

EAD PROJECT

SP IT ONLINE WEB STORE



DONE BY: POON HAO JUN (1448920)

ROBERT TED TZE HURN (1430714)

FROM: DISM/FT/2A/01

LECTURER: MR LOW JIN KIAT

DATE: 10 AUG 2015

Table of Contents

TERM 1.....	1
Submitting a comment (indProductPage.jsp)	2
Add Product (insertproduct.jsp)	4
Add Category (insertCategory.jsp).....	8
Search Product (searchproduct.jsp)	11
Delete Product (deleteProduct.jsp)	12
Update Product (updateProduct.jsp).....	14
View Comments (viewcomments.jsp)	18
Delete Comments (deleteComment.jsp)	19
MEMBER A	21
Add Product to Cart (indProductPage.jsp)	22
View Product from Cart (displayCartController)	23
Update Product in Cart (upCartController)	24
Delete Product from Cart (delCartController)	25
Show Order (placeorder.jsp).....	26
Confirm Order (recentorderController)	27
Recent Order (recentorderController)	28
MEMBER B.....	29
Register Member (createMember.jsp)	30
Login Role (login.jsp).....	32
Update Member Profile (updateProfile.jsp)	33
View Sales Report (salesreport.jsp).....	35
Log Out (logoutController)	37
ADVANCE FEATURES	38
Generate Discount Code (coupons.jsp)	39
Encrypt and Decrypt Password (mixSmash.java)	41
Forget Password (forgetpass.jsp)	42
Send Email (SendMail.java)	44

TERM 1

IN THIS SECTION - THE BASIC PUBLIC
FEATURES OF THE WEBSITE WILL BE
COVERED, AS WELL AS THE VARIOUS
CONTROLS THAT AN ADMINISTRATOR IS
ABLE TO PERFORM.

Submitting a comment (indProductPage.jsp)

The screenshot shows a web form for submitting a comment. At the top, there is a product image of a laptop. Below the image, there is a section for product details, including a title, a price, and a description. The comment section is highlighted with an orange border and contains a text area for the comment, a name input field, and a rating dropdown menu. The rating is currently set to 4 stars. The comment text is "This product is very good!". Below the comment section, there are two buttons: "Submit" and "Reset".

The screenshot shows a form titled "Comment". It displays the submitted data: "Ratings: 4 Star", "Name: Alex123", and "Comment: This product is very good!". Below the form, there are two buttons: "Submit" and "Reset". The "Submit" button is highlighted with an orange border.

processComment.jsp

Commenting results (processComment.jsp)

Insert Comment

Your 1 comment(s) has been successfully sent

Back

Submit **Reset**

Name:	Alex123
Product:	N56VB-S4041H-16GB
Ratings:	4 Star
Comment:	This product is very good!
Date/Time:	2015-08-08 14:46:45

Add Product (insertproduct.jsp)

Admin wants to insert a new product:

Insert Product

Category:	<input type="text" value="Select Category"/>
Brand:	<input type="text" value="Enter Brand..."/>
Product Name:	<input type="text" value="Enter Product Name..."/>
Description:	<input type="text" value="Enter Description..."/>
Specification Info 1:	<input type="text" value="Enter Specification..."/>
Specification Info 2:	<input type="text" value="Enter Specification..."/>
Specification Info 3:	<input type="text" value="Enter Specification..."/>
Specification Info 4:	<input type="text" value="Enter Specification..."/>
Price:	<input type="text" value="Enter Price..."/>
Image Path:	<input type="text" value="Enter Image Path..."/>
Quantity:	<input type="text" value="Enter Quantity..."/>
<div><input type="button" value="Insert"/><input type="button" value="Reset"/></div>	

Admin types in its specifications, etc. :

Insert Product

Cellphones

Nokia

Nokia 180

Durable and long-lasting

Waterproof

Long lasting battery

Good Camera

Magnetic

188

images/Nokia.jpg

20

Insert **Reset**

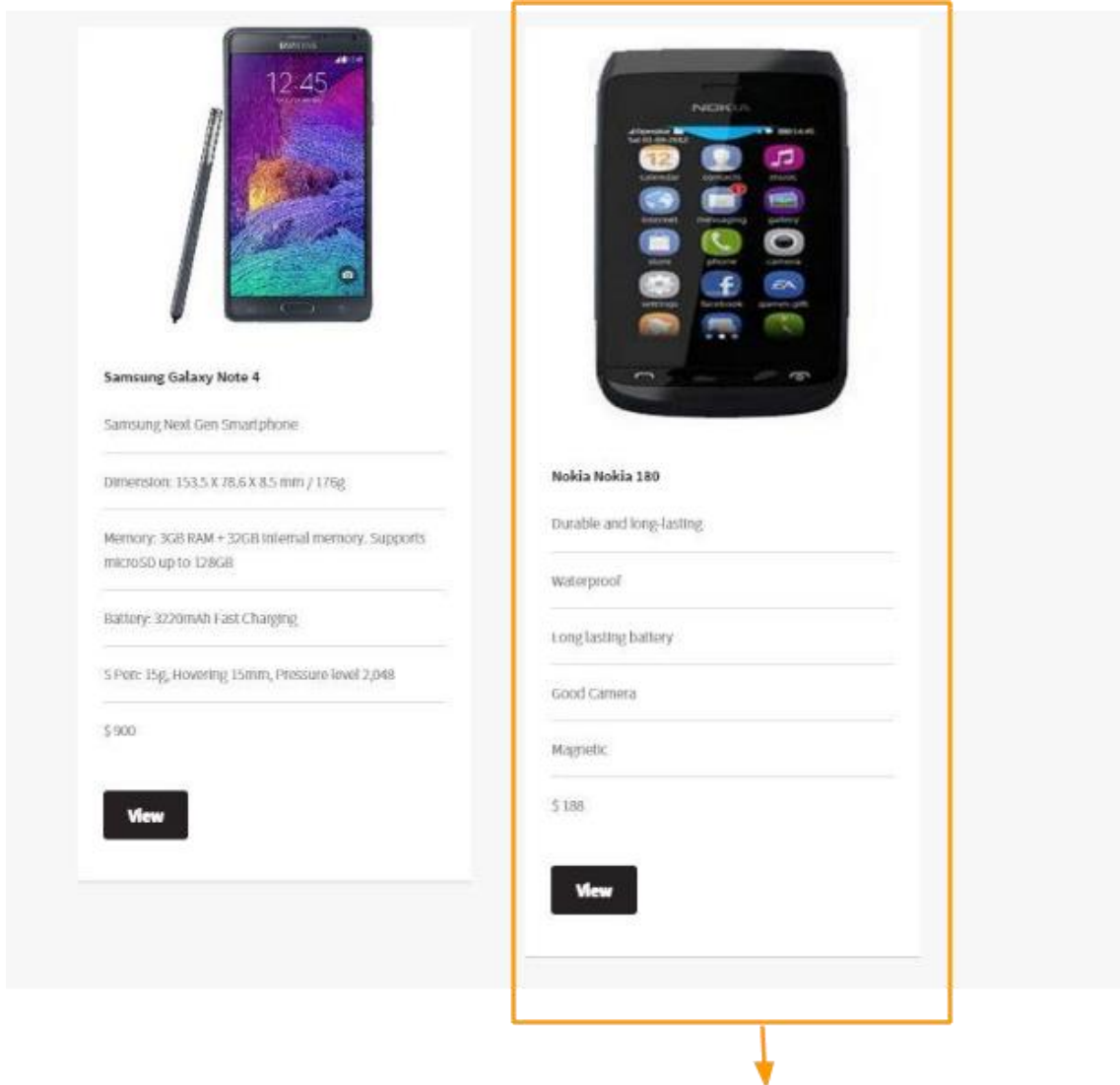
processinsertPro.jsp

Insert Product

1 record(s) inserted successful

Back


Add Product Results



The specs that were previously filled, as well as the image have all appeared in the products page for cellphones as well.

The Product can be viewed individually too

Nokia Nokia 180



Nokia Nokia 180

Durable and long lasting

Waterproof

Long lasting battery

Good Camera

Magnific

\$ 188

Add to Cart

Back

Comment

Ratings: Choose Ratings

Name: Enter Name...

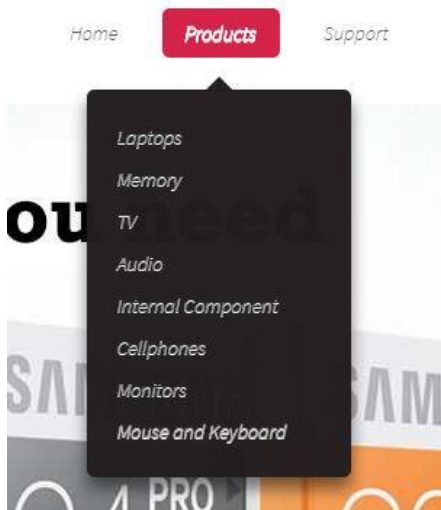
Comment: Enter Description...

Submit

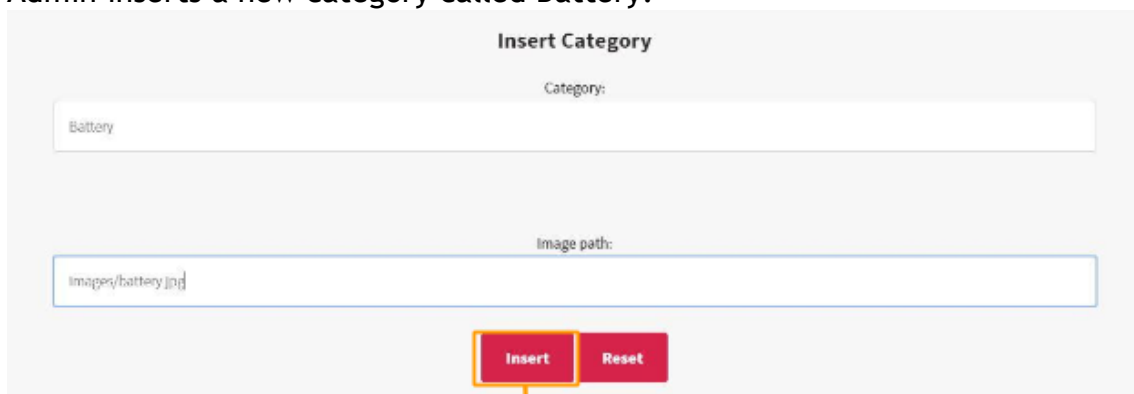
Reset

Add Category (insertCategory.jsp)

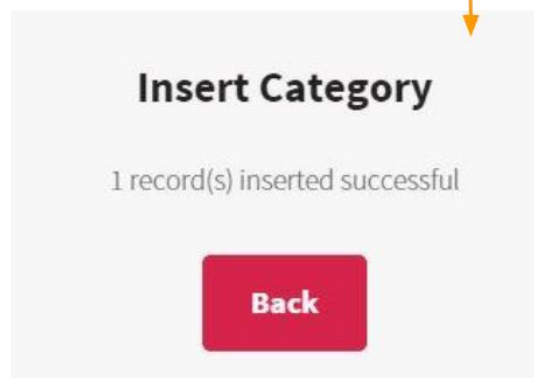
The navigation bar currently:



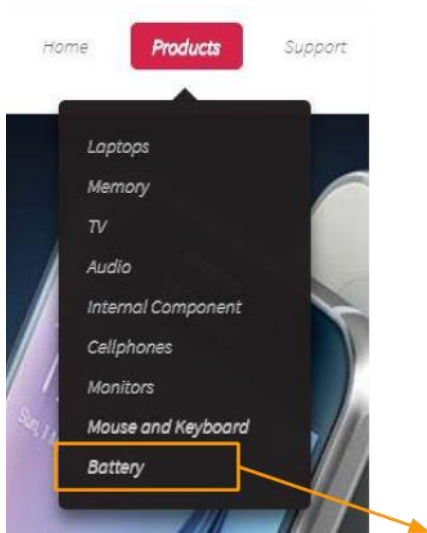
Admin inserts a new category called Battery:

A screenshot of the 'Insert Category' form. The form has two input fields: 'Category' and 'Image path:'. The 'Category' field contains the text 'Battery'. The 'Image path:' field contains the text 'images/battery.jpg'. Below the fields are two buttons: 'Insert' and 'Reset'. The 'Insert' button is highlighted with a red border and a yellow arrow points to it from below.

processinsCategory.jsp

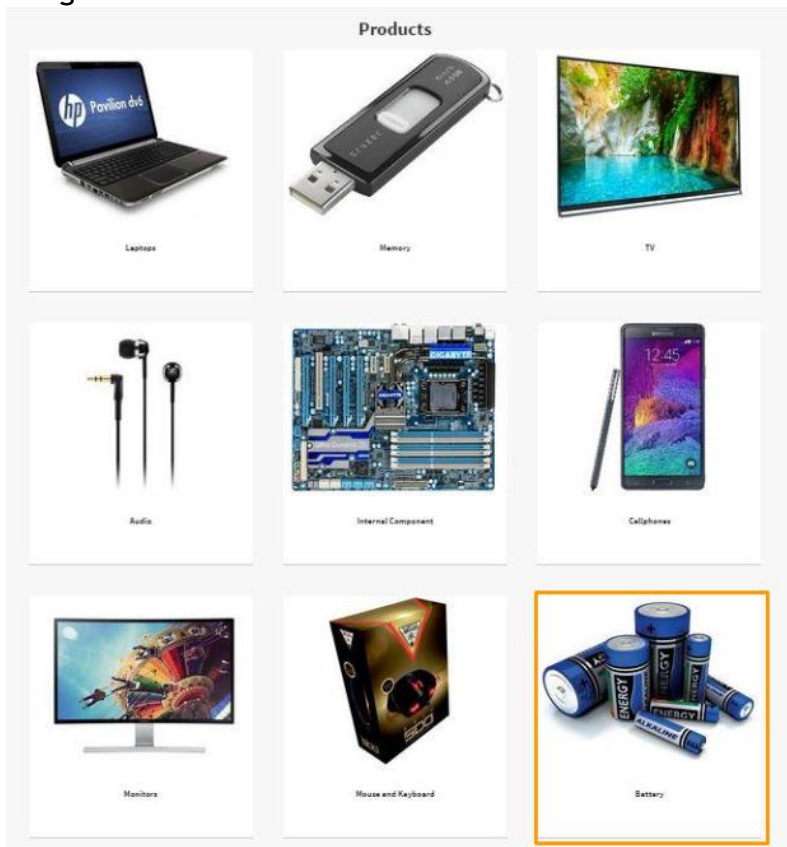
A screenshot of the 'Insert Category' form after a successful insertion. The form displays the message '1 record(s) inserted successful' in green text. Below the message is a red button labeled 'Back'.

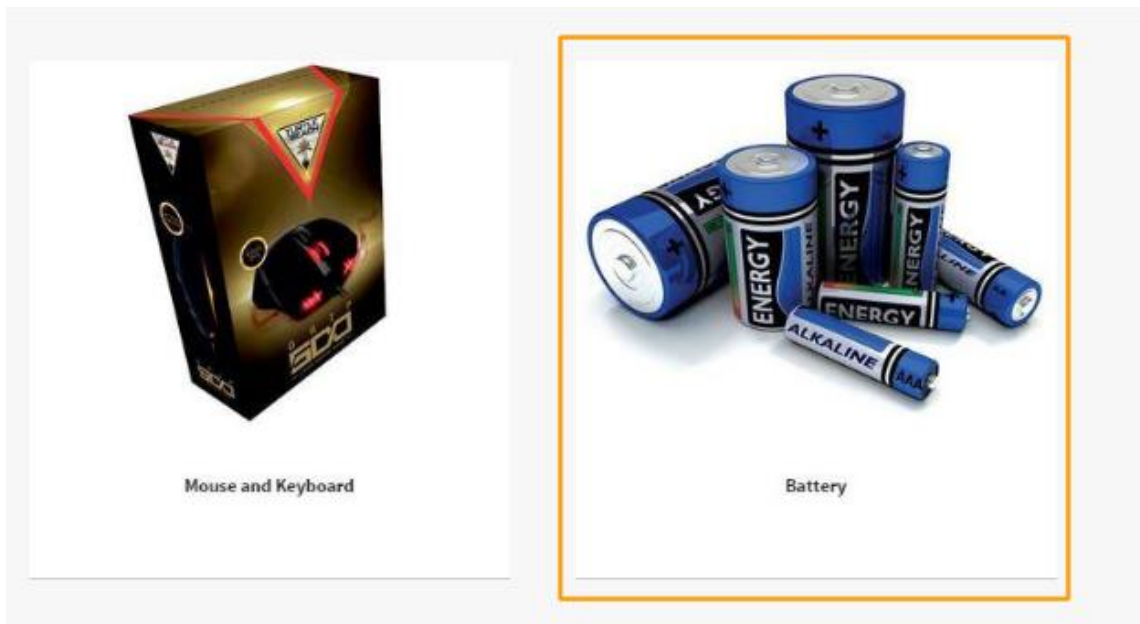
Add Category Results



New category “Battery” has been added to the navigation bar!

In the products page (product.jsp), battery category will appear too, with the image the administrator had inserted:





When the administrator wishes to insert a new product, there will be the new category for him to select as well, depending on the category of the product:

Insert Product

Category:	<div>Select Category</div>
Brand:	<div>Select Category</div>
Product Name:	<div>Laptops</div>
Description:	<div>Memory</div>
	<div>TV</div>
	<div>Audio</div>
	<div>Internal Component</div>
	<div>Cellphones</div>
	<div>Monitors</div>
	<div>Mouse and Keyboard</div>
	<div>Battery</div>
	<div>Other Accessories</div>

Search Product (searchproduct.jsp)

Admin wishes to search for Samsung products:

Search Engine

Search Products/Category/Brand/Price/Spec:

Search

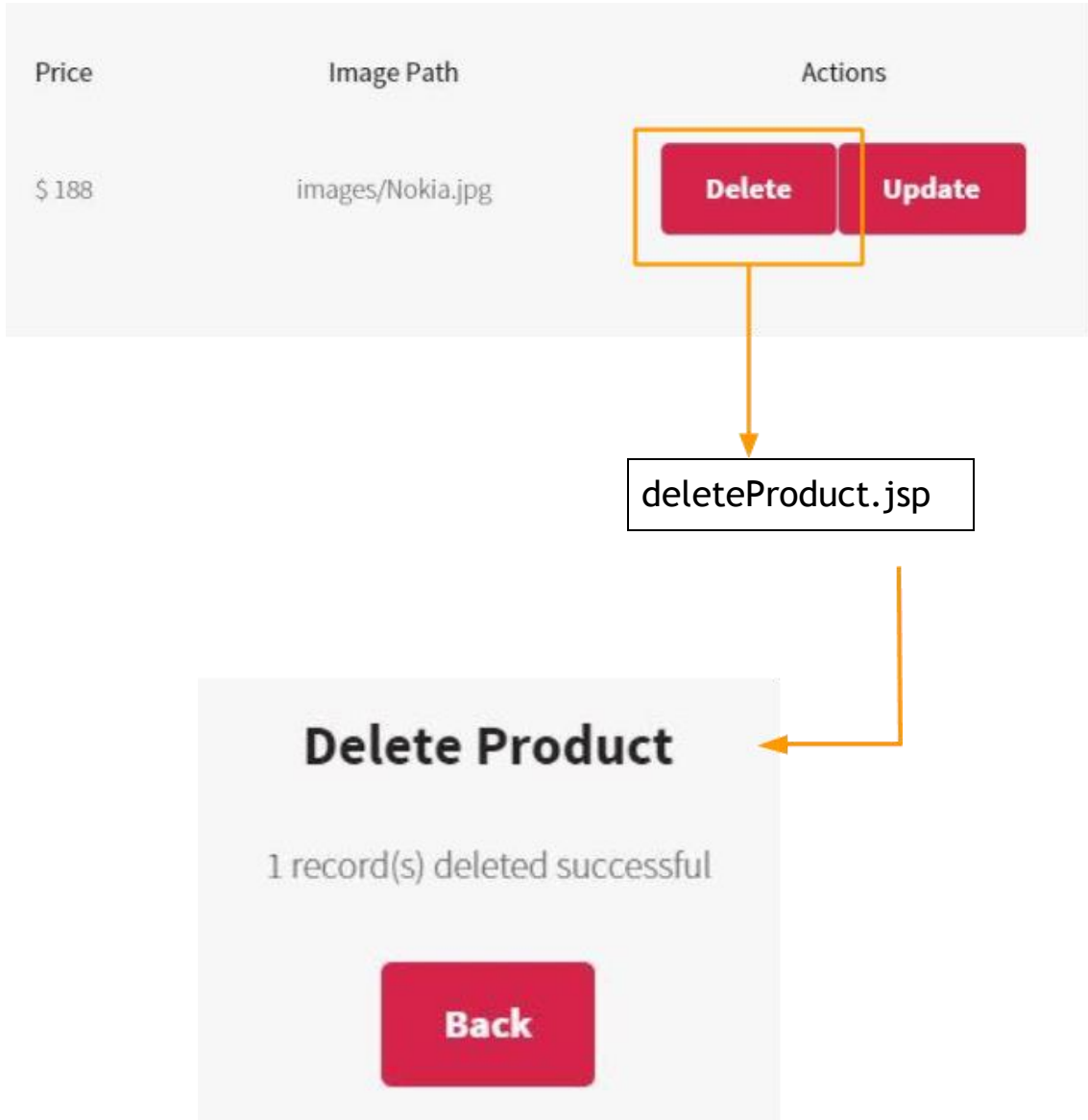
Search Results (delupproduct.jsp)

Category	Product Name	Brand	Spec	Price	Image Path	Actions	
Cellphones	Galaxy Note 4	Samsung	Dimension: 153.5 X 78.6 X 8.5 mm / 176g, Memory: 3GB RAM + 32GB Internal memory, Supports microSD up to 128GB, Battery: 3220mAh Fast Charging, S Pen: 15g, Hovering 15mm, Pressure level 2,048	\$ 900	images/hp_samsung_galaxy_note4.jpg	Delete	Update
Memory	M3 Portable Hard Drive	Samsung	Dimension: 82x17.5x112 (WxHxD), SafetyKey protection for your data, Capacity: 1TB, Various colour to choose	\$ 90	images/mem_samsung_1TB_M3.jpg	Delete	Update
Monitors	27" Minimalist FHD LED Monitor	Samsung	Viewing Angle (H/V): 178°/178°, Contrast Ratio: 3,000:1, Response Time: 4(GTG) ms, Various colour to choose	\$ 499	images/mon_Minimalist_FHD.jpg	Delete	Update
TV	55 UHD 4K Flat Smart TV	Samsung	Resolution: 3840 x 2160, Screen Size: 55", Ultra Clear Panel: Yes, Various colour to choose	\$ 2899	images/tv_flat_smart_55_uhd.jpg	Delete	Update

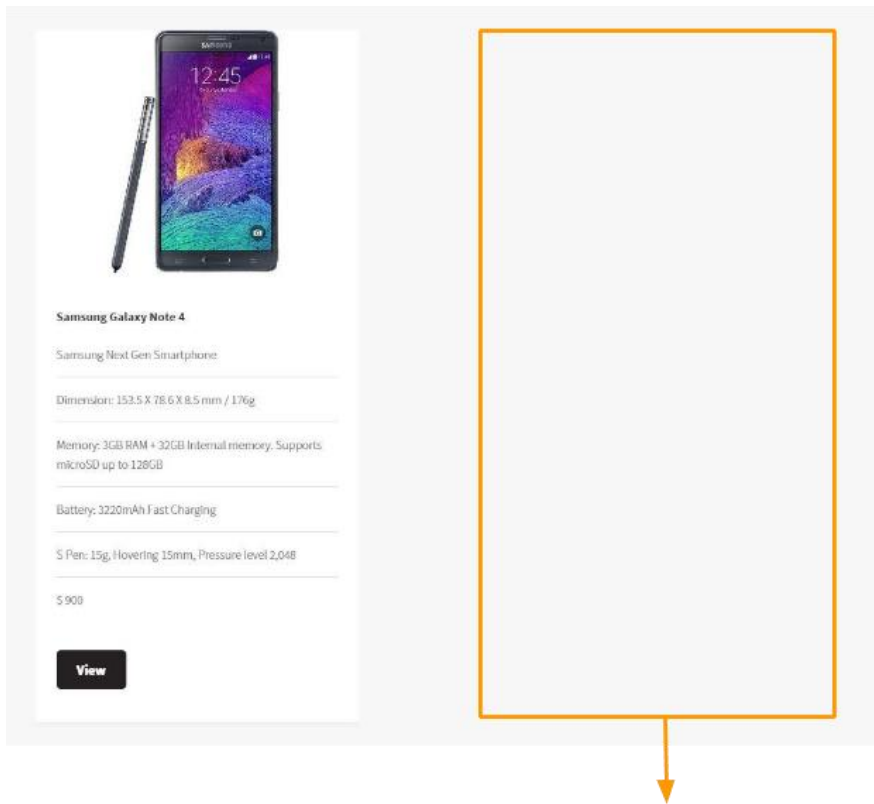
The Results will show all the products that contain “samsung” in it, whatever the category of the product.

Delete Product (deleteProduct.jsp)

Using the search engine to find the Nokia phone that was earlier inserted, the Nokia phone can now be deleted as well:



Delete Product Results



The Nokia Phone no longer exists here.

Using the search engine, the Nokia phone can also no longer be found:

Search Engine

Search Products/Category/Brand/Price/Spec:

nokia

Search

No record found

Category	Product Name	Brand	Spec	Price	Image Path	Actions
----------	--------------	-------	------	-------	------------	---------

Update Product (updateProduct.jsp)

The administrator will update the samsung galaxy note 4:

Category	Product Name	Brand	Spec	Price	Image Path	Actions
Cellphones	Galaxy Note 4	Samsung	Dimension: 153.5 X 78.6 X 8.5 mm / 176g, Memory: 3GB RAM + 32GB Internal memory, Supports microSD up to 128GB, Battery: 3220mAh Fast Charging, S Pen, 15g, Hovering 15mm, Pressure level 2,948	\$ 900	images/tp_samsung_galaxy_note4.jpg	<div>Delete Update</div>

updateProduct.jsp

Update Product

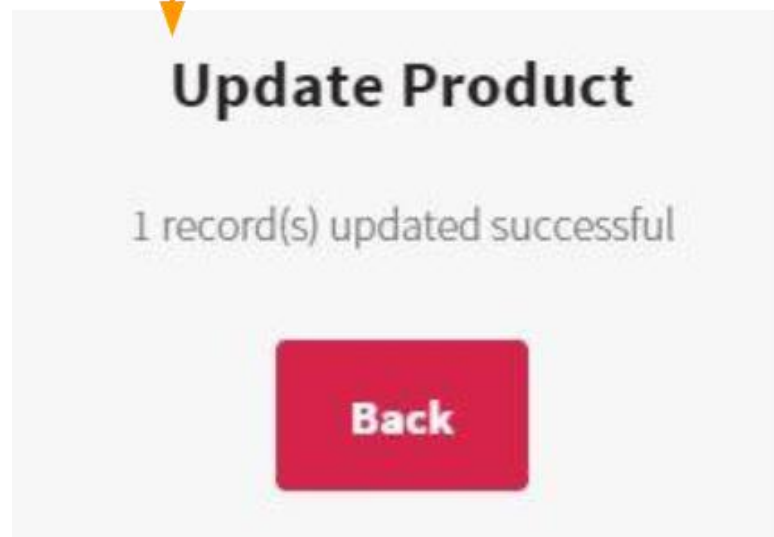
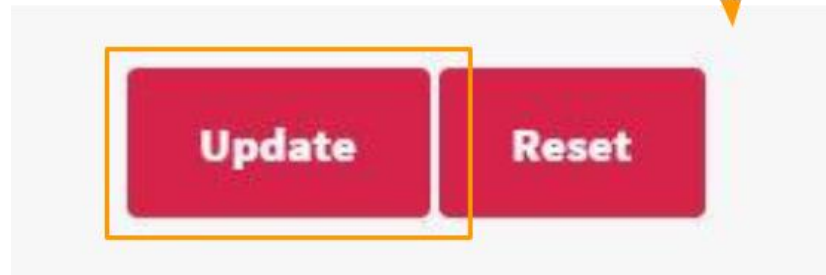
Category:	Cellphones
Brand:	Samsung
Product Name:	Galaxy Note 4
Description:	Samsung Next Gen Smartphone
Specification Info 1:	Dimension: 153.5 X 78.6 X 8.5 mm / 176g
Specification Info 2:	Memory: 3GB RAM + 32GB Internal memory, Supports microSD up to 128GB
Specification Info 3:	Battery: 3220mAh Fast Charging
Specification Info 4:	S Pen, 15g, Hovering 15mm, Pressure level 2,948
Price:	900
Image Path:	images/tp_samsung_galaxy_note4.jpg

Update

Reset

The administrator shall change Samsung Galaxy Note 4 to LG Life 20:

Brand:	LG
Product Name:	Life 20



Update Results

When the administrator searches “samsung” on the search engine, there is one less record, which is due to the update on the Galaxy Note 4:

Search Engine

Search Products/Category/Brand/Price/Spec:

Search

Category	Product Name	Brand	Spec	Price	Image Path
Memory	M3 Portable Hard Drive	Samsung	Dimension: 82x17.5x112 (WxHxD), SafetyKey protection for your data, Capacity: 1TB, Various colour to choose	\$ 90	images/mem_samsung_1TB_M3.jpg
Monitors	27" Minimalist FHD LED Monitor	Samsung	Viewing Angle (H/V): 178°/178°, Contrast Ratio: 3,000:1, Response Time: 4(GTG) ms, Various colour to choose	\$ 499	images/mon_Minimalist_FHD.jpg
TV	55 UHD 4K Flat Smart TV	Samsung	Resolution: 3840 x 2160, Screen Size: 55", Ultra Clear Panel: Yes, Various colour to choose	\$ 2899	images/tv_flat_smart_55_uhd.jpg

Searching for “LG”, however, will show the phone that was updated:


Search Products/Category/Brand/Price/Spec:

Search

Category	Product Name	Brand	Spec	Price	Image Path	Actions
Cellphones	Life 20	LG	Dimension: 153.5 X 78.6 X 8.5 mm / 176g, Memory: 3GB RAM + 32GB Internal memory. Supports microSD up to 128GB, Battery: 3220mAh Fast Charging, 5 Port: 15g, Hovering 15mm, Pressure level 2,048	\$ 900	images/hp_samsung_galaxy_note4.jpg	<div>DeleteUpdate</div>

Do take note of the image path, which states “galaxy note 4”.

In the cellphones section, the phone's name can be seen to be changed to "LG Life 20":



LG Life 20

Samsung Next Gen Smartphone

Dimension: 153.5 X 78.6 X 8.5 mm / 176g

Memory: 3GB RAM + 32GB Internal memory. Supports microSD up to 128GB

Battery: 3220mAh Fast Charging

S Pen: 15g, Hovering 15mm, Pressure level 2,048

\$ 900

View

View Comments (viewcomments.jsp)

The administrator searches for comments for “samsung” products:

Search Engine

Search Comments by Brand/Category/Products/Stars/Reviewer:

Search

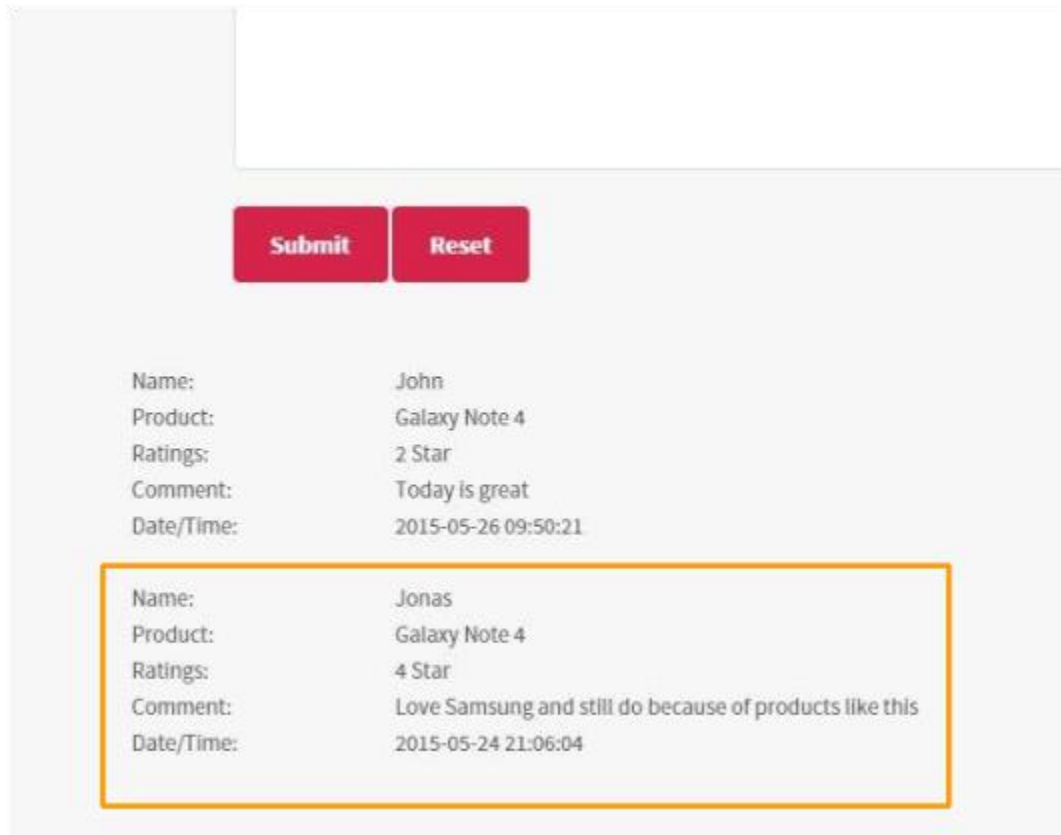
(delviewcomment.jsp)

Comment	Product Name	Category	Ratings	Date/Time
I can store anything in it!! AMAZING!!	M3 Portable Hard Drive	Memory	5 Star	2015-05-24 20:58:55
Watching Movies have never felt so amazing. The feeling this TV gives simply amazes me!!	55 UHD 4K Flat Smart TV	TV	5 Star	2015-05-24 21:01:22
Love Samsung and still do because of products like this	Galaxy Note 4	Cellphones	4 Star	2015-05-24 21:06:04
Today is great.	Galaxy Note 4	Cellphones	2 Star	2015-05-26 09:50:21
Works great, feels good!	27" Minimalist FHD LED Monitor	Monitors	4 Star	2015-05-24 21:08:18

Comments shown are only meant for samsung products.

Delete Comments (deleteComment.jsp)

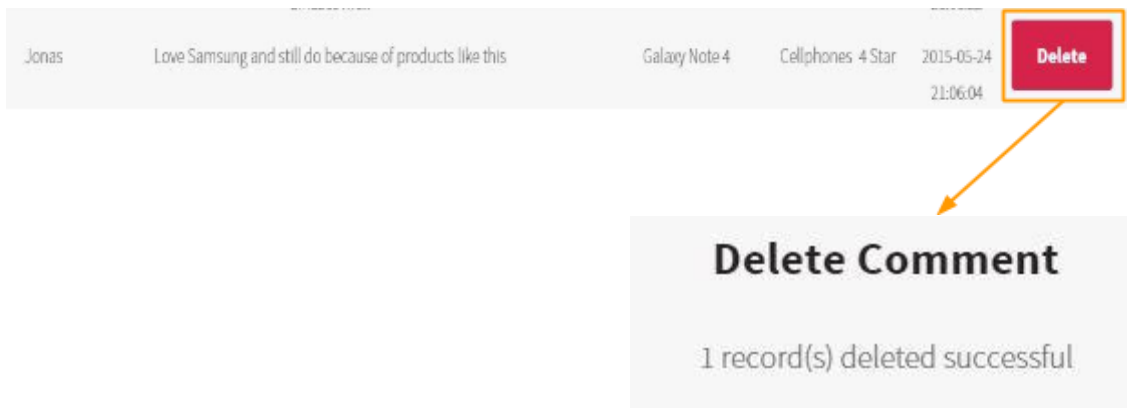
The administrator will delete this comment:



A screenshot of a web form for deleting a comment. At the top, there are two red buttons labeled "Submit" and "Reset". Below them, the details of a comment to be deleted are listed in two columns. The first comment has the following details: Name: John, Product: Galaxy Note 4, Ratings: 2 Star, Comment: Today is great, and Date/Time: 2015-05-26 09:50:21. The second comment, which is highlighted with an orange border, has the following details: Name: Jonas, Product: Galaxy Note 4, Ratings: 4 Star, Comment: Love Samsung and still do because of products like this, and Date/Time: 2015-05-24 21:06:04.

Name:	John
Product:	Galaxy Note 4
Ratings:	2 Star
Comment:	Today is great
Date/Time:	2015-05-26 09:50:21
<hr/>	
Name:	Jonas
Product:	Galaxy Note 4
Ratings:	4 Star
Comment:	Love Samsung and still do because of products like this
Date/Time:	2015-05-24 21:06:04

The administrator finds that comment using the viewing comments search engine:



A screenshot showing the process of deleting a comment. At the top, a table lists comments. The comment by Jonas, with the text "Love Samsung and still do because of products like this", is highlighted. A red "Delete" button is visible next to it, with an orange arrow pointing from it to a confirmation box below. The confirmation box has the title "Delete Comment" and the message "1 record(s) deleted successful".

Jonas	Love Samsung and still do because of products like this	Galaxy Note 4	Cellphones 4 Star	2015-05-24 21:06:04	Delete
-------	---	---------------	-------------------	---------------------	--------

Delete Comment

1 record(s) deleted successful

Delete Comments Results

The comment by Jonas can no longer be viewed:

Name	Comment	Product Name	Category	Ratings	Date/Time
Jon123	I can store anything in it!! AMAZING!!	M3 Portable Hard Drive	Memory	5 Star	2015-05-24 20:58:55
Anon	Watching Movies have never felt so amazing. The feeling this TV gives simply amazes me!!	55 UHD 4K Flat Smart TV	TV	5 Star	2015-05-24 21:01:22
John	Today is great	Galaxy Note 4	Cellphones	2 Star	2015-05-26 09:50:21
Ethan	Works great, feels good!	27" Minimalist FHD LED Monitor	Monitors	4 Star	2015-05-24 21:08:18

In the individual page of the Galaxy Note 4, his comment is also no longer visible:

Name:	John
Product:	Galaxy Note 4
Ratings:	2 Star
Comment:	Today is great
Date/Time:	2015-05-26 09:50:21

MEMBER A

IN THIS SECTION - IT WILL
BE SHOWN HOW A POTENTIAL
CUSTOMER MAKES AN ONLINE
PURCHASE.

Add Product to Cart (indProductPage.jsp)

A customer, who must be a member, will put the quantity of the product he wishes to add to cart:



add2CartController

View Product from Cart (displayCartController)

add2CartController



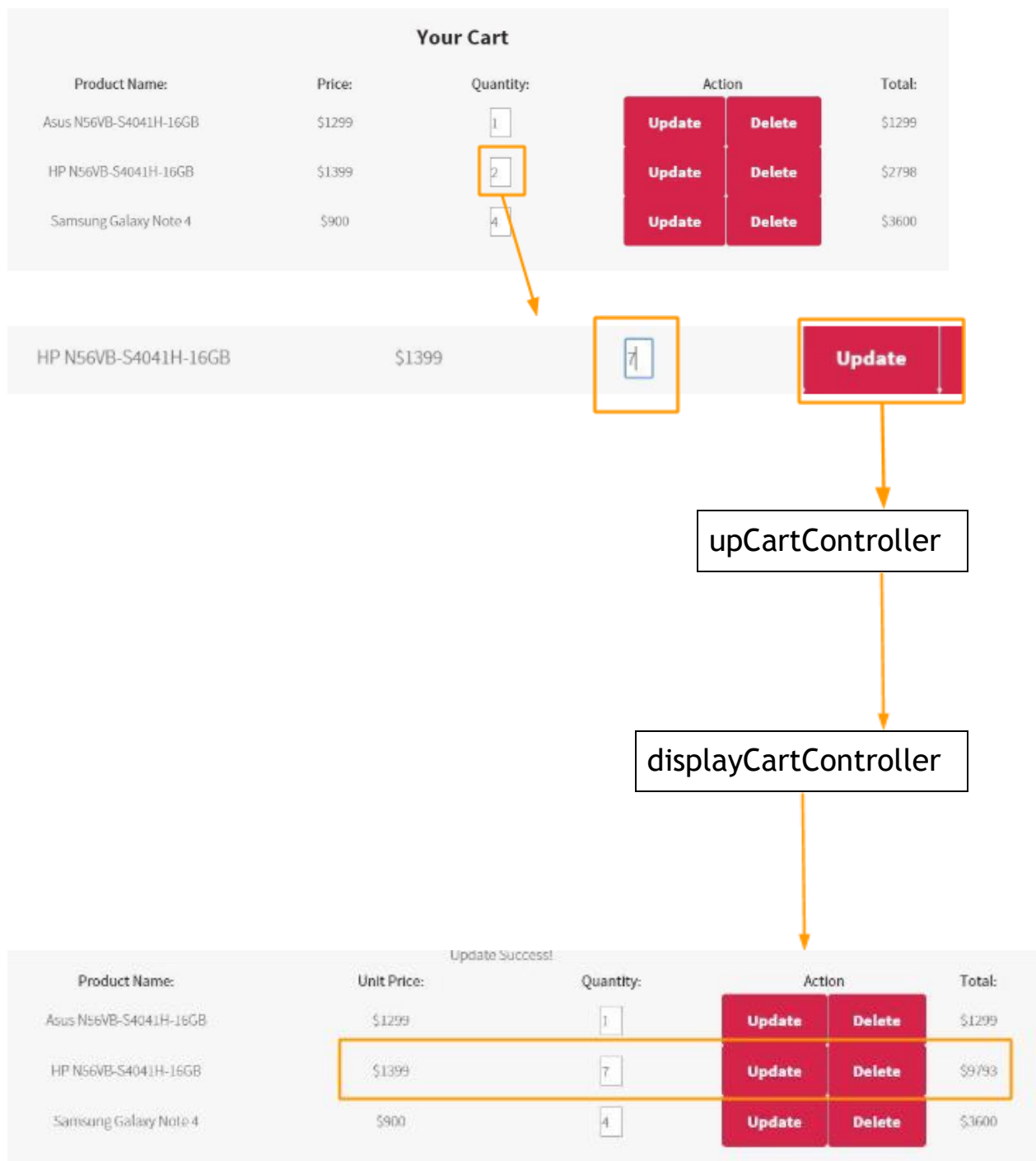
displayCartController



The product added to the cart will be displayed, along with the quantity the customer wants:

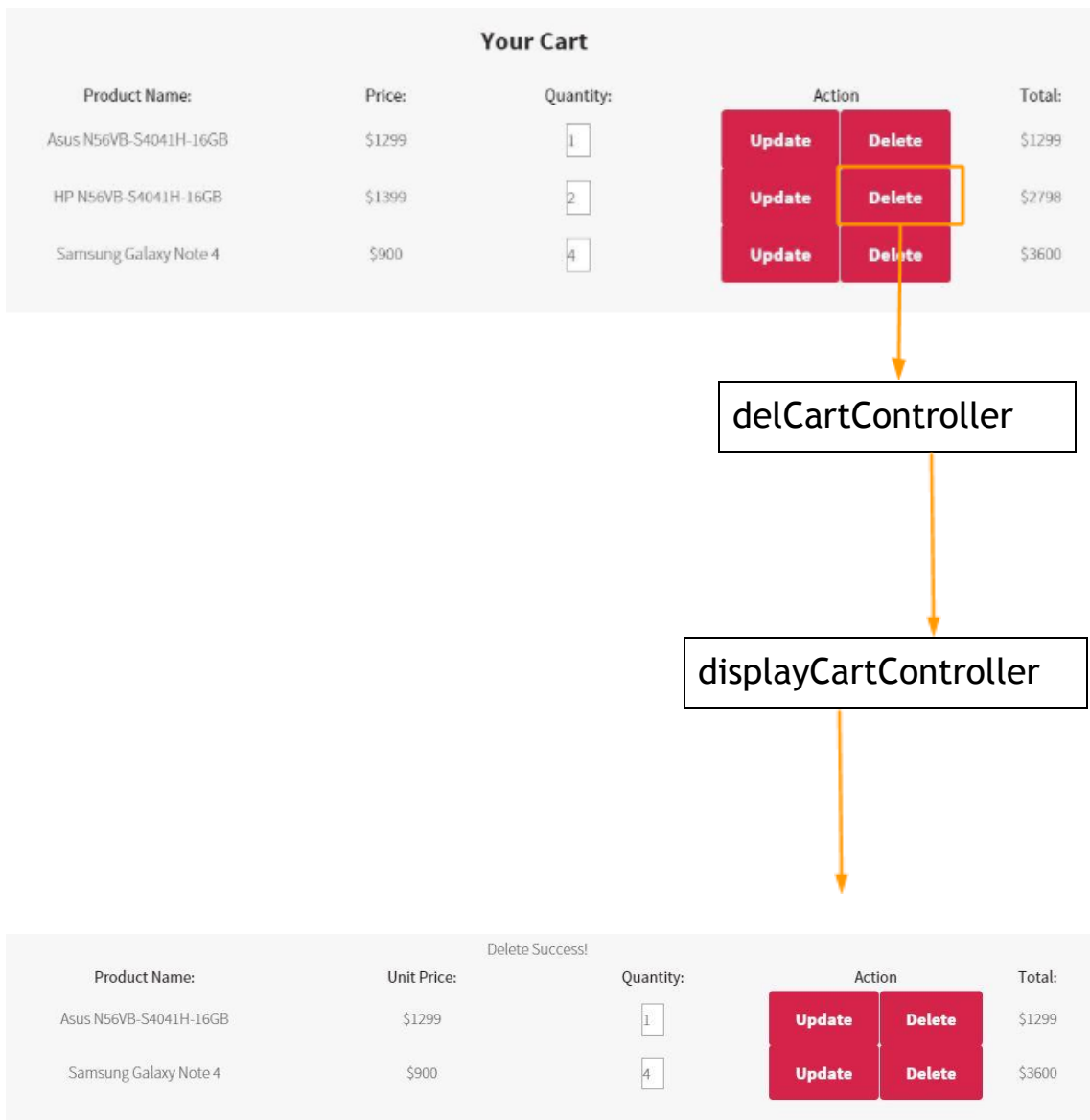
Your Cart					
Product Name:	Price:	Quantity:	Action		Total:
Asus N56VB-S4041H-16GB	\$1299	<input type="text" value="1"/>	Update	Delete	\$1299
HP N56VB-S4041H-16GB	\$1399	<input type="text" value="2"/>	Update	Delete	\$2798
Samsung Galaxy Note 4	\$900	<input type="text" value="4"/>	Update	Delete	\$3600

Update Product in Cart (upCartController)



Product's quantity will be updated alongside its total price value.

Delete Product from Cart (delCartController)



The product that was deleted can no longer be found in the shopping cart.

Show Order (placeorder.jsp)

Product Name:	Unit Price:	Quantity:	Action	Total:
Asus N56VB-S4041H-16GB	\$1299	<input type="text" value="1"/>	Update Delete	\$1299
Samsung Galaxy Note 4	\$900	<input type="text" value="4"/>	Update Delete	\$3600
SUB TOTAL: \$4899				
Summary				

placeOrder.jsp

Place Order			
Product Name:	Unit Price:	Quantity:	Total:
Asus N56VB-S4041H-16GB	\$1299	1	\$1299
Samsung Galaxy Note 4	\$900	4	\$3600
SUB TOTAL: \$4899			

Confirm Order (recentorderController)

Place Order

Product Name:	Unit Price:	Quantity:	Total:
Asus N56VB-S4041H-16GB	\$1299	1	\$1299
Samsung Galaxy Note 4	\$900	4	\$3600

SUB TOTAL: \$4899

Payment Info

Credit Card No.:

123456789

Credit Card Name:

Jennifer Wang

Credit Card Type:

Visa

Expiry Date:

6

2016

CVC No.:

543

Continue

placeorderController

Place Order

Order Success!

Product Name:	Price:	Quantity:	Total:
Asus N56VB-S4041H-16GB	\$1299	1	\$1299
Samsung Galaxy Note 4	\$900	4	\$3600

SUB TOTAL: \$4899
DISCOUNT: \$15
Total: \$4884

Voucher: UF52GW

Payment Info

Credit Card No.:

123456789

Credit Card Name:

Jennifer Wang

Credit Card Type:

Visa

Expiry Date:

6 / 2016

Finish

Recent Order (recentorderController)

Place Order

Order Success!

Product Name:	Price:	Quantity:	Total:
Asus N56VR-S4041H-16GB	\$1299	1	\$1299
Samsung Galaxy Note 4	\$900	4	\$3600

SUB TOTAL: \$4899
DISCOUNT: \$15
Total: \$4884

Voucher: UFS2GW

Payment Info

Credit Card No.: 123456789
Credit Card Name: Jennifer Wang
Credit Card Type: Visa
Expiry Date: 6 / 2016

Finish

recentorderController

Transaction ID:	Credit Card Name:	Credit Card No.:	Credit Card Type:	Total:	Date Purchased:
32	Sly Poon	9674827198341674	JCB	\$3943	2015-08-08 22:04:58

Product Name:	Unit Price:	Quantity:	Total:
Samsung Galaxy Note 4	\$800	1	\$800
SanDisk Cruzer Micro USB flash drive	\$20	1	\$20
Samsung 55 UHD 4K Flat Smart TV	\$2899	1	\$2899
Turtle Beach GRIP 500 Laser Gaming Mouse	\$139	1	\$139

Voucher Code: 132371
DISCOUNT: \$15

Transaction ID:	Credit Card Name:	Credit Card No.:	Credit Card Type:	Total:	Date Purchased:
33	Jennifer Wang	123456789	Visa	\$4884	2015-08-09 00:04:27

Product Name:	Unit Price:	Quantity:	Total:
Asus N56VR-S4041H-16GB	\$1299	1	\$1299
Samsung Galaxy Note 4	\$900	4	\$3600

Voucher Code: UFS2GW
DISCOUNT: \$15

The recent order by Jennifer Wang

MEMBER B

IN THIS SECTION - THE LOGIN
FEATURES OF THE WEBSITE WILL BE
COVERED, AS WELL AS THE VIEWING OF
THE SALES REPORT. HOW MEMBERS CAN
CREATE THEIR ACCOUNTS AND HOW
THEY CAN NAVIGATE THROUGH THE
WEBSITE WILL ALSO BE TOUCHED ON.

Register Member (createMember.jsp)

The form that a potential member has to fill:

Register Account

Email:

Password:

Name:

Gender: ☐ Male ☐ Female

Date of Birth:

Mailing Address:

Contact No.:

Subscribe Newsletter: ☐ Yes ☐ No

Ability to check for weak, medium or strong passwords by clicking the check button beside the password field:

Password strength Weak!

Register Account

Password strength Strong!

Register Account

Password strength Strong!

Register Account

Email:

Password:

Name:

Gender: ☒ Male ☐ Female

Date of Birth:

Mailing Address:

Contact No.:

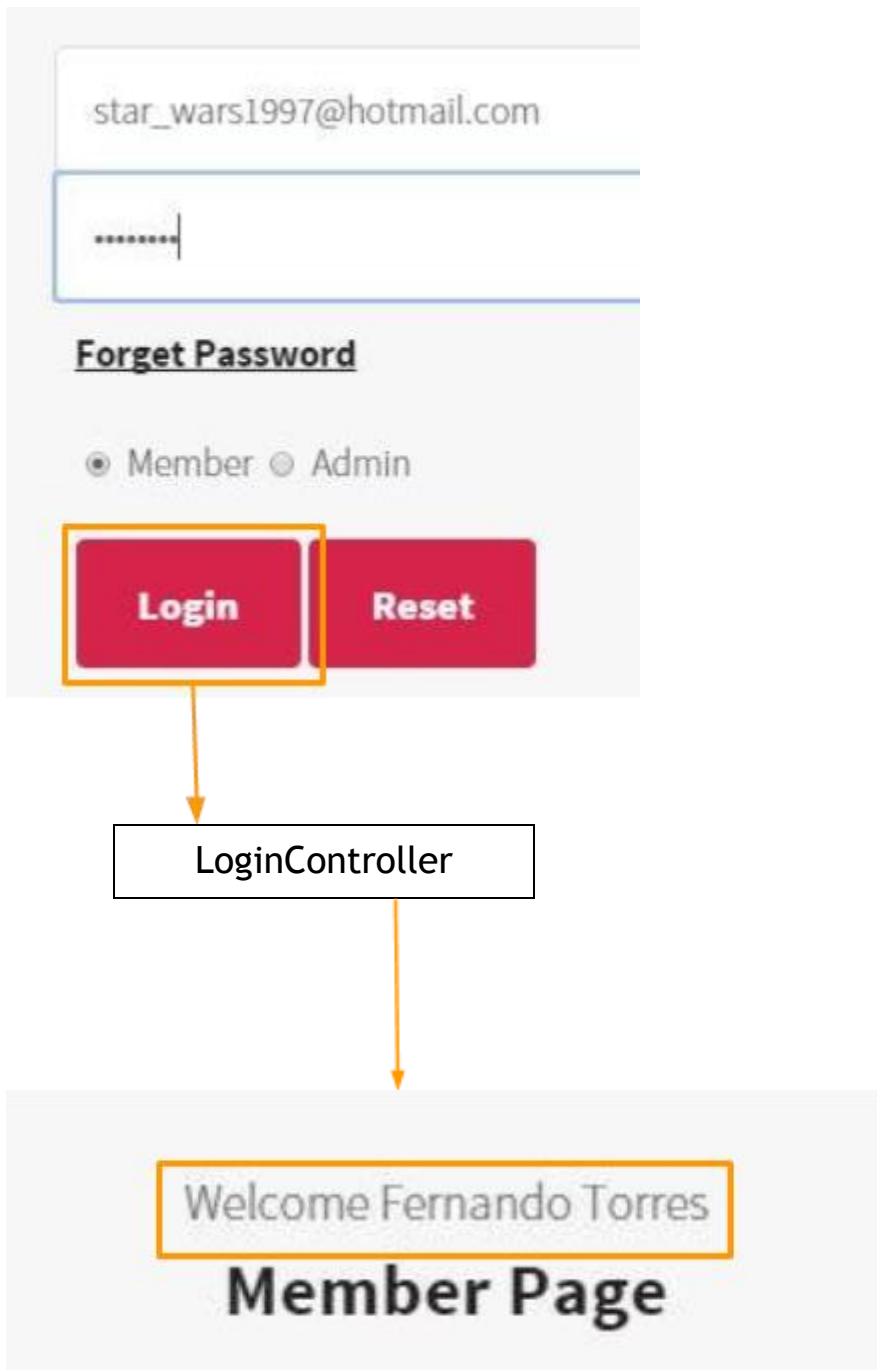
Subscribe Newsletter: ☒ Yes ☐ No

RegisterController

Please proceed to login!

Login Page

Login Role (login.jsp)



The name that the member entered earlier appears on the member page as well.

Update Member Profile (updateProfile.jsp)

Member Sly Poon intends to change his name:

Register Account

Email:

Password:

Name:

Gender: ☒ Male ☐ Female

Date of Birth:

Mailing Address:

Contact No.:

Subscribe Newsletter: ☒ Yes ☐ No

Register Account

Email:

Password:

Name:

Gender: ☒ Male ☐ Female

Date of Birth:

Mailing Address:

Contact No.:

Subscribe Newsletter: ☒ Yes ☐ No

updateProfileController

updateProfileController

Update Successful

Register Account

Email:

Password:

Name:

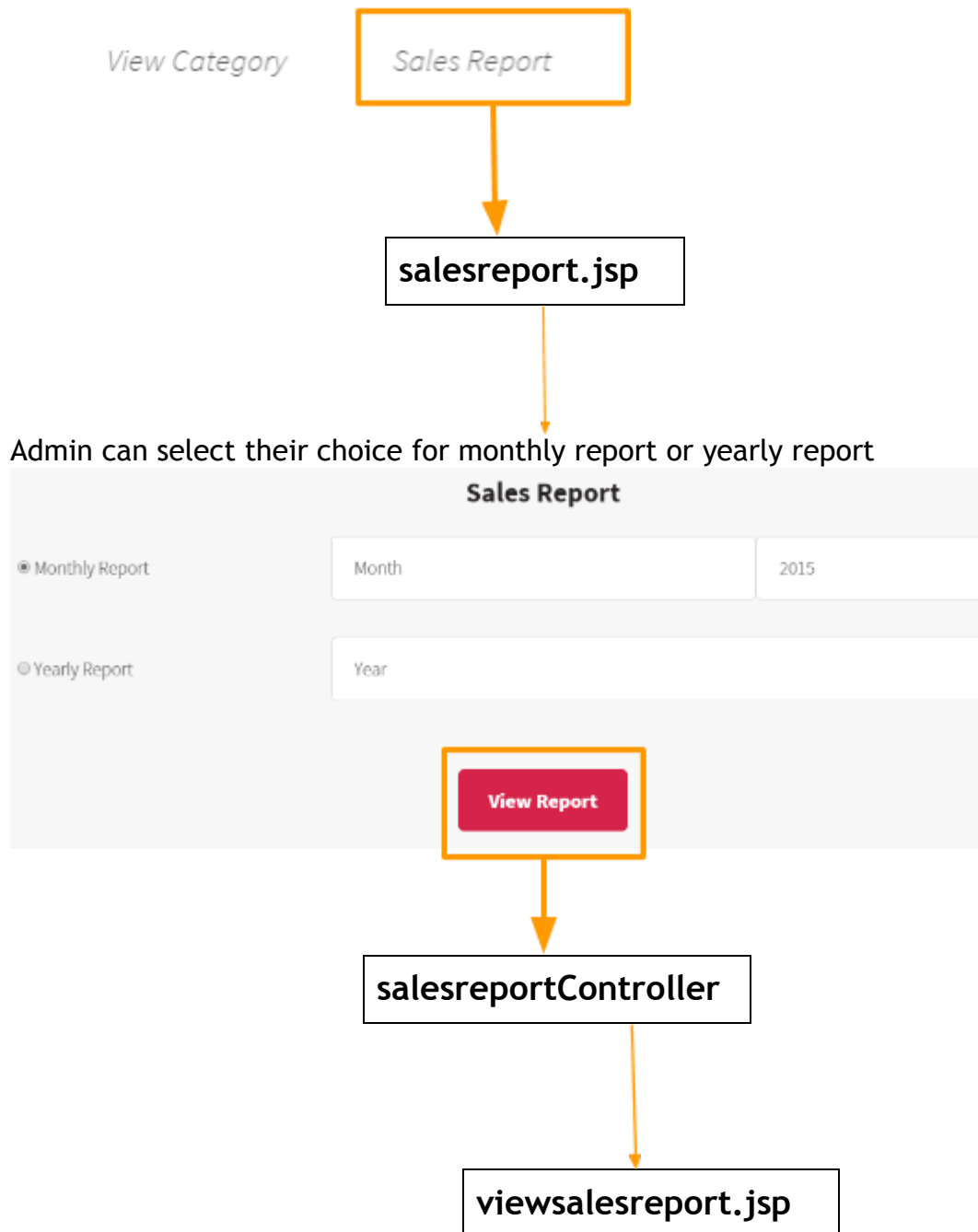
Member Page no longer welcomes “Sly Poon”, but welcomes “Handsome Boy 92” instead:

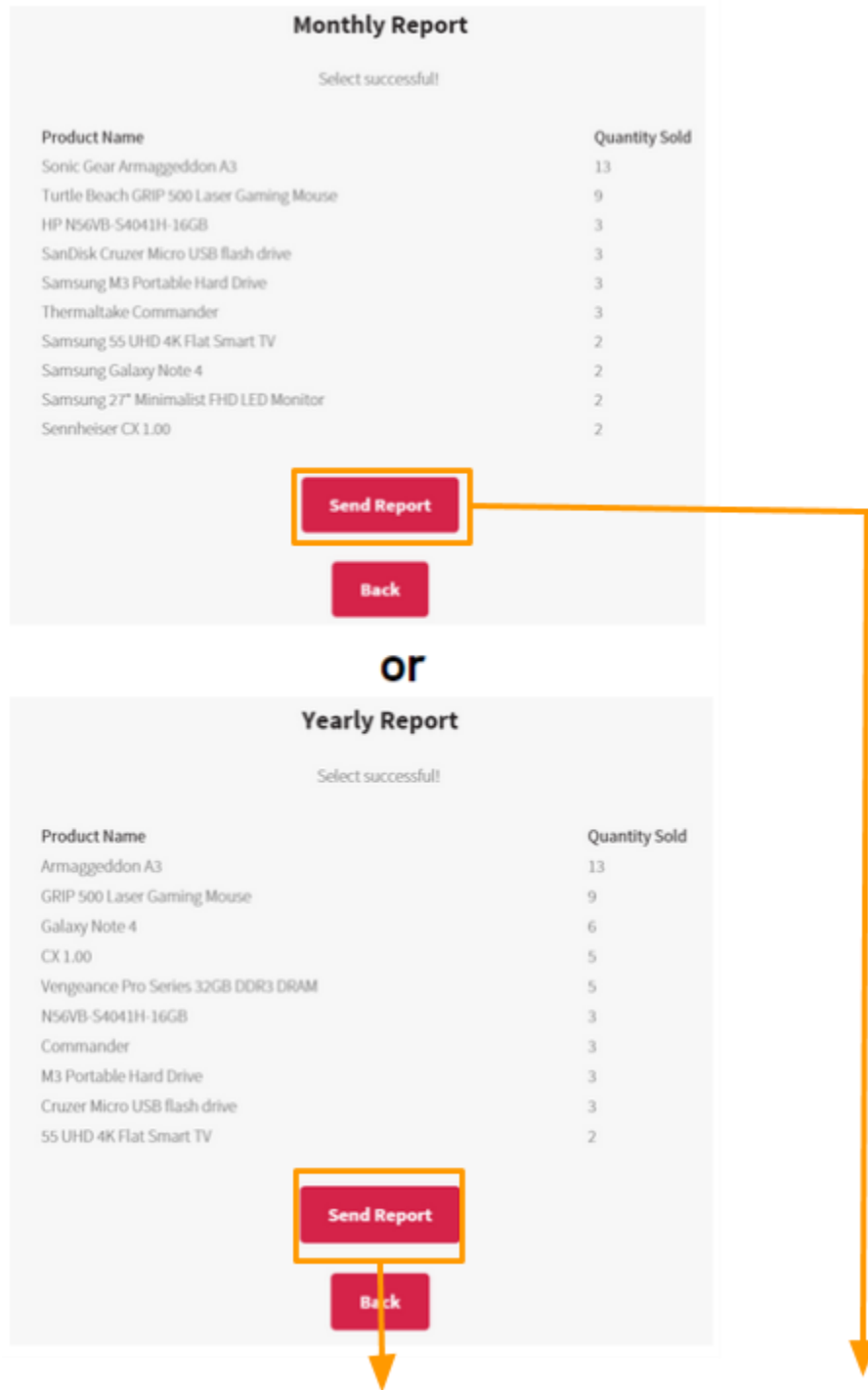
Welcome Handsome Boy 92

Member Page

View Sales Report (salesreport.jsp)

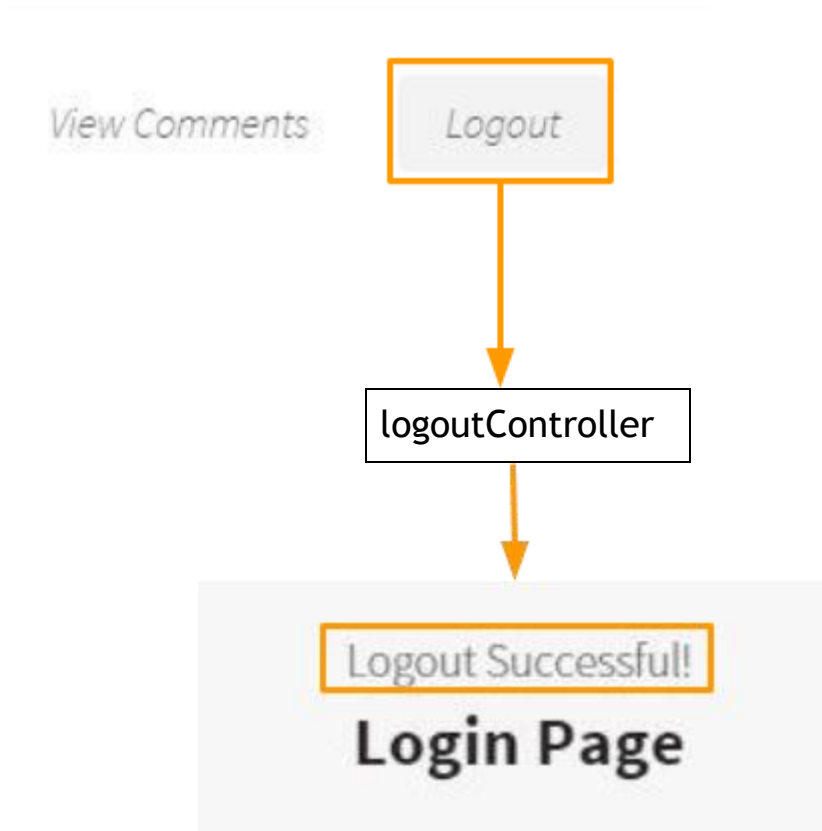
Login into admin to see the sales report





If the admin would like to send a report to it, it will call the sendreport Controller, or if admin wishes to go back, it will redirect admin back to salesreport.jsp.

Log Out (logoutController)

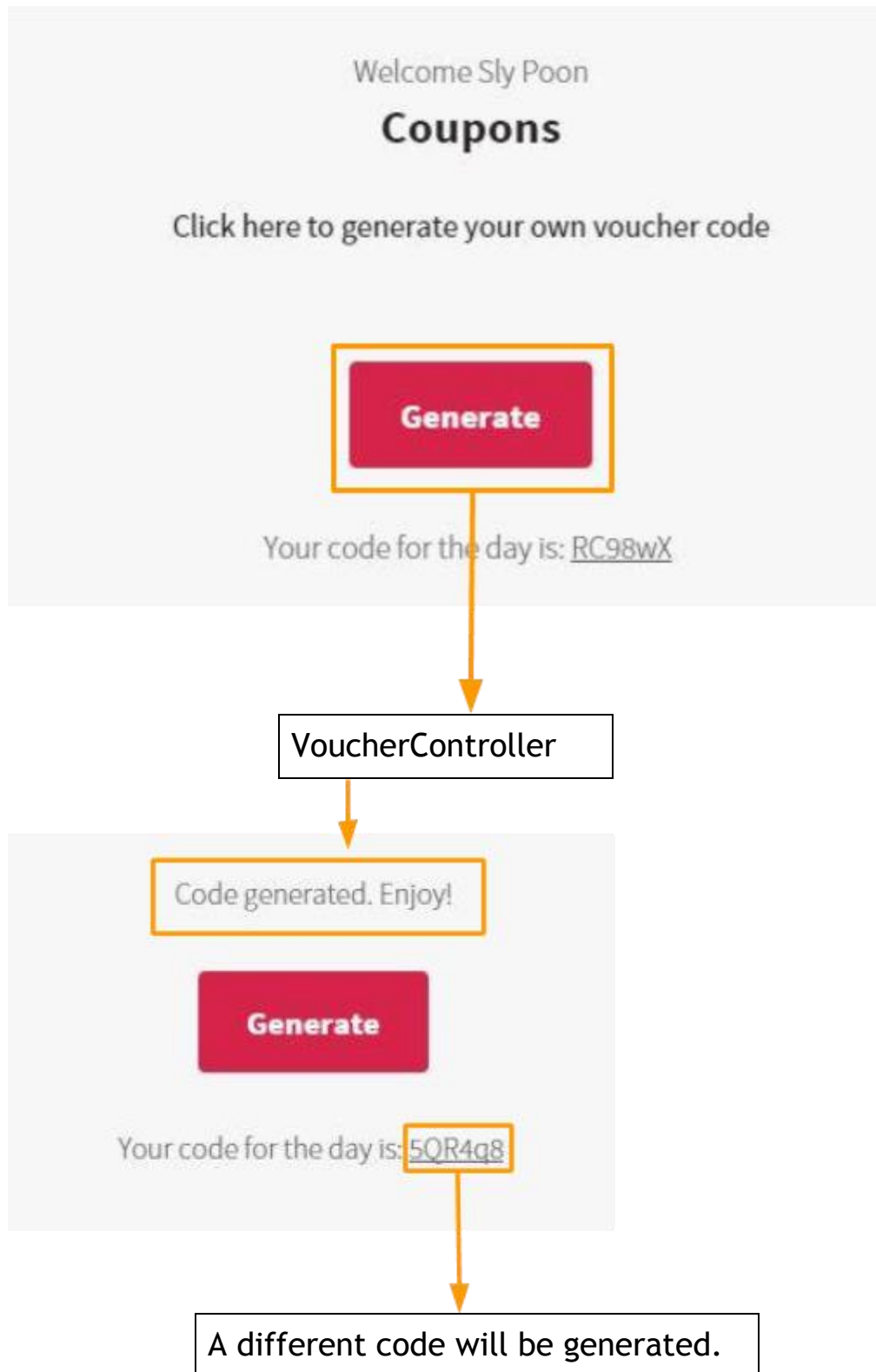


Redirect to login.jsp will display the “Logout Successful” message.

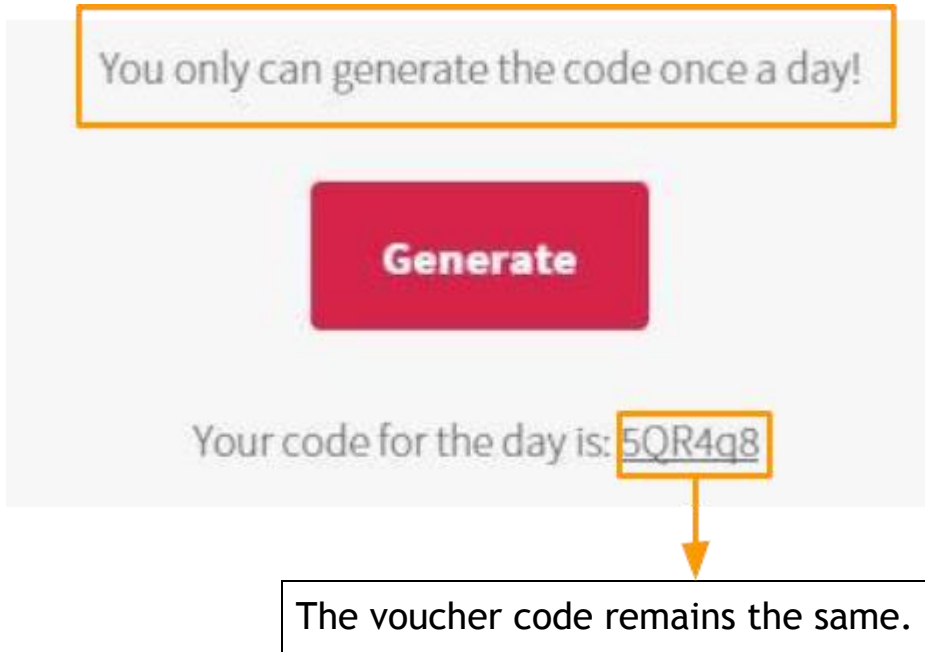
ADVANCE FEATURES

IN THIS SECTION - THE VARIOUS
ADDITIONAL FEATURES TO ENHANCE
THE MEMBER EXPERIENCE IN THE WEB
STORE AND THE SECURITY OF THE
PASSWORD WILL BE COVERED.

Generate Discount Code (coupons.jsp)



In the scenario where the customer tries to generate the code a second time in one day:



Encrypt and Decrypt Password (mixSmash.java)

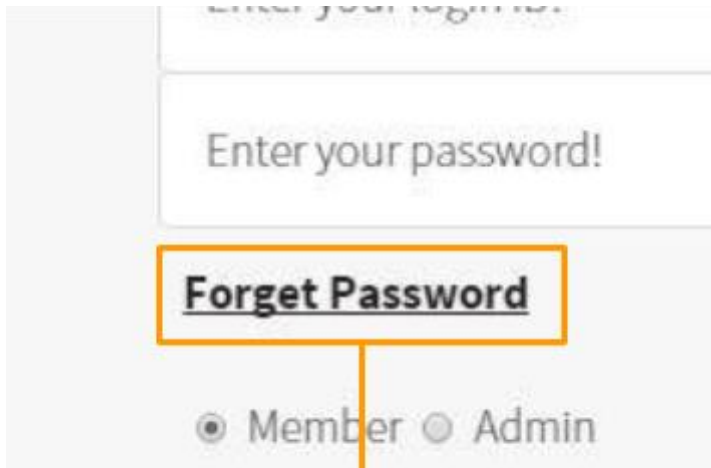
Encrypting of password starts when a member signs up for an account in the web store. The plain text password will be encrypted using DES algorithm in the mixSmash.java encryption method in the security package. The key and IV bytes is stored in the base.java.

Instead of storing the encrypted password in password attribute at the member table in the database, it stores the encrypted password in the crypt table and converts the encrypted password into a string, and stores it with the member details which doesn't match the actual password of the member input.

During member input of their credentials in the login.jsp, their emails will be matched in the crypt table. If matched, it will return the encrypted password, and pass the encrypted password to the decrypt method in mixSmash.java, converting it back into plaintext and match it with the member input password.

Same concept for the forgetting of password, when the member enters their email address, the password will be decrypted into plaintext from the crypt table in the database, and send it to the member's email address as stated in the database.

Forget Password (forgetpass.jsp)



Enter your password!

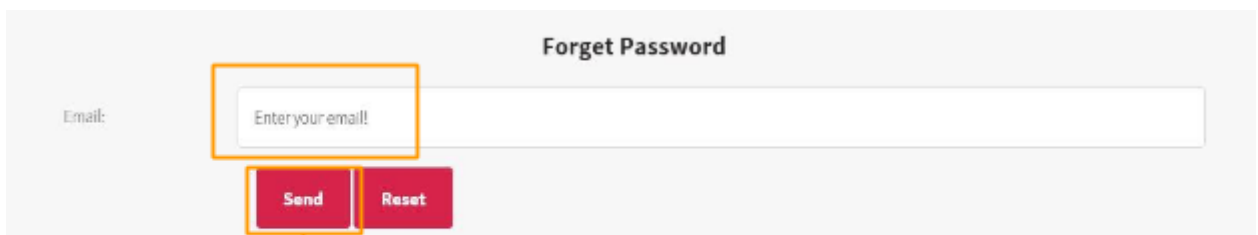
Forget Password

☒ Member ☐ Admin

This screenshot shows a web form for forgetting a password. It includes a text input field for the password, a link labeled 'Forget Password' which is highlighted with an orange box, and radio buttons to select between 'Member' and 'Admin' roles.

forgetpass.jsp

Member is required to enter his email before the password can be sent to him.



Forget Password

Email:

This screenshot shows the same 'Forget Password' form, but now with an email input field. The 'Send' button is highlighted with an orange box. The form title 'Forget Password' is centered at the top.

forgetPassController

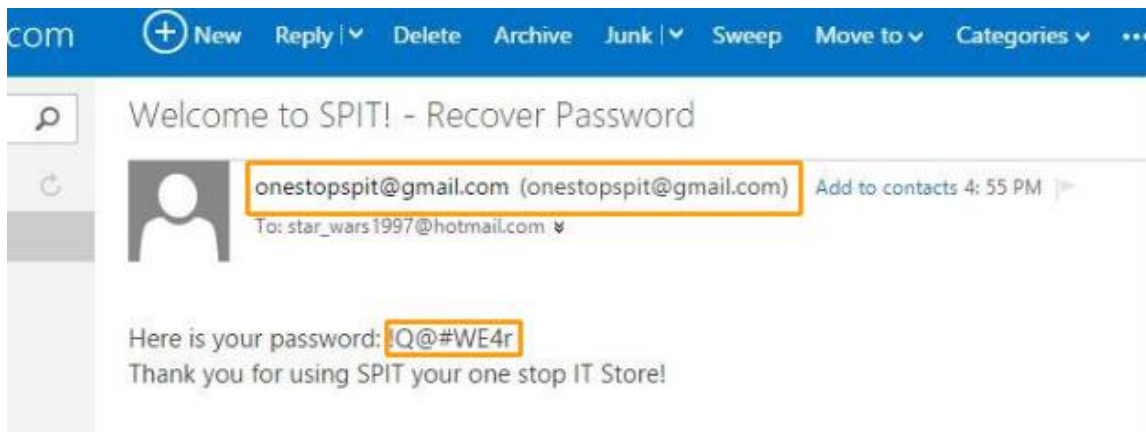
forgetPassController



Password sent, check your email!

Forget Password

When the member checks their email:



Send Email (SendMail.java)

Email authentication sessions and the sending of message methods will be located in the mail package called SendMail.java.

Similar to setupDBconn, SendMail.java has a method called requestSession that presents the email address and password of our webstore email to the SMTP server to request a session to send an email. For forgetting of passwords, when members enter their email addresses, it will call the method sendforgetPass in the SendMail.java after the password has been decrypted. The content in their email will be the member's decrypted passwords, so that they will be able to log into their account.

When a member first signs up with the webstore, a welcome message will be sent to them. For admin, when they would like to see the sales report and get a copy of the report, it can be also sent to his or her email by clicking on the send report button located at viewsalesreport.jsp.