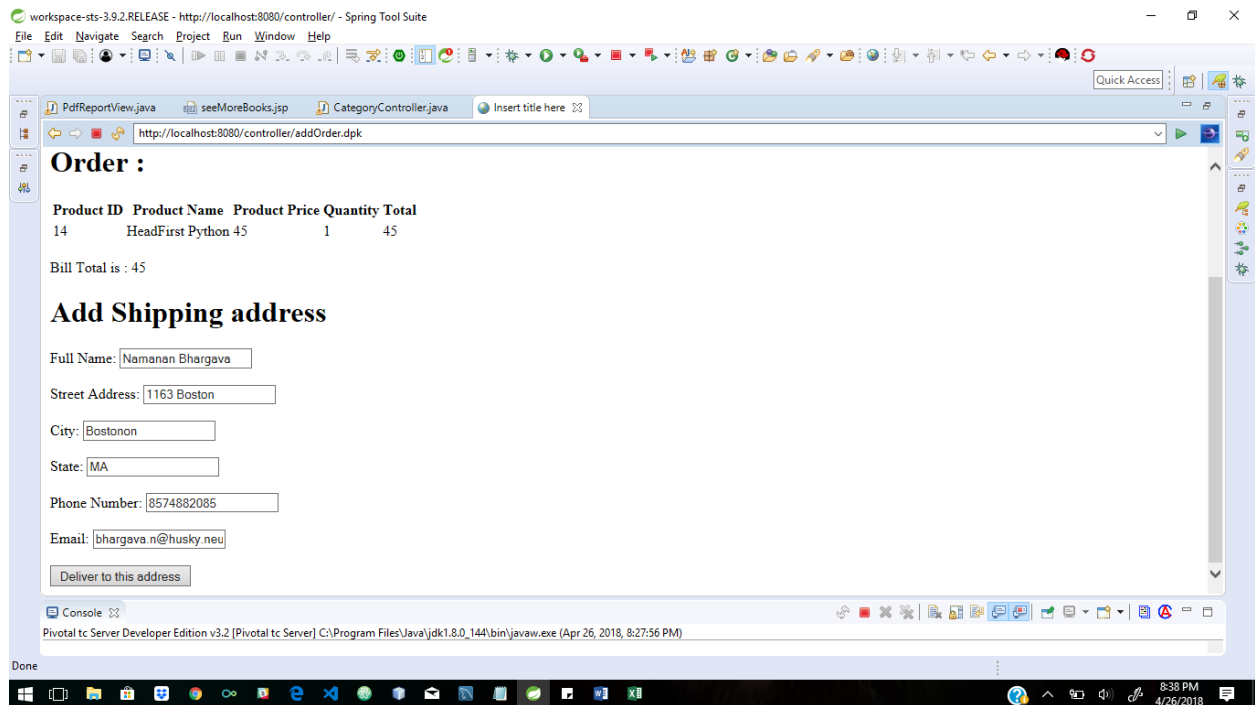


The screenshot shows a web application running in a browser. The page title is "BookShelf". The navigation bar includes links: Home, My Profile, View All Products, Sell Here, See more Books, Books Purchased, View Cart, and Logout. The main content area is titled "Products in the cart" and contains a table with the following data:

Product ID	Product Name	Product Price	Quantity	Total	Action
14	HeadFirst Python	45	1	45	Delete

Below the table, the text "Bill Total is : 45" is displayed, followed by a "Checkout" button. The console at the bottom shows the message: "Pivotal tc Server Developer Edition v3.2 [Pivotal tc Server] C:\Program Files\Java\jdk1.8.0\_144\bin\javaw.exe (Apr 26, 2018, 8:27:56 PM)".

## On checkout the user is asked for details about shipping address and summary of the order.



The screenshot shows a web application running in a browser. The page title is "Order :". The main content area displays the order summary:

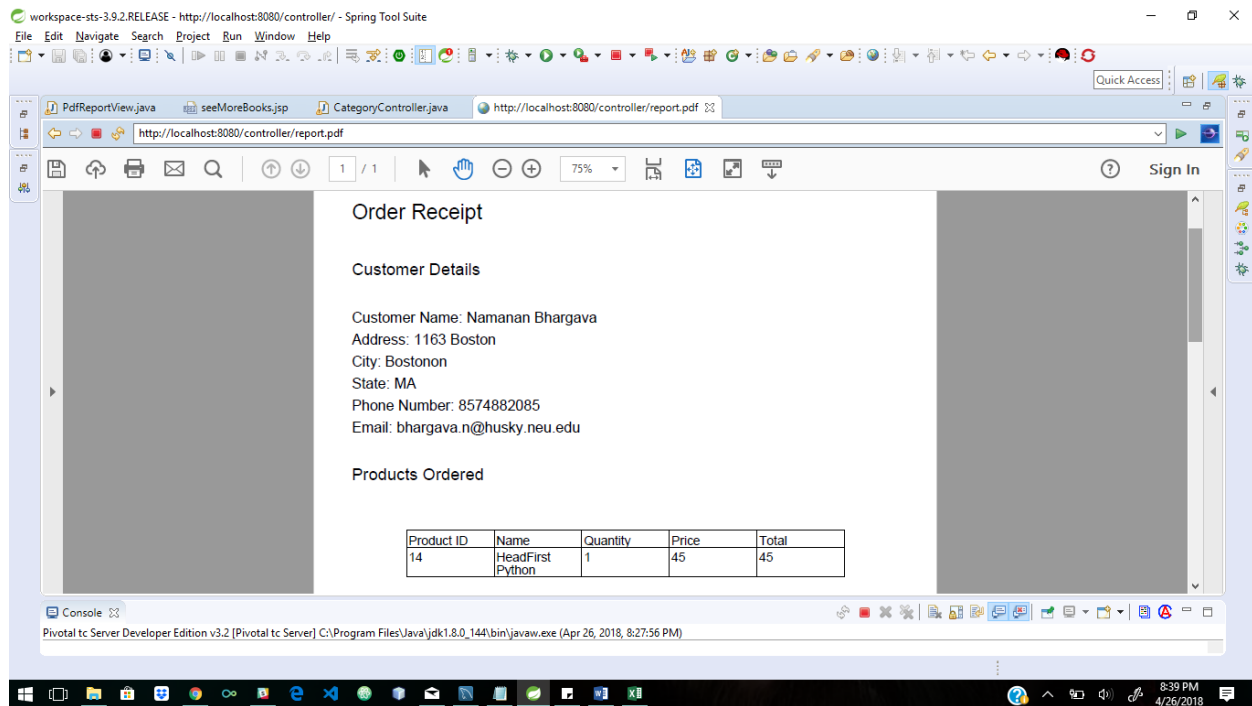
Product ID	Product Name	Product Price	Quantity	Total
14	HeadFirst Python	45	1	45

Below the table, the text "Bill Total is : 45" is displayed. The page then prompts the user to "Add Shipping address" with a form containing the following fields:

- Full Name: Namanan Bhargava
- Street Address: 1163 Boston
- City: Bostonon
- State: MA
- Phone Number: 8574882085
- Email: bhargava.n@husky.neu

A "Deliver to this address" button is located below the form. The console at the bottom shows the message: "Pivotal tc Server Developer Edition v3.2 [Pivotal tc Server] C:\Program Files\Java\jdk1.8.0\_144\bin\javaw.exe (Apr 26, 2018, 8:27:56 PM)".

The order is finalized once the user clicks on “Deliver to this address”. Here the user has the option to download the receipt in pdf format



workspace-sts-3.9.2.RELEASE - http://localhost:8080/controller/ - Spring Tool Suite

File Edit Navigate Search Project Run Window Help

http://localhost:8080/controller/report.pdf

### Order Receipt

**Customer Details**

Customer Name: Namanan Bhargava  
Address: 1163 Boston  
City: Bostonon  
State: MA  
Phone Number: 8574882085  
Email: bhargava.n@husky.neu.edu

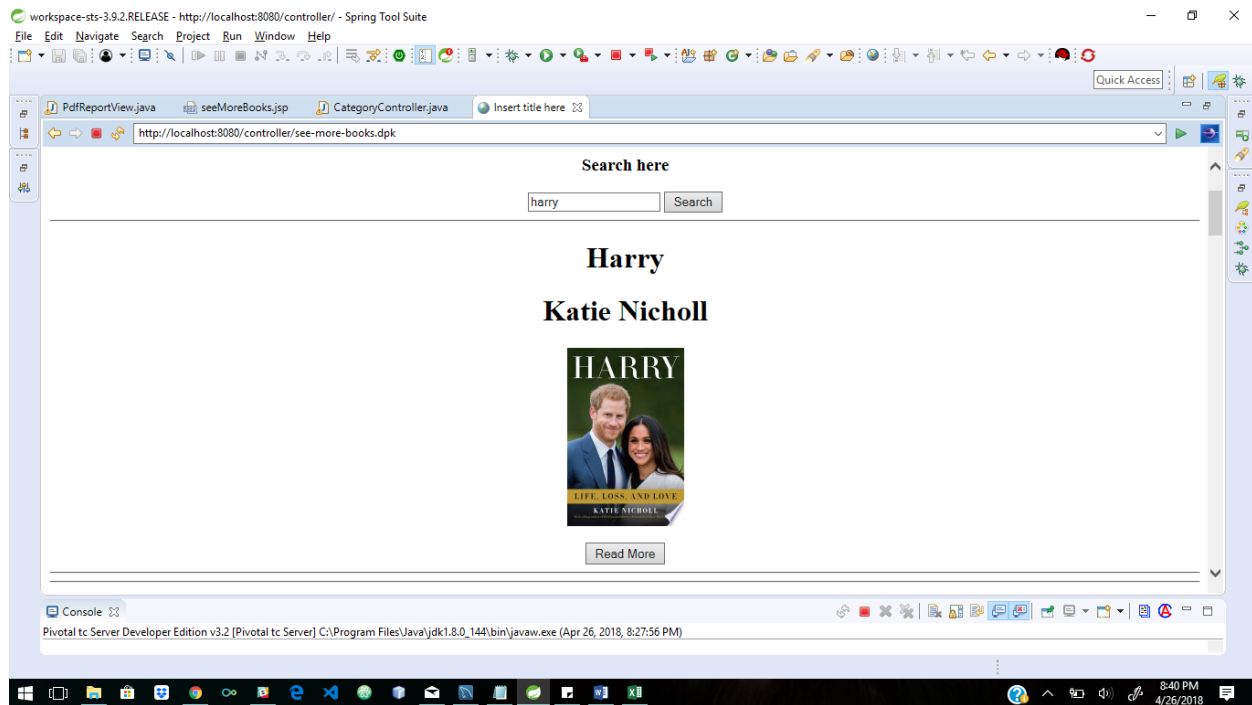
**Products Ordered**

Product ID	Name	Quantity	Price	Total
14	HeadFirst Python	1	45	45

Console

Pivotal tc Server Developer Edition v3.2 [Pivotal tc Server] C:\Program Files\Java\jdk1.8.0\_144\bin\javaw.exe (Apr 26, 2018, 8:27:56 PM)

The user can also search for more books using google api by entering a keyword to search



workspace-sts-3.9.2.RELEASE - http://localhost:8080/controller/ - Spring Tool Suite

File Edit Navigate Search Project Run Window Help

Insert title here


http://localhost:8080/controller/see-more-books.dpk

Search here

harry Search

## Harry

### Katie Nicholl



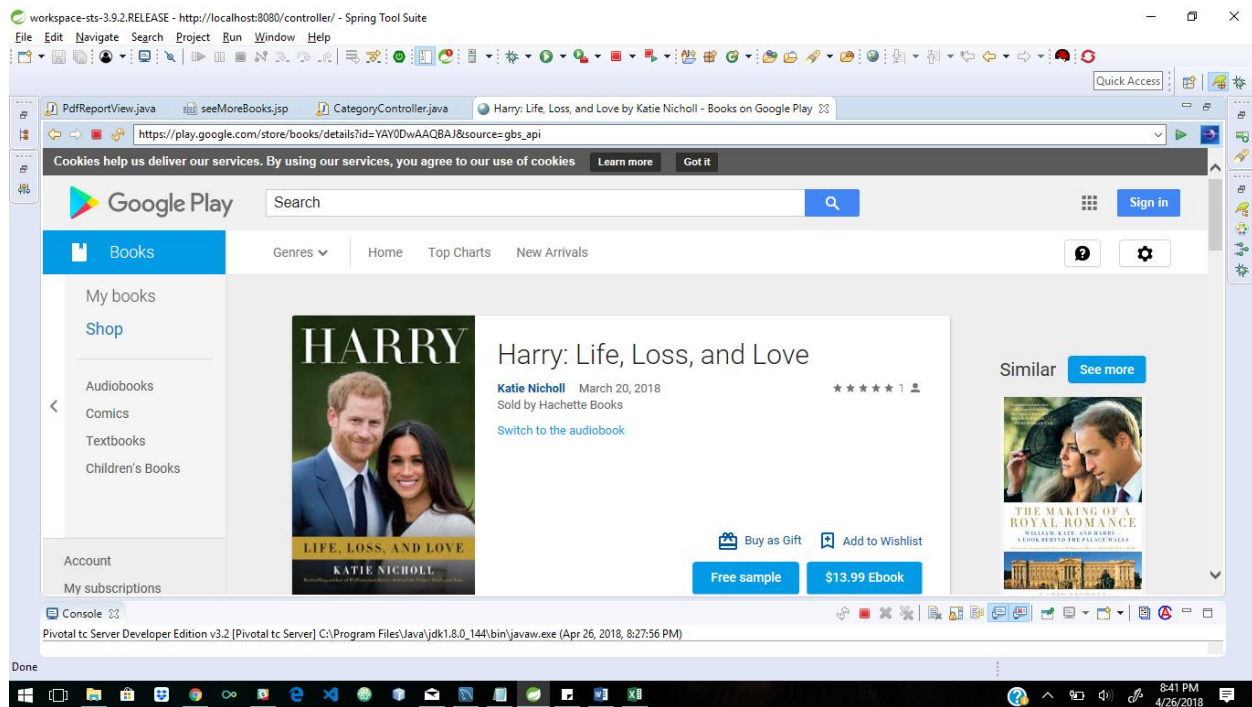
Read More

Console

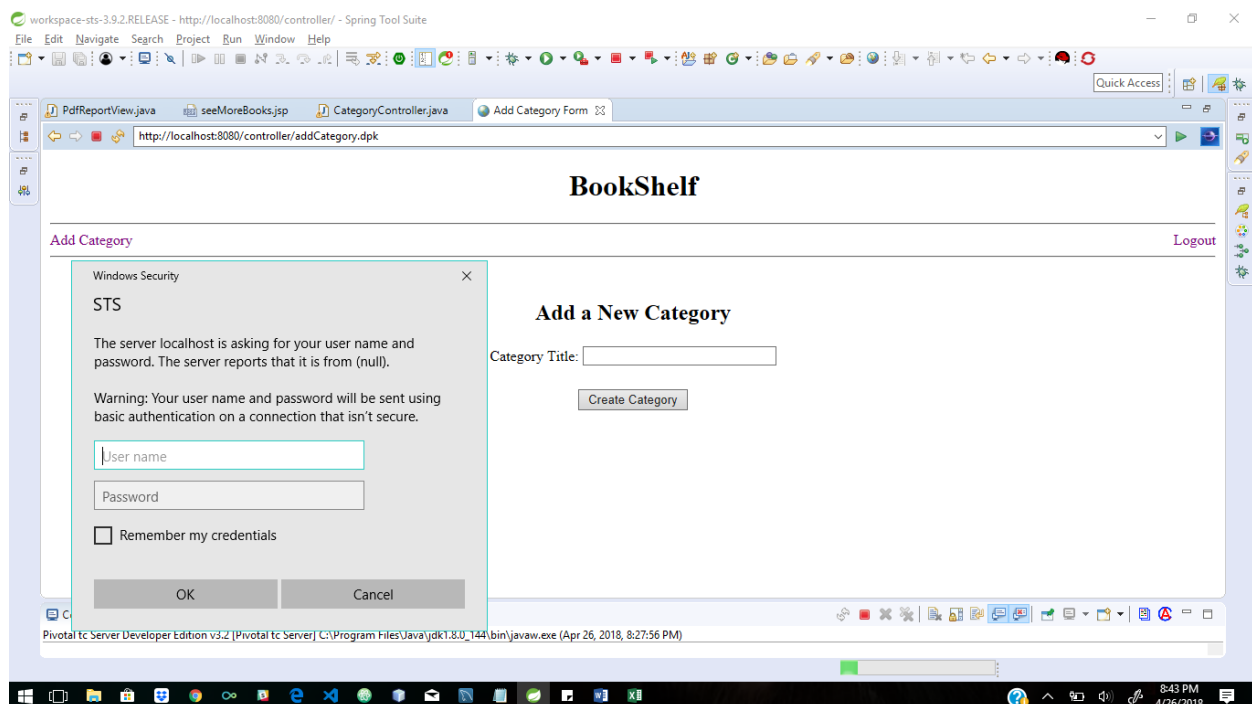
Pivotal tc Server Developer Edition v3.2 [Pivotal tc Server] C:\Program Files\Java\jdk1.8.0\_144\bin\javaw.exe (Apr 26, 2018, 8:27:56 PM)



Read More button navigates the user to google play book page.



The programmatic security is added here. So when the admin user clicks on create Category button it is prompted to enter the user and password.



The simple controller validator is used here. Once the category is added is by admin, the same will be visible to seller.

