



Full Stack Java Developer

Capstone Project Problem Statement



Get Certified. Get Ahead.



Developing Online Music Store

Background of the problem statement:

1) An online product catalog that can be browsed: The work starts with adding many new product catalog features which includes displaying categories, products, and product details.

2) Searching the Catalog: For the visual part, a text box is used in which the visitor can enter one or more words to search through the product catalog. In Music CD Shop, the words entered by the visitor are searched for in the products' names and descriptions. Also, the user can search for a particular song by entering the title, artist, style, format and the price range.

3) A Custom Shopping Cart and checkout: A custom shopping basket is implemented, which stores its data into the local database. Also a "shopping cart summary control" is created that shows up in every catalog page except the shopping cart page.

4) Handling Customer Accounts: In customer account system, details such as credit card numbers are stored in a database so that customers don't have to retype this information each time they place an order. Customers can log in via a login page or dialog box to get access to secured areas of the web site. Once logged in, the Web Application remembers the customer until the customer logs out (either manually via a Log Out button or automatically, if the session times out or a server error occurs). All secure pages in a Web Application need to check whether a customer is logged in before allowing access.

5)Catalog Administration: This administrative interface is implemented for easy management of the web store data. The catalog administration page allows the administrator to:

- Add or remove genres, and update the details of existing genres

- View and manage the categories that belong to a genre
- Manage the list of products in a specific category, and edit product details
- Assign an existing product to an additional, or move it to another category
- Remove a product from a category or delete the product from the catalog
- Manage orders by updating their status

Recommended technologies:

1. Spring boot
2. Java 8
3. H2 database
4. Spring Data JPA
5. JSP
6. Servlets
7. Bootstrap

Project Structure & Flow:

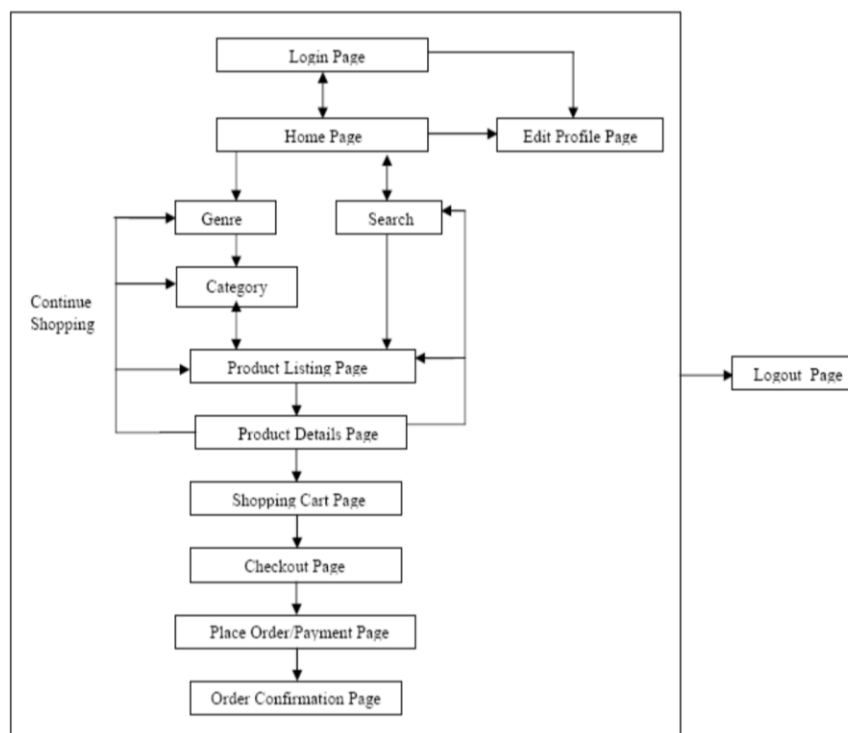
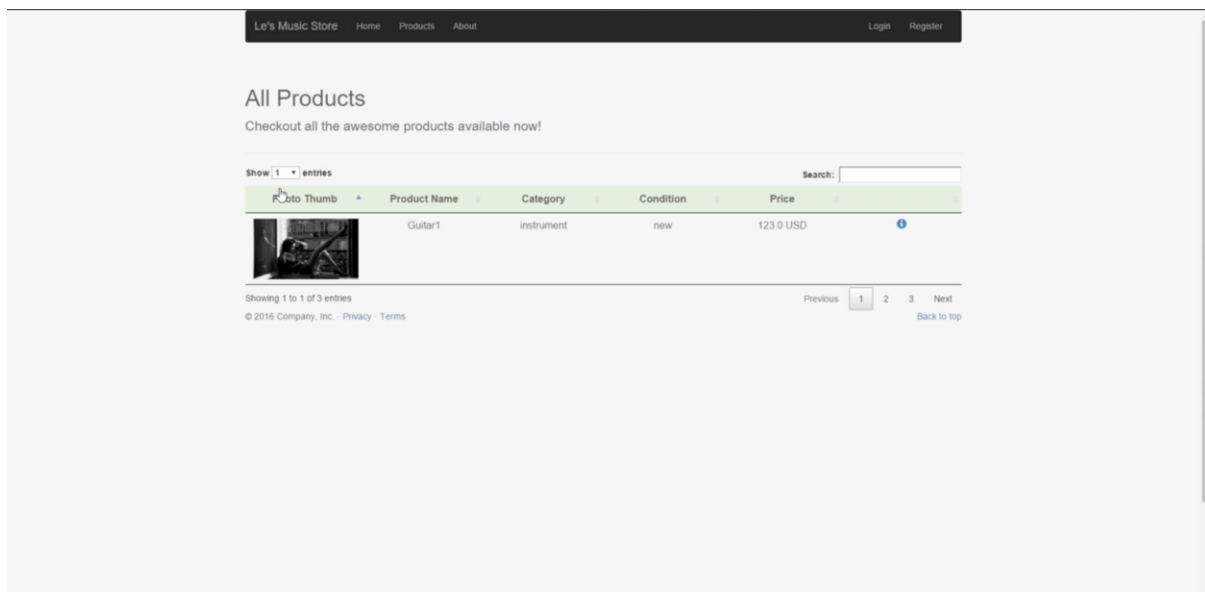
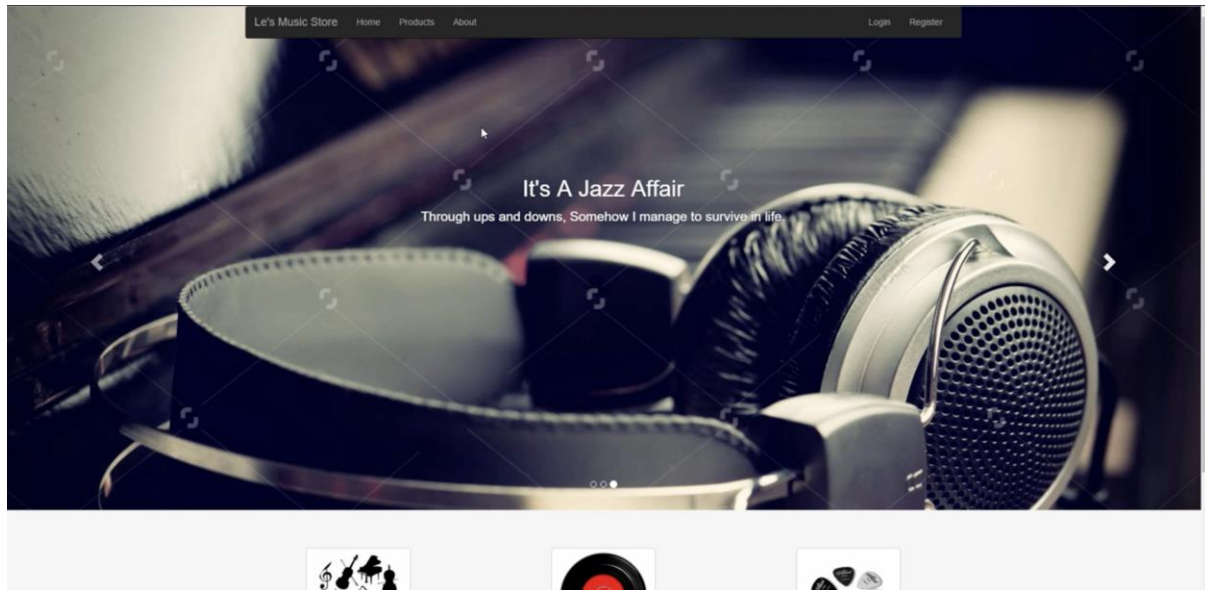


Fig1. Page Flow Diagram

Sample Output:



Le's Music Store

HomeProductsAbout




LoginRegister

All Products

Checkout all the awesome products available now!

Show 5 entries

Search:

Photo Thumb	Product Name	Category	Condition	Price	
	Guitar1	instrument	new	123.0 USD	i
	Record	record	new	23.0 USD	i
	Accessory	accessory	new	34.0 USD	i

Showing 1 to 3 of 3 entries

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Show 5 entries

Search: acc

Showing 1 to 1 of 1 entries (filtered from 3 total entries)

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	Record	record	new	23.0 USD	
	Accessory	accessory	new	34.0 USD	

Showing 1 to 3 of 3 entries

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Le's Music Store

HomeProductsAbout

LoginRegister

Product Detail

Here is the detail information of the product!



Guitar1

Manufacturer:

Category : instrument

Condition : new

123.0 USD

BackOrder Now

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Back to top



Register Customer

Please fill in your information below:

Basic Info

Name

Email

Phone

Username

password

Billing Address

Street Name

Apartment No.

City

State

[Let's Music Store](#) [Home](#) [Products](#) [About](#)

[Login](#) [Register](#)

Register Customer

Please fill in your information below:

Basic Info

Name

Ray Deng

Email Email already exists.

ray.deng83@hotmail.com

Phone

5857474929

Username

user1

password

Billing Address

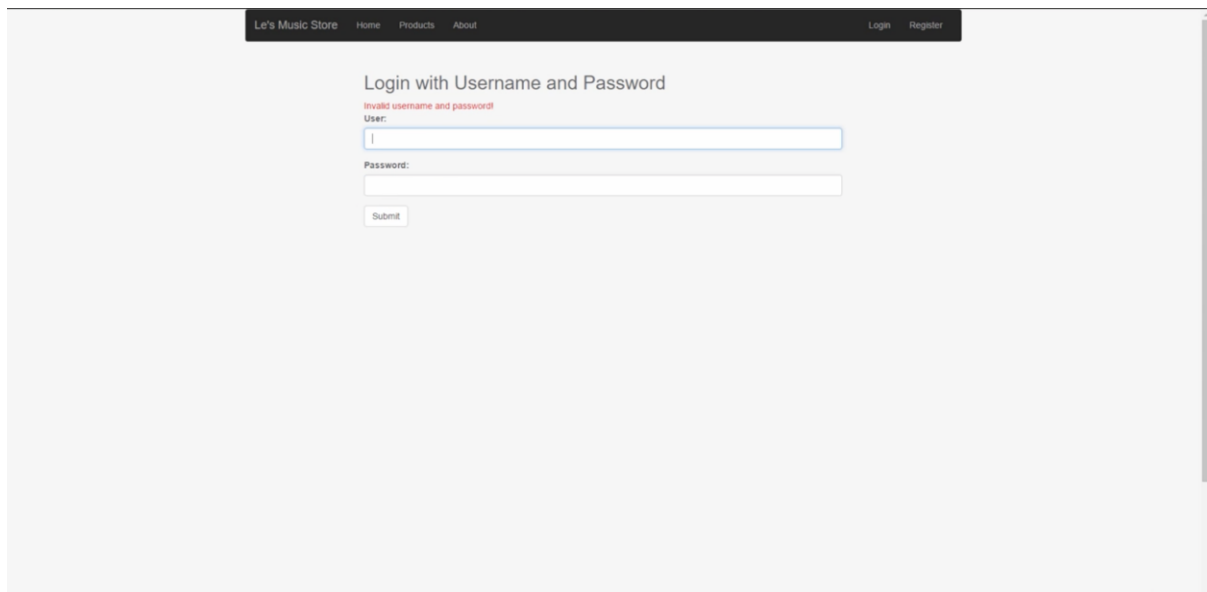
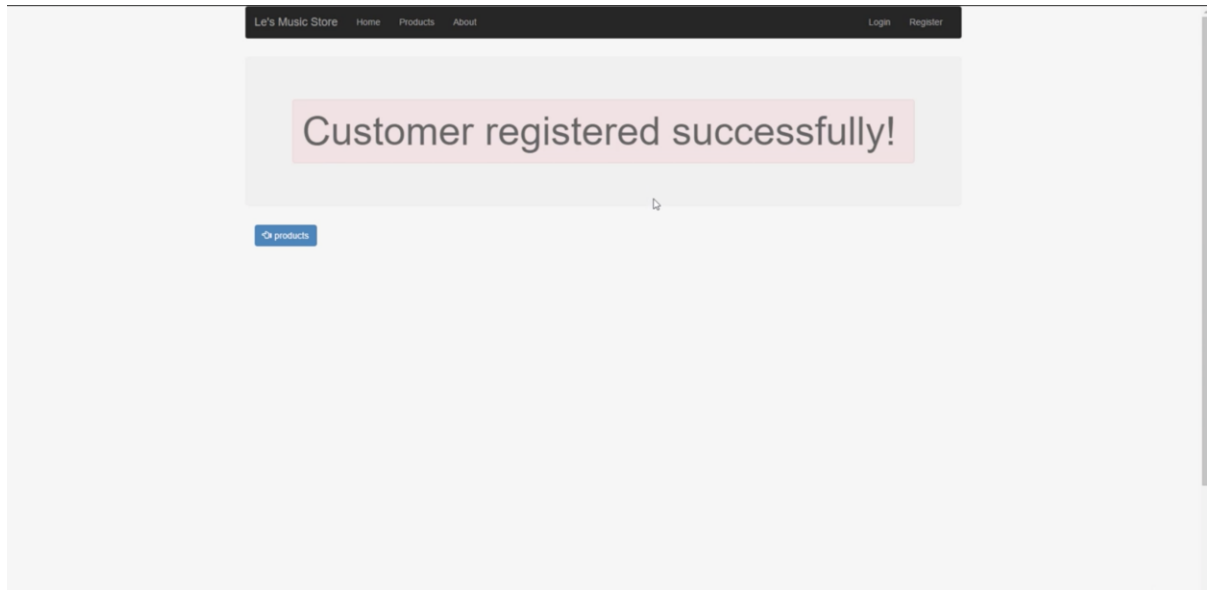
Street Name

308 Beacon Street

Apartment No.

City

Boston






Le's Music Store

HomeProductsAbout

Welcome: user1LogoutCart

Product Detail

Here is the detail information of the product!



Guitar1

Manufacturer :

Category : instrument

Condition : new

123.0 USD

BackOrder Now

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Le's Music Store

HomeProductsAbout

Welcome: user1LogoutCart

Product Detail

Here is the detail information of the product!



Guitar1

Manufacturer :

Category : instrument

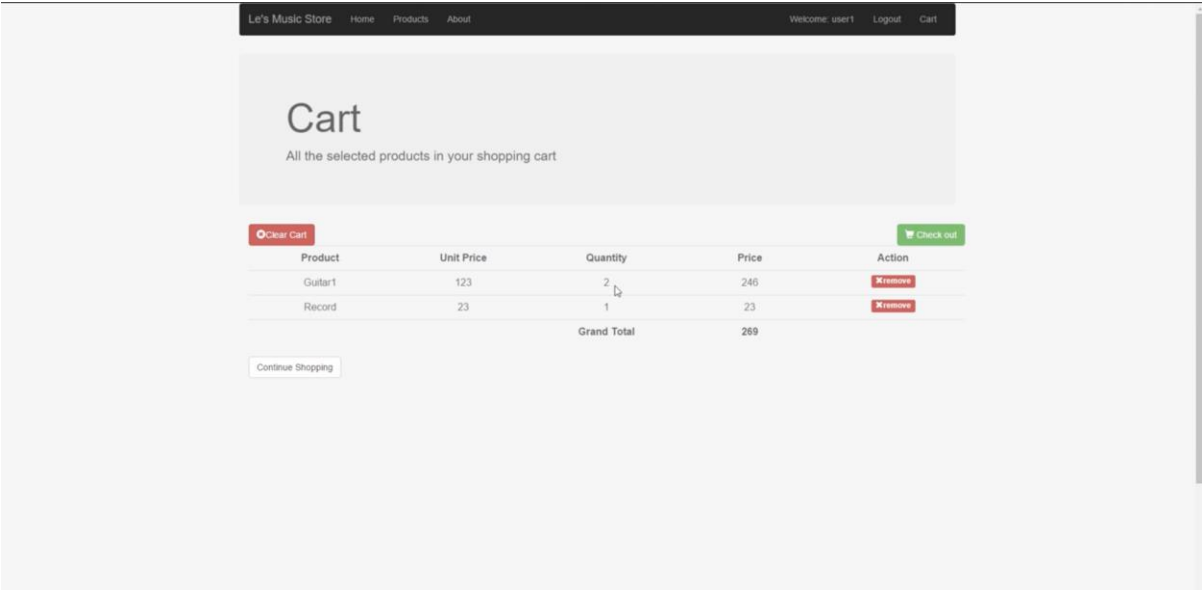
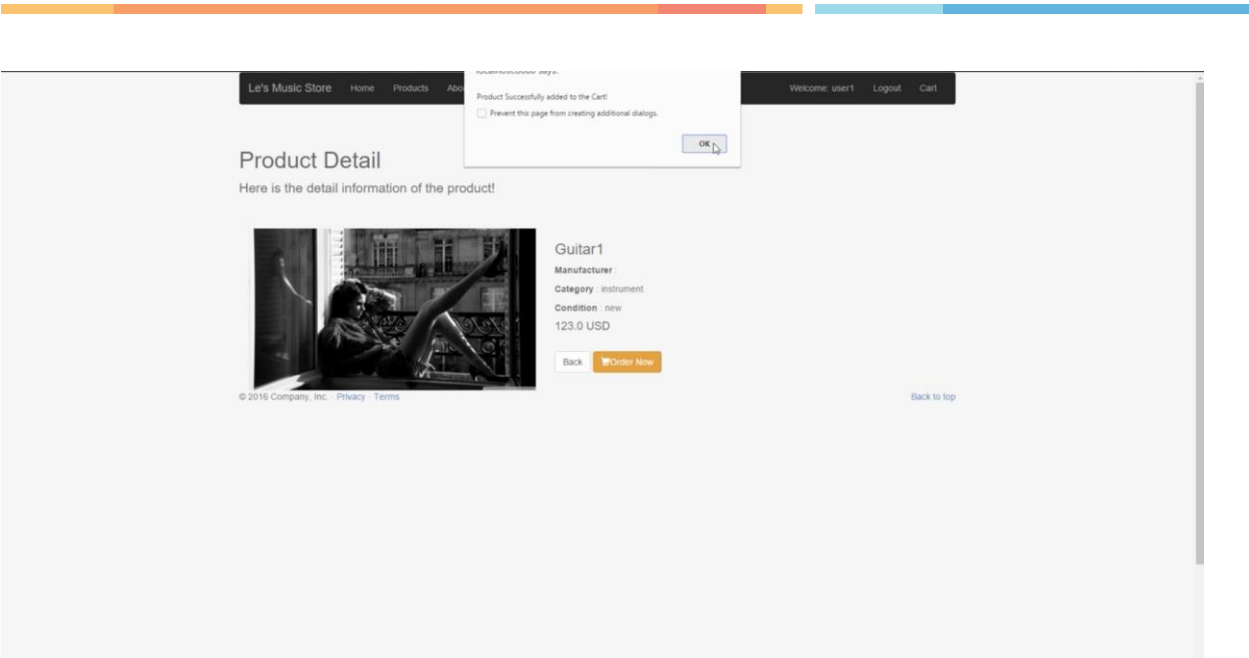
Condition : new

123.0 USD

BackOrder Now

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Le's Music Store

HomeProductsAbout

Welcome, user1LogoutCart

Cart

All the selected products in your shopping cart

Clear Cart

Check out

Product	Unit Price	Quantity	Price	Action
Guitar1	123	2	246	X remove
Record	23	1	23	X remove
Grand Total			269	

Continue Shopping

Le's Music Store

HomeProductsAbout

Welcome, user1LogoutCart

Customer

Customer details

Customer Details

Name

Ray Deng

Email

raydeng@123.com

Phone

5857474929

Street Name

308 Beacon Street

Apartment Number

City

Boston

State

MA

country

United States

Zip Code

02116

NextCancel



Order

Order Confirmation

Receipt

Shipping Address

2 Regent St.
G34835252 New York
.14607

Billing Address

308 Beacon Street
Boston, MA
United States 02116

Shipping Date: Jan 29, 2016

Product	#	Price	Total
Guitar1	2	\$123.0	\$246.0

Grand Total: \$246.0

[back](#) [Submit Order >](#) [Cancel](#)

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Welcome: user1 [Logout](#) [Cart](#)

Thank you for your business!

Your order will be delivered to you within three business days !

[OK](#)



Le's Music Store

HomeProductsAbout


Welcome: adminLogoutAdmin

All Products

Checkout all the awesome products available now!

Show 1 entries

Search:

Photo Thumb	Product Name	Category	Condition	Price	
	Guitar1	instrument	new	123.0 USD	i

Showing 1 to 1 of 3 entries

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Le's Music Store

HomeProductsAbout

Welcome: adminLogoutAdmin

Administrator page

This is the administrator page!

Welcome: admin | Logout

[Product Inventory](#)
Here you can view, check and modify the product inventory!

[Customer Management](#)
Here you can manage customer information!

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Le's Music Store

HomeProductsAbout

Welcome adminLogoutAdmin

Product Inventory Page

This is the product inventory page!

Show 5 entries

Search:

Photo Thumb	Product Name	Category	Condition	Price	
	Guitar1	instrument	new	123.0 USD	
	Record	record	new	23.0 USD	
	Accessory	accessory	new	34.0 USD	

Showing 1 to 3 of 3 entries

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Add Product

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Le's Music Store

HomeProductsAbout

Welcome adminLogoutAdmin

Customer Management Page

This is the customer management page!

Name	Email	Phone	Username	Password	Enabled
Le Deng	ray.deng83@hotmail...	5857474929	user	user	true
Ray Deng	raydeng@123.com	5857474929	user1	test123	true

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