FPT ACADEMY INTERNATIONAL

FPT – APTECH COMPUTER EDUCATION

[Online Shoes Store]

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Semester:	II	
Batch No:	T1.1803M0	
Group No:	3	
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REVIEW 1

1. INTRODUCTION

Online Shoes Store is a company that operates in the footwear industry, as the name may imply. They started out as a local small business, specializing in the production and sale of footwear to the surrounding people in a small city. After a few years of business, **Shoes Store** has become one of the most prominent and prestigious names in the local area. They are committed to making every customer feel special when wearing shoes that are both trendy and comfortable for their feet. They are always trusted by customers and satisfied with the value of products and reasonable prices.

However, because they operate in small cities, they want to let people around the country know the company's products, they start looking for new platforms to bring their products to potential buyers. They tried to print leaflets and pay for newspaper ads, but both methods proved too costly but inefficient.

2. EXISTING SCENARIO

The shops mainly sell shoes and sandals made by experienced experienced shoemakers. Since they are a small business, they cannot afford to advertise on TV and billboards. Leaflets and advertisements in local newspapers are also unable to reach new customers. In addition to their problems, customers tend to look for what they need online, where things are much cheaper due to low maintenance (unlike in a real store where business owners have to worry about maintenance and rent costs.

Recognizing traditional marketing platforms that will not support sales**, Online Shoes Store** decided to adopt an Internet approach because E-commerce has become the fastest growing platform for businesses. E-commerce websites allow their customers to access remote stores, allowing them to access and expand their customer base. A website not only eliminates the need to open multiple stores in different locations, it can also save money for leaflets and physical ads like billboards and posters.

3. CUSTOMER REQUIREMENT SPECIFICATION

➤ The website must allow customers who visit the site to browse and search for products using search terms or filtering products' categories and attributes. They can compare products.

➤ If the customer wishes to buy a product, they must register an account. A customer with an existing account can login. They do not have the permission to change any information apart from their own.

➤ A registered customer can leave reviews or inquiries on products and rate products. They can also bookmark products they wish to visit later in the future.

➤ The website must allow the admins (shop owner and others who are appointed to the job) to view, update (when requirements are met) existing products, categories and jewellery collections, a product's attributes, customers who have registered, orders which have been placed, customer's feedbacks on products, discount vouchers.

➤ If an admin wants to change sensitive information (e.g. delete a product, ban customers, etc.), said admin must have the authority level of a "Super Admin", otherwise they are not going to be able to access these functions.

➤ Aside from managing products, categories, orders, etc. an admin can also view reports on products, orders and customers.

4. FUNCTIONAL REQUIREMENT SPECIFICATION

4.1 User Can Register

a. Description

Customers must be able to register a new account. Once they have their account, they can login and access more features. A guest, who is not logged in, can only browse products.

b. Functional Requirement

User must provide the information below to create an account:

- Username (must be unique)

- Password

- First Name and Last Name
- Email (must be unique)
- Date Of Birth
- Telephone number

4.2   User Can Login

a.   Description

After registering an account, user can login. Once they have logged in, they can modify their personal information, including their password. They can also access more features: product review, order products.

b.   Functional Requirement

User must already have an existing account and must not be a banned account. User must provide Username (or alternatively their Email) and Password to login.

4.3   User Can Buy Products

a.   Description

User can find products they want by searching or filtering results. User can buy products by adding chosen products to cart and proceeding to check out. They will be asked to provide billing and payment information.

b.   Functional Requirement

User must log in to use this function. User can only buy products that are still in stock. User needs to provide the information below to complete their order placement:

- Name of the receiver
- Required shipping date
- Shipping address
- Payment method
- Valid payment information (card owner, card number, security code)

4.4   User Can Write Reviews on Products

a.   Description

User can leave their review and rating on products. Each user can only post one review on each product. Rating can be done by choosing on a scale from 1 to 5, in which 5 is the best score. This score will be calculated and serve as the overall rating of the products.

b. Functional Requirement

User must login to use the review function. They must provide:

- Review title
- Review content
- A score on a scale from 1 to 5

4.5 User Can Bookmark Products

a. Description

User can bookmark, also known as "Add to Favourite" a product they like and wish to visit later. They can view a list of products they have bookmarked and remove products from the list.

b. Function Requirement

User must login to use this function. User can choose a product they like and click the heart icon to add that product into their bookmarked list.

4.6 Recommended Products, User's History

a. Description

User can see a list of products that are recommended based on what they have purchased and which products are popular. They can also see a list of products which they have viewed before.

b. Function Requirement

- User will see products that are recommended for them.
- User will see products they have viewed.

4.7 User Can Compare Products

a. Description

User can choose a maximum of 5 products from to compare. The products' price and attributes will be compared so it is easier for user to choose which product they prefer.

b. Function Requirement

- User can choose no more than 5 products. If they want to choose another product, they must remove at least one product from the compared list

4.8 Admin Can Manage Categories

a. Description

The site must allow admins to interact with Products' Categories. An admin can view a list of existing categories, insert a new category, modify category's name. When an admin is a Super Admin, they can delete sub-categories. Categories chosen for deletion must not contain any existing products. A category with no products and no sub-categories is an empty category.

b. Function Requirement

To add or modify a category, admin must provide:

- Category's Name
- Category's parent ID (parent ID is the ID of a category)

Other requirements:

- Must login as an admin to add or modify categories
- Sub-categories cannot be a parent
- Names are unique
- Parent ID must exist
- Must be a Super Admin to delete categories
- Can only delete empty categories
- Admin can search for categories by names and

4.9 Admin Can Manage Collections

a. Description

The site must allow admins to interact with Collections. An admin can view a list of existing collections, insert a new collection, they can also modify a collection's name, description, banner, image, trending status and active status. When an admin is a Super

Admin, they can delete collections. Collections chosen for deletion must not contain any existing products. A collection with no products is an empty collection.

b. Function Requirement

To add or modify a collection, admin must provide:

- Collection's Name
- Collection's Description
- Collection's Banner. This banner will appear on the site's carousel.
- Collection's Image.
- Trending status (whether collection shows on carousel or not)
- Active status (whether user can see collection or not)

Other requirements:

- Must login as an admin to add or modify collections
- Names are unique
- Banner and image are stored as file names
- Must be a Super Admin to delete collections
- Can only delete empty collections
- When create a new collection, created date can be recorded
- When modify a collection, modified date can be recorded
- Admin can search collections by names

4.10 Admin Can Manage Attributes List

a. Description

The site must allow admins to interact with Attribute Groups and Values. An admin can view a list of existing attributes group. Admin can add a new group and modify a group's name. Admin can also add new values to a group and modify these values. When an admin is a Super Admin, they can delete attributes and values. Attribute groups chosen for deletion must not contain any values. Values chosen for deletion must not belong to any product.

b. Function Requirement

To add or modify attribute groups and values, admin must provide:

- Group's Name
- Attribute's Name (value)
- Group ID (which group that value belongs to)

Other requirements:

- Must login as an admin to add or modify attributes
- Groups' names are unique
- Must be a Super Admin to delete attributes groups and values
- Can only delete group which do not contain any values
- Can only delete values which do not belong to any products
- Admin can search attributes by names and groups

4.11 Admin Can Manage Products,

a. Description

The site must allow admins to interact with Products. An admin can view a list of existing products. Admin can add a new product and modify a product's name, description, status, category, collection, discount value, start and end dates of discount. When an admin is a Super Admin, they can delete products. Products chosen for deletion must not belong to any wish lists and must contain no reviews. Admin can view a product's details when click on the product.

b. Function Requirement

To add or modify a product, admin must provide:

- Product's Name
- Product's Description
- Active status (whether user can see product or not)
- Category which product belongs to
- Collection which product belongs to
- Discount value in percent
- Discount start date
- Discount end date

Other requirements:

- Must login as an admin to add or modify products

- Names are unique
- Category must exist
- Collection must exist
- Discount must be between 0 to 75
- A status of a product is always in active if it does not have at least one SKU
- Admin must add at least one SKU to set product's status to active
- Must be a Super Admin to delete products

- Can only delete products which do not belong to any wish lists and have no reviews by customers
- When create a new product, created date can be recorded
- When modify a product, modified date can be recorded
- Admin can search products by names
- Admin can filter by categories, collections and attributes

4.12 Admin Can Manage Product's Details (Images, Attributes, Reviews)

a. Description

The site must allow admins to interact with Products' Details. An admin can view a list of images and attributes of a product. Admin can add new images and modify existing images. Admin can modify a product's attributes like adding and removing attributes. An admin can also see customers' rating and reviews on a product and can response to customer's review.

b. Function Requirement

To modify a product's details, admin must provide:

- Specific product
- Image's Link
- Attributes
- Attribute Groups
- Admin's response to a review

Other requirements:

- Must login as an admin to add or modify products
- Can add multiple images
- Attributes must exist
- When modify a product's details, modified date can be recorded

4.13 Admin Can Manage Stock Keeping Units (SKUs)

a. Description

The site must allow admins to interact with Products' SKUs. SKUs are for keeping track of stock and price as each product may have multiple size options. Sizes are linked to categories (e.g. ring size, necklace size). An admin can view a list of existing SKUs of a product. Admin can add new SKUs to a product and modify a SKU's ID, Size of that SKU,

Base Price, Unit Price, Units in Stock and Units on Order. When an admin is a Super Admin, they can delete SKUs. SKUs chosen for deletion must not belong to any orders.

b. Function Requirement

To add or modify SKUs, admin must provide:

- SKU ID (generated)
- Product ID (product which the SKU is a variant of)
- Base Price
- Unit Price
- Units in Stock
- Units on Order

Other requirements:

- Must login as an admin to add or modify SKUs
- Products must exist
- SKU ID is generated from a product's category, size and product ID
- Size must be appropriate for product's category
- Must be a Super Admin to delete SKUs
- Can only delete SKUs which do not belong to any orders
- If all SKUs of the same product are deleted, that product's status will be automatically set to inactive
- When create a new SKU, created date can be recorded
- When modify a SKU, modified date can be recorded
- Admin can search SKUs by SKU ID
- Admin can filter SKUs by product ID, price range and stock
- New SKU can be added by adding a new product or update an existing product

4.14 Admin Can Manage Customers

a. Description

The site must allow admins to interact with Customer's Accounts. When a customer has registered an account, they will show up in customer list. An admin can view a list of existing registered customers. Admin can ban a customer who violates site's rules by changing customer's status.

b. Function Requirement

- Must login as an admin to ban customers
- Admin can search customers by Username and Emails
- Admin can filter customers by registered date and status
- Admin can ban customers
- Admin must provide: customer's Active status

4.15 Admin Can Manage Orders

a. Description

The site must allow admins to interact with Orders. When a customer places an order, it will show up in the list of orders and these orders' details. An admin can view a list of existing orders and see their statuses. Admin can change order status. Orders are considered highly important data and cannot be deleted.

b. Function Requirement

An Order will contain:

- Customer ID
- Voucher ID if available
- Shipping fee
- Shipping Name
- Shipping address
- Shipping date
- Payment method
- Status: Pending, Confirmed, Completed, Cancelled

Other requirements:

- Must login as an admin to modify order's status
- Order must show created date
- Order must show updated date
- Admin can search orders by customers
- Admin can filter customers by created date

4.16 Admin Can Manage Vouchers

a. Description

The site must allow admins to interact with Voucher. An admin can view a list of existing Vouchers. Admin can add new vouchers and modify a voucher's ID, Description, Value,

Quantity and Valid Date. When an admin is a Super Admin, they can delete vouchers. Vouchers chosen for deletion must not belong to any orders.

b. Function Requirement

To add or modify Vouchers, admin must provide:

- Voucher ID
- Voucher's Description
- Voucher's Value (in percent)
- Quantity
- Valid time: start and end dates

Other requirements:

- Must login as an admin to add or modify vouchers
- Value must be between 0 to 75
- Can only delete vouchers which do not belong to any orders
- Admin can search vouchers by ID

4.17 Admin Can Manage Admin's Information

a. Description

The site must allow Super Admin to interact with Voucher. An authorized Super Admin can view a list of admins. A Super Admin can add new admins and modify existing admins. Admins cannot be deleted.

b. Function Requirement

To add or modify admins' information, Super Admin must provide:

- Admin ID (for reference, cannot be changed)
- Username
- Password
- Role: Admin, Super Admin

Other requirements:

- Must login as a Super Admin to add or modify admins
- Usernames are unique
- When create an account, created date can be recorded
- When modify an account, modified date can be recorded
- Can search admins by id, usernames and roles

4.18 Admin Can View Admin's Log

a. Description

The site must allow admins to view admin's activities log.

b. Function Requirement

Activity Log includes:

- Admin's activity

- Admin who performs the activity

- Date performed

4.19 Admin Can Manage Reports

a. Description

The site must allow admins to view reports of Products, Customers and Orders. Product report shows products by their sold quantity, the revenue of each individual product and allows admins to see which products need to be improved (low sale). Customer report shows customer's activities such as the number of new customers, their orders and how much money a customer has spent. Order report shows the number of orders that have been placed and the revenues. Admin can export reports as a pdf file. Admin can also view the general report.

b. Function Requirement

- Must login as an admin to use report function

- Product: revenue for each product, revenue by category

- Order: total number of orders, total revenue

- Customer: total number of customer, customer's activities

5 SYSTEM REQUIREMENTS

5.1 Hardware

1.1	SERVER	
	Minimum	Recommended
Processor	800 MHz Intel Pentium III	2.6 GHz Intel Pentium IV
Memory	2 GB	4 GB
Disk space	8 GB	16 GB
Monitor	Super-VGA (800x600) or higher resolution monitor	
Internet	Internet access is required	
1.2	CLIENT	
Processor	800 MHz Intel Pentium III	
Memory	512 MB	
Monitor	Super-VGA (800x600) or higher resolution monitor	
Internet	Internet access is required	

5.2 Software

1.3	SERVER
Operating System	Windows XP or later
Browser	Google Chrome 65.0
Database	Microsoft SQL Server 2017
Software	Java SDK 1.8
	GlassFish Server 4.0
	CLIENT

Operating System	Windows XP or later
Browser	Google Chrome 65.0

6 DEVELOPMENT SOFTWARE

- Microsoft Windows 10
- Netbeans IDE 7.4
- GlassFish Server 4.0
- Microsoft SQL Server 2017
- Google Chrome 65.0

7 TECHNOLOGY

- HTML/CSS
- JavaScript
- AJAX
- Jquery
- Apache Tiles Framework

REVIEW 1 – TASK SHEET

No.	Contents	Member	Activity Plan	Preparation	
			Start Date	Actual Days	Status
1	Introduction	Chau Thanh Phong Vo Duy Cuong Le Gia Phuc	31/12/2018	3	Completed
2	Existing Scenario				
3	Customer Requirement Specification				
4	Functional Requirement Specification				
5	System Requirements				
6	Development Software				
7	Technology				

Plan prepared by: Group 3   December 31th, 2018
Group Leader   **Faculty**

Vo Duy Cuong   **Mr. Ngo Phuoc Nguyen**

REVIEW 2

1. USE CASE AND SEQUENCE DIAGRAM
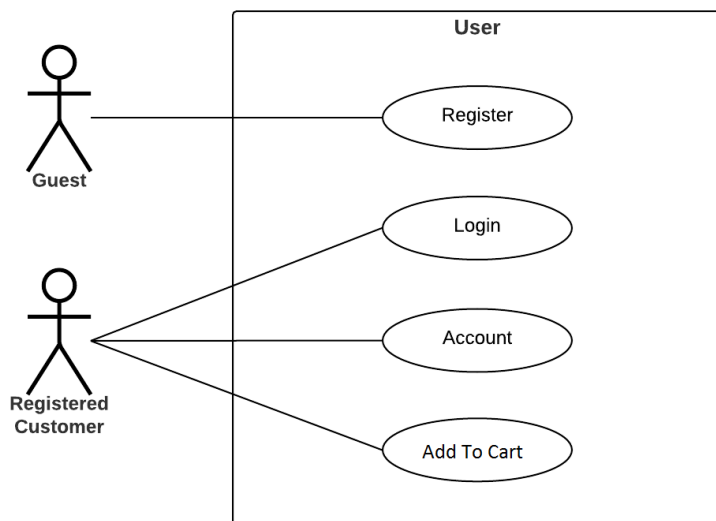
1.1 User

1.1.1 Register as Customer

Author	Chau Thanh Phong	
Use Case Name	Register as Customer	
Actors	Guest	
Description	Guest registers an account on the website and becomes a member (customer)	
Requirements	Guest provides their register information	
Pre-conditions	N/A	
Post-conditions	Success: Guest creates a Customer account in this website	
	Fail: Refill information	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor clicks 'Register' link on Home Page.	2. System redirects to Register page and displays Registration form with the following controls: - 'Username' text field - 'Password' text field - 'Confirm Password' text field - 'First Name' text field - 'Last Name' text field - 'Email' text field - 'Phone1' text field

|		
	3. Actor inputs register's information and click 'Register' button.	- 'Register' button - 'Reset' button 4. System validates the information. 5. System inserts the account into database 6. System show success message.
Exceptions	**Actor's actions:**	**System's responses:**
	- Actor left 'Username' text field blank. - Username has already existed. - Actor left 'Password' text field blank. - Actor left 'Confirm Password' text field blank. - Password and confirm password don't match. - Actor left 'Name' text field blank. - Actor left 'Birthday' field blank. - Input age is less than 16. - Actor left 'Phone' text field blank. - Input phone is not numeric format or phone length is not between 8 and 14 characters. - Actor left 'Email' text field blank or input an invalid email address.	System displays message to actor: - 'Username cannot be blank'. - 'This Username has already existed'. - 'Password cannot be blank''. - 'Confirm Password cannot be blank'. - 'Confirm Password does not match password.' - 'Name cannot be blank'. - 'Birthday is invalid'. - 'Age must be over 16'. - 'Phone is invalid'. - 'The phone number should be numeric only and must be between 8 and 14 digits'. - 'Email is invalid'.

1.1.2 Login as Customer

Author	Chau Thanh Phong	
Use Case Name	Login	
Actors	Customer	
Description	Customer who has registered an account can login	
Requirements	Actor provides username and password	
Pre-conditions	Actor must register an account	
Post-conditions	Success: User is logged in to website	
	Fail: Refill information	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor clicks on 'Login' button.	2. System redirects to Login Page with the following controls - 'Username' text field - 'Password' text field - 'Login' button
	3. Actor inputs Username (or email) and Password, then click the 'Login' button.	4. System checks the information. 5. System redirects to User's dashboard.
Exceptions	**Actor's actions:**	**System's responses:**
	1. Actor inputs invalid username (or email)	System redirects to Login page with the

and password.	following controls: - 'Username' text field - 'Password' text field - 'Login' button. System shows message: "Invalid Username and password".

1.1.3 Update Customer's Profile

Author	Chau Thanh Phong	
Use Case Name	Update Customer's Profile	
Actors	Customer	
Description	Customer wants to Update their profile's information.	
Requirements	Actor provides profile information	
Pre-conditions	Actor has logged in.	
Post-conditions	Success: Profile's information of this user has been updated.	
	Fail: Refill information	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor clicks 'Profile' button in Actor's Home page menu.	2. System redirects to Update Profile page and displays Update Profile form with the following controls : - 'Old Password' text field - 'New Password' text field - 'New Password Confirm' text field - 'First Name' text field - 'Last Name' text field - 'Birthday' field - 'Gender' radio button - 'Address' text field - 'Phone' text field (x2) - 'Email' text field - 'Save' button - 'Cancel' button
	3. Actor updates information and click 'Save' button.	4. System checks the information. 5. System updates the account in database and then redirects to User's Dashboard
Exceptions	**Actor's actions:**	**System's responses:**

	1. Actor left 'New Password' text field blank. 2. Actor left 'Confirm Password' text field blank. 3. New Password and New Password Confirm do not match. 4. Actor left 'Name' text fields blank. 5. Actor left 'Birthday' field blank. 6. Input age in 'Birthday' field is less than 16. 7. Actor left 'Address' text field blank. 8. Actor left 'Phone' text fields blank. 9. Input phone is not in numeric or phone length is not in between 8 and 14 characters. 10. Actor left 'Email' text field blank or input an invalid email address.	System displays message to actor : - 'Password cannot be blank''. - 'Confirm Password can't be blank'. - 'Confirm password does not match Password.'= - 'Name cannot be blank'. - 'Birthday is invalid'. - 'Age must be over 16'. - 'Address cannot be blank'. - 'Phone is invalid'. - 'The phone number should be numeric only and must be between 8 and 14 digits'. - 'Email is invalid'.

1.2 Product

1.2.1 Detail's Product

a. Create new feature

Author	Le Gia Phuc
Use case name	Add product's categories
Actors	Administrator
Description	When admin wants to add a new product in the database
Requirements	Actor provides category's information
Pre-conditions	Actor is logged in as admin
Post-conditions	Success: category is added in the database
	Fail: refill information

	Actor's actions:	**System's responses:**
Basic flow	1. Actor chooses Add Product Tab on menu. 4. Actor inputs information to create new product and click "Save" button.	2. System redirects to 'Add product' page. 3. System displays a form with the following fields: - Product's ID -Product's Name - Product's image - Product's Size - Product's Price - Brand -Category
Exceptions	**Actor's actions:**	**System's responses:**
	1. Actor left 'Product ID' field blank.	System displays messages:

2. Actor left 'Name' field blank.	- 'Product's ID cannot be blank.'
3. Actor left 'Image ' file blank.	- 'Product's Name cannot be blank'
4. Actor left 'Size' field blank.	
5. Actor left 'Price' field blank.	- 'Product's Image Please select this File'
6. Actor left 'Brand' field blank.	- 'Product's Size cannot be blank'
7.Actor choose 'Category'	- 'Product's Price' must be choose
	- Brand cannot be blank'
	-

a.   Update Product

Author	Le Gia Phuc
Use case name	Update Product
Actors	Administrator
Description	When admin wants to update a category
Requirements	Actor provides category's information
Pre-conditions	Actor is logged in as admin or super admin
Post-conditions	Success: category is updated in the database
	Fail: refill information

	Actor's actions:	**System's responses:**
Basic flow	1. Actor chooses Category Tab on menu. 3. Actor clicks "Update" on Category list. 5. Actor inputs information update Category.	2. System redirects to 'Category List' page and display a list of existing categories. 4. System displays a form with the following fields. - Category's Name - Parent category (optional) 6. System validates inputs. 7. System updates category in database 8. System displays confirmation message or error message.
	Actor's actions:	**System's responses:**
Exceptions	1. Actor left 'Category's Name' field blank. 2. Category's Name existed in database.	System displays messages: - 'Category's Name cannot be blank'. - 'Category's Name must be unique'.

b. Delete Product

Author	Le Gia Phuc
Use case name	Delete Product
Actors	Admin
Description	When a admin wants to delete a category from the database
Requirements	Actor provides category's information
Pre-	Actor is logged in as super admin

conditions	
Post-conditions	Success: category is deleted from the database
	Fail: category is not deleted from the database

Basic flow	Actor's actions:	System's responses:
	1. Actor chooses Category Tab on menu. 3. Actor clicks on 'Delete' button and confirm.	2. System redirects to 'Product List' page and display a list of existing categories. 4. System delete category from database. 5. System displays confirmation message or error message.
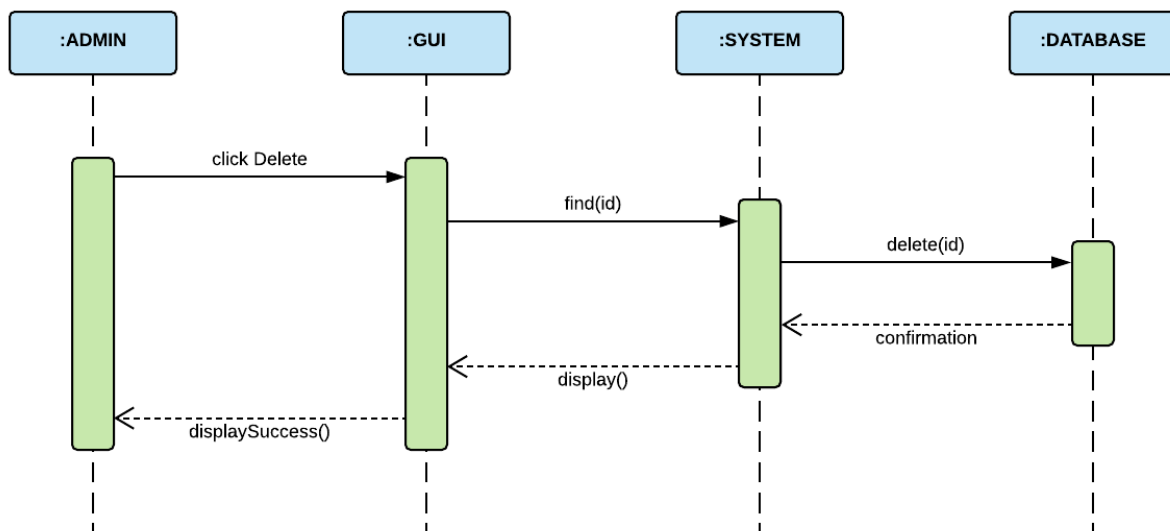
1.2.2 Category Products

Author	Le Gia Phuc
Use Case Name	Bookmark product
Actors	Customer
Description	Customer wants to bookmark products to view it later
Requirements	Customer choose products they want to bookmark
Pre-conditions	Actor is logged in
Post-conditions	Success: show bookmarked products in customer's bookmark list

Basic flow	Actor's actions:	System's responses:
	1. Actor clicks 'bookmark' icon on each product in Product Page. 3. Actor clicks 'Wish List' link.	2. System adds bookmark in database. 4. System shows list of bookmarked products.

1.3 . ADMIN
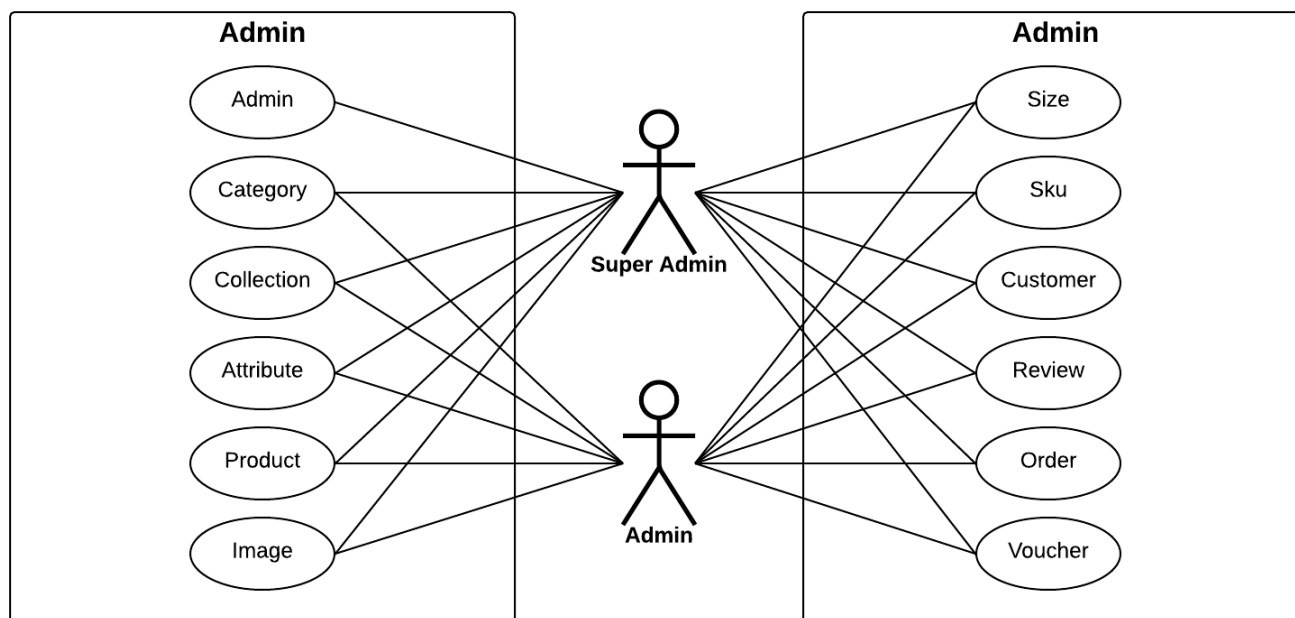
1.3.1 Admin's Account

   **a. Add Admin's Account**

Author	Vo Duy Cuong	
Use case name	Add admin's accounts	
Actors	Super Administrator	
Description	When admin wants to add a new admin's account in the database	
Requirements	Super Admin provides admin information	
Pre-conditions	Actor is logged in as a Super Admin	
Post-conditions	Success: a new admin's account is created in the database	
	Fail: Refill information	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor chooses Admin Tab on menu. 3. Actor chooses 'Create an Admin Account' button. 5. Actor inputs information to create admin.	2. System redirects to 'Admin List' page and display a list of existing admin. 4. System displays admin form with the following fields. - Admin's Username - Admin's password - Confirm password - Admin's role 6. System validates inputs. 7. System adds new admin to database. 7. System displays confirmation message.

	Actor's actions:	System's responses:
Exceptions	1. Actor left 'Username' field blank. 2. Actor inputs an existing Username. 2. Actor left 'Password' field blank. 3. 'Confirm password' does not match 'Password'.	System displays messages: - 'Username' cannot be blank'. - 'Username already exists' - 'Password cannot be blank'. - 'Confirm password does not match password'

b. Update Admin

Author	Vo Duy Cuong
Use case name	Update admin's accounts
Actors	Super Administrator
Description	When admin wants to update an admin's account in the database
Requirements	Super Admin provides admin information
Pre-conditions	Actor is logged in as a Super Admin
Post-conditions	Success: admin's account is updated in the database
	Fail: Refill information
Basic flow	Actor's actions:	System's responses:

	1. Actor chooses Admin Tab on menu. 3. Actor chooses Admin they want to update. 5. Actor inputs information to update admin.	2. System redirects to 'Admin List' page and display a list of existing admin. 4. System displays admin form with the following fields. - Admin's password - Confirm password - Admin's role 6. System validates inputs. 7. System updates admin in database. 8. System displays confirmation message or error message.
Exceptions	**Actor's actions:**	**System's responses:**
	1. Actor left 'Username' field blank. 2. Actor inputs an existing Username. 2. Actor left 'Password' field blank. 3. 'Confirm password' does not match 'Password'.	System displays messages: - 'Username' cannot be blank'. - 'Username already exists' - 'Password cannot be blank'. - 'Confirm password does not match password'

1.3.2 Category

c. Create new Product's Category

Author	Vo Duy Cuong
Use case name	Add product's product
Actors	Administrator
Description	When admin wants to add a new category in the database
Requirements	Actor provides category's information
Pre-conditions	Actor is logged in as admin or super admin
Post-conditions	Success: category is added in the database
	Fail: refill information
Basic flow	**Actor's actions:**	**System's responses:**

Basic flow	1. Actor chooses Category Tab on menu. New product's product ' 5. Actor inputs information to create category.	2. System redirects to 'Category List' page and display a list of existing categories. 4. System displays a form with the following fields. - Category's Name - Parent category 6. System validates inputs. 7. System add category into database. 8. System displays confirmation message or error message.

	Actor's actions:	System's responses:
Exceptions	1. Actor left 'Category's Name' field blank. 2. Category's Name existed in database.	System displays messages: - 'Category's Name cannot be blank'. - 'Category's Name must be unique'.

d. Update Product's Category

Author	Vo Duy Cuong
Use case name	Update **Product's Category**
Actors	Administrator
Description	When admin wants to update a category
Requirements	Actor provides category's information
Pre-conditions	Actor is logged in as admin or super admin
Post-conditions	Success: category is updated in the database
	Fail: refill information
Basic flow	**Actor's actions:** 1. Actor chooses Category Tab on menu. 3. Actor clicks "Update" on Category list. 5. Actor inputs information update Category.	**System's responses:** 2. System redirects to 'Category List' page and display a list of existing categories. 4. System displays a form with the following fields. - Category's Name - Parent category (optional) 6. System validates inputs. 7. System updates category in database

		8. System displays confirmation message or error message.
Exceptions	**Actor's actions:**	**System's responses:**
	1. Actor left 'Category's Name' field blank. 2. Category's Name existed in database.	System displays messages: - 'Category's Name cannot be blank'. - 'Category's Name must be unique'.

e. Delete Product's Category

Author	Vo Duy Cuong
Use case name	Delete category
Actors	Super Admin
Description	When a super admin wants to delete a category from the database
Requirements	Actor provides category's information
Pre-conditions	Actor is logged in as super admin
Post-conditions	Success: category is deleted from the database
	Fail: category is not deleted from the database
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor chooses Stock out ontab Action. 3. Actor clicks on 'Delete' button and confirm.	2. System redirects to 'Category List' page and display a list of existing categories. 4. System delete product from database. 5. System displays confirmation message or error message.

1.3.3 Transaction

a. Confirm Transaction

Author	Chau Thanh Phong
Use case name	Confirm Transaction
Actors	Administrator
Description	When admin wants to confirm a order
Requirements	Actor have to login to purchase
Pre-conditions	Actor is logged in as admin or super admin

Post-conditions	Success: a new collection is added in the database	
	Fail: refill information	
Basic flow	**Actor's actions:**	**System's responses:**
	Actor clicks 'Confirm' button.	The system will transfer information to order and issue invoice
Exceptions	**Actor's actions:**	**System's responses:**

b. Transaction' s detail

Author	Chau Thanh Phong	
Use case name	Transaction' s detail	
Actors	Administrator	
Description	When admin wants to import a recepit	
Requirements	Actor provides recpit information of product	
Pre-conditions	Actor is logged in as admin or super admin	
Post-conditions	Success: collection is updated in database	
	Fail: refill information	
Basic flow	**Actor's actions:** Actor clicks 'View' button.	**System's responses:** Show the receipt of customer'product

1.3.4 Customer

a. Customer's information

Author	Vo Duy Cuong	
Use case name	Customer's profile	
Actors	Admin	
Description	When super admin wants to view information of customer have been sign up	
Requirements	Actor provides cusomer's information	
Pre-conditions	Actor is logged in as admin	
Post-conditions	Success: information of customer is send to the database	
	Fail: information of customer is not send to the database	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor chooses MessageTab on menu.	View all the customer's message

1.3.5 Message

a. Customer's message

Author	Le Gia Phuc	
Use case name	Customer's message	
Actors	admin	
Description	When super admin wants to view information of message have been sign up	
Requirements	Actor provides cusomer's information	
Pre-conditions	Actor is logged in as admin	
Post-conditions	Success: message is send to the database	
	Fail: message is not send to the database	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor chooses CustomerTab on menu.	View all the customer's profile

1.3.6 Order

a. Order's details

Author	Chau Thanh Phong	
Use case name	order's details	
Actors	admin	
Description	When s admin wants to view information of product need to be order summary	
Requirements	Actor provides cusomer's information	
Pre-conditions	Actor is logged in as admin	
Post-conditions	Success: order is send to the database	
	Fail: order is not send to the database	
Basic flow	**Actor's actions:**	**System's responses:**
	1. Actor chooses OrderTab on menu.	View all the information of product need to be order

2.ENTITY PROPERTIES

2.1 AdminAccount
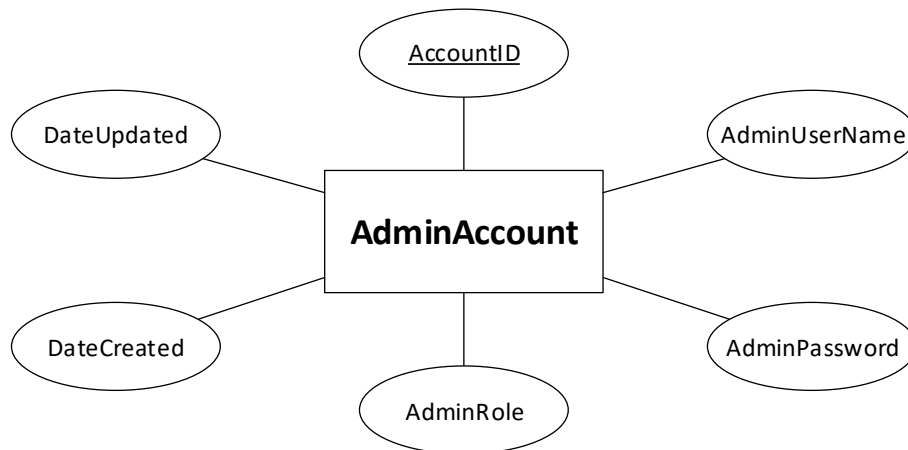
2.2 Customer
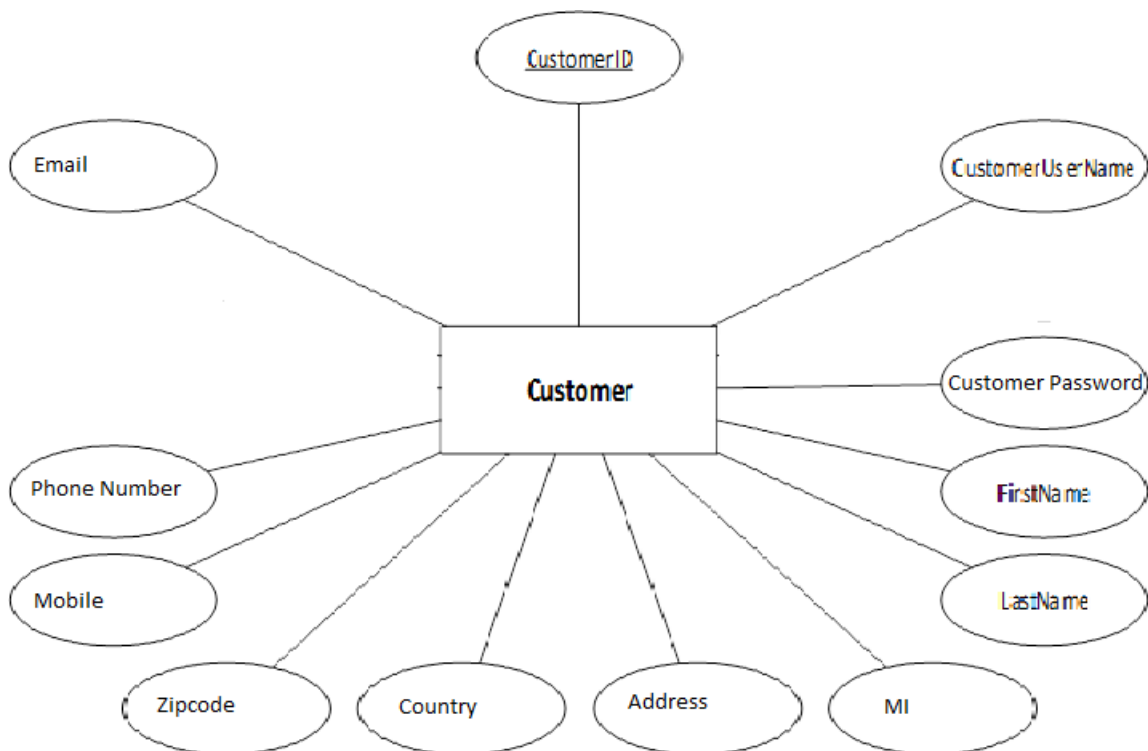
2.3 .Product

2.4 AttributeGroup

```
( AttributeGroupID ) —— [ AttributeGroup ] —— ( AttributeGroupName )
```

2.5 Attribute
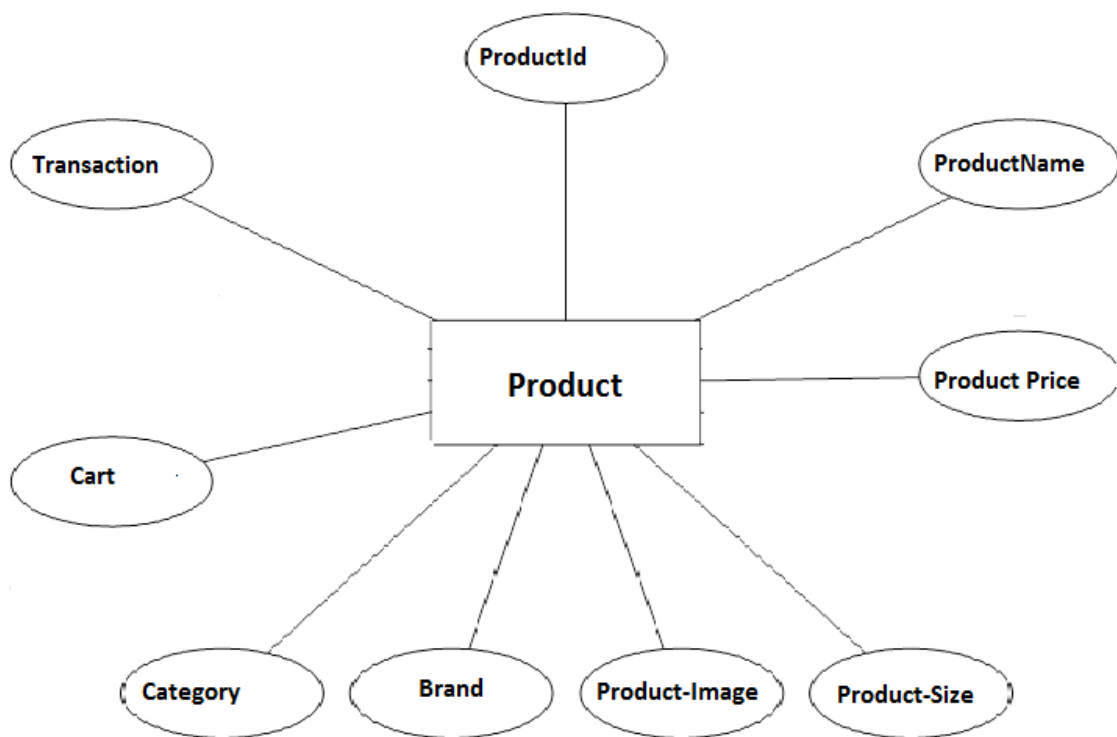
```
              ( AttributeID )
                    |
( AttributeGroupID ) —— [ Attribute ] —— ( AttributeValue )
```
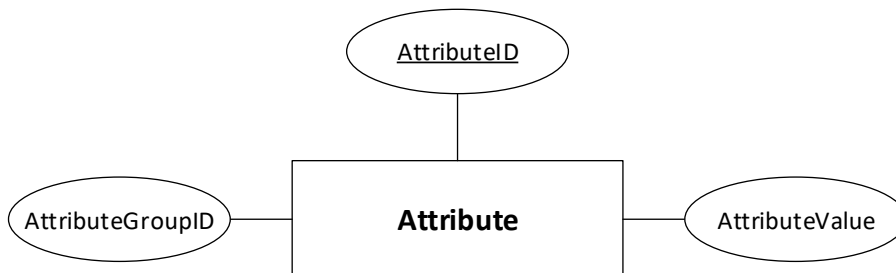
2.6 ProductImage
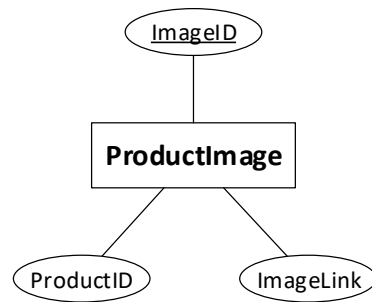
2.7 ProductAttribute (join table)
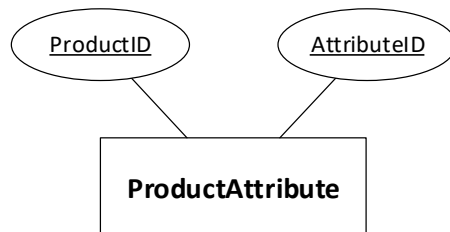
2.8 Bookmark
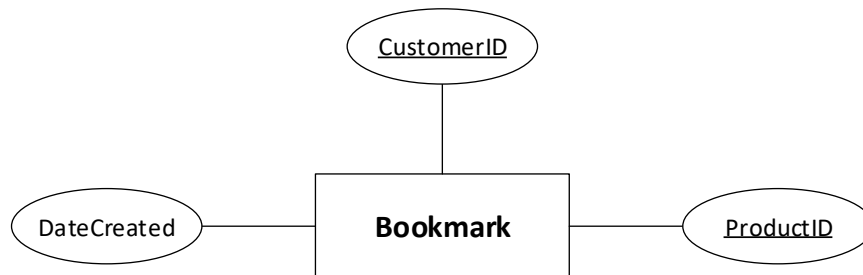
2.9 Review
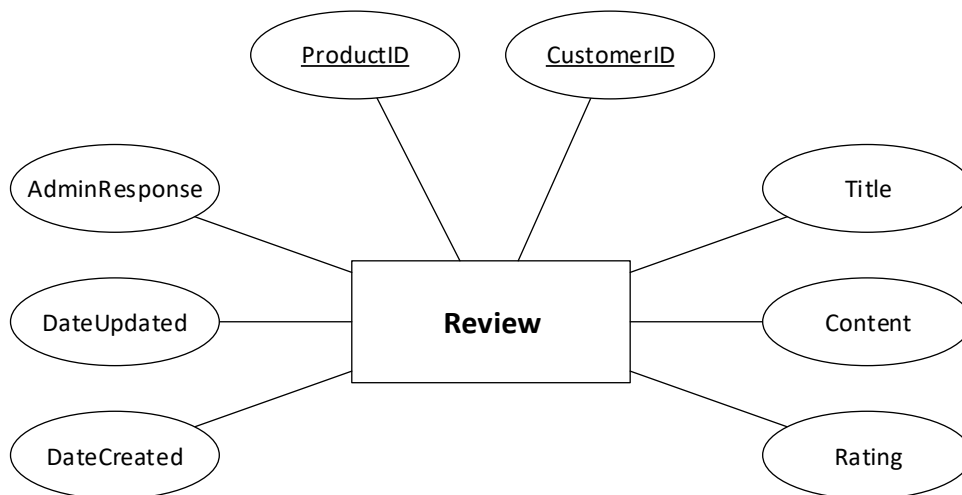
2.10 OrderMaster
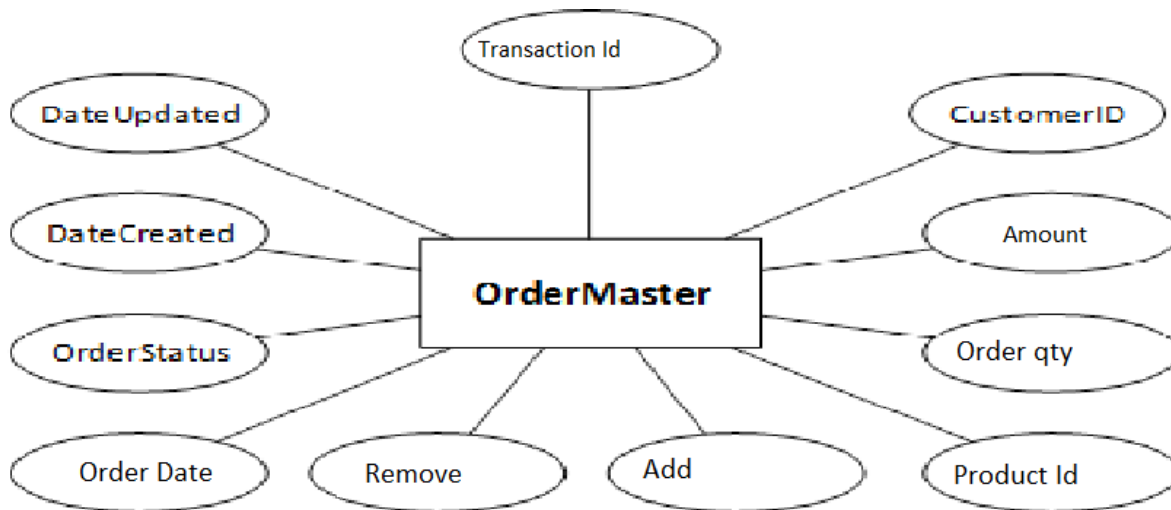
2.11 OrderDetail
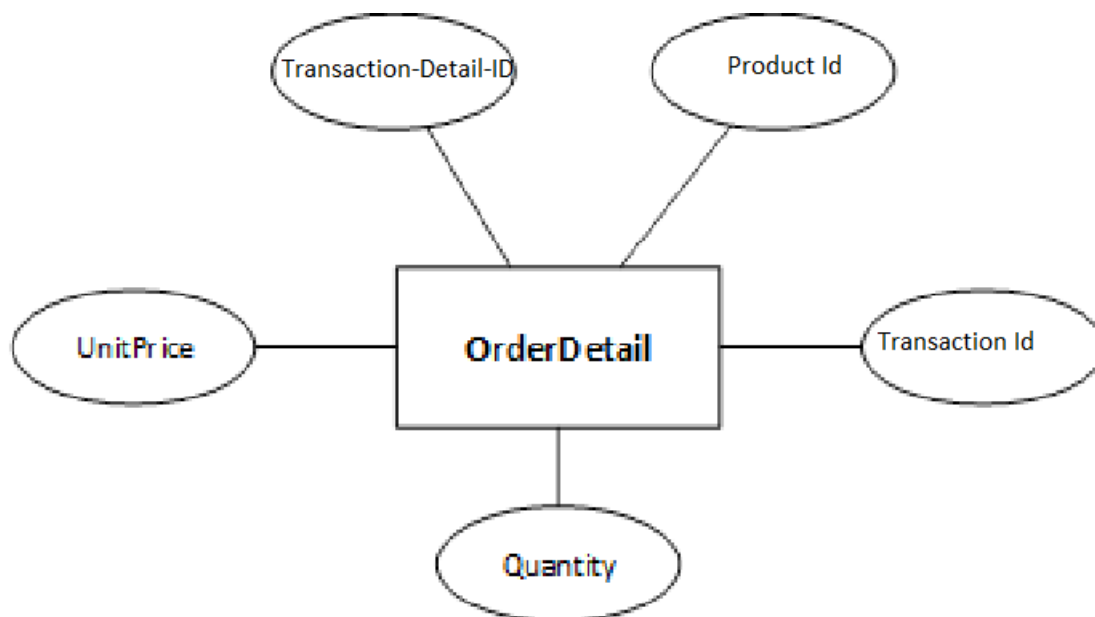
2.12   AdminLog
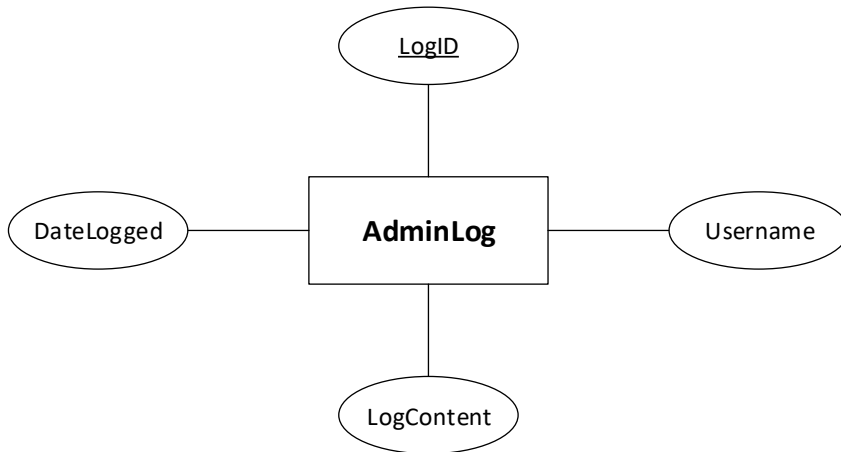
3. ENTITY RELATIONSHIP DIAGRAM (ERD)

Physical ERD
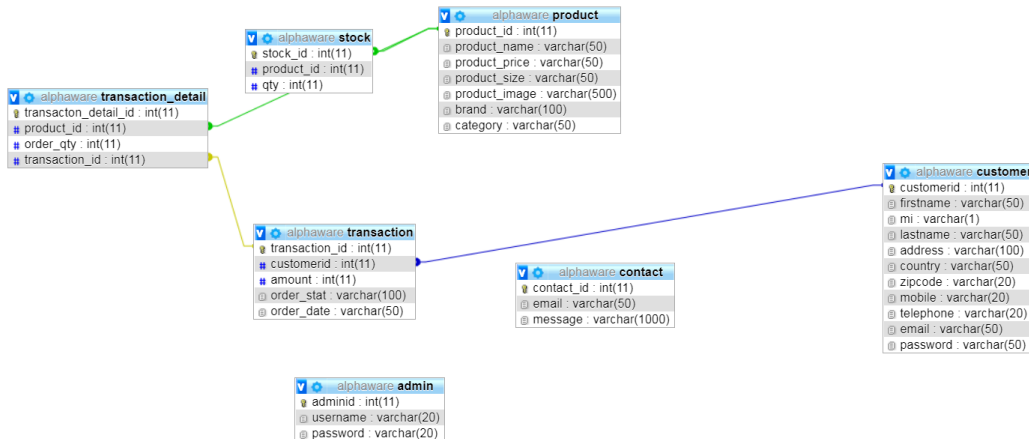
4. TABLE DESIGN

4.1 AdminAccount

Table: AdminAccount			
No.	**Column Name**	**Data Type**	**Constraint**	**Description**
1	AdminID	INT(11)	NOT NULL PRIMARY KEY	Stores the ID of admin
2	Username	VARCHAR(20)	NOT NULL UNIQUE	Stores the Username of admin
3	Password	VARCHAR(20)	NOT NULL	Stores Pass of admin

4.2 Contact

No.	Column Name	Data Type	Constraint	Description
	Table: Contact			
1	Contact_ID	INT(11)	NOT NULL PRIMARY KEY	Stores the ID of customer's address
2	Email	Varchar(50)	NOT NULL	Stores the email of customer
3	Message	VARCHAR(1000)	NOT NULL	Stores the message of customer

4.3 Customer

No.	Column Name	Data Type	Constraint	Description
	Table: Customer			
1	CustomerId	INT(11) IDENTITY(1,1)	NOT NULL PRIMARY KEY	Stores the ID of product
2	FirstName	VARCHAR(50)	NOT NULL	Stores the first name of customer
3	Mi	VARCHAR(1)	NOT NULL	Stores the middle of customer's intital
4	LastName	Varchar(50)	NOT NULL	Stores the last name of customer
5	Address	Varchar(100)	NOT NULL	Stores the address of customer
6	Country	Varchar(50)	NOT NULL	Stores the Country of customer
7	ZipCode	Varchar(20)	NOT NULL	Stores the code of customer
8	Mobile	Varchar(20)	NOT NULL	Stores the mobile phone of customer
9	Telephone	Varchar(50)	NULL	Stores the telephone of customer
10	Email	Varchar(50)	NOT NULL	Stores the email of customer

11	Password	Varchar(50)	NOT NULL	Stores the pass of customer's email

4.4 Product

Table: Product				
No.	Column Name	Data Type	Constraint	Description
1	ProductId	INT IDENTITY(1,1)	NOT NULL PRIMARY KEY	Stores the ID of product
2	Product_Name	VARCHAR(50)	NOT NULL	Stores the name of Product
3	Product_Price	VARCHAR(50)	NOT NULL	Stores the size of product
4	Product_Size	VARCHAR(50)	NOT NULL	Stores the size of product
5	Product_Image	VARCHAR(500)	NOT NULL	Stores the image of product
6	Brand	VARCHAR(100)	NOT NULL	Stores the brand of product
7	Category	VARCHAR(50)	NOT NULL	Stores the type of product

4.5 Stock

Table: Stock				
No.	Column Name	Data Type	Constraint	Description
1	StockID	INT IDENTITY(1,1)	NOT NULL PRIMARY KEY	Stores the Stock of product's Id
2	ProductId	INT(11)	NOT NULL	Stores the ID of product

3	Qty	INT(11)	NOT NULL	Stores the qty of product

4.6 Transaction

Table: Transaction				
No.	**Column Name**	**Data Type**	**Constraint**	**Description**
1	TransactionId	INT IDENTITY(1,1)	NOT NULL PRIMARY KEY	Stores the ID of product's transaction
2	Customer Id	Int(11)	NOT NULL	Stores the id of customer
3	Amount	Int(11)	NOT NULL	Stores the Amount of product
4	Order_stat	VARCHAR(50)	NOT NULL	Stores the start of Order
5	Order_Date	VARCHAR(50)	NOT NULL	Stores the date of Order

4.7 Transaction_Detail

Table: Transaction_Detail				
No.	**Column Name**	**Data Type**	**Constraint**	**Description**
1	Transaction_Detail_ID	INT IDENTITY(1,1)	NOT NULL PRIMARY KEY	Stores the ID of transaction's details
2	Product_ID	Int(11)	NOT NULL	Stores the id of product
3	Order_Qty	Int(11)	NOT NULL	Stores the Amount of order
4	TransactionID	Int(11)	NOT NULL	Stores the id of Transaction

REVIEW 2 – TASK SHEET

Số TT	Nội Dung	Thành Viên	Kế Hoạch	Sự Chuẩn Bị	
			Ngày Bắt Đầu	Số Ngày Thực	Trạng Thái
1	Details Website	Chau Thanh Phong Vo Duy Cuong Le Gia Phuc	28/12/2018	7	Hoàn Thành

Chuẩn Bi Bởi Nhóm 2   January 5, 2019
Nhóm Trưởng   **Giảng Viên**

Vo Duy Cuong   **Mr. Ngô Phước Nguyên**

REVIEW 3

1. SITE MAP

1.1 Client's Site Map
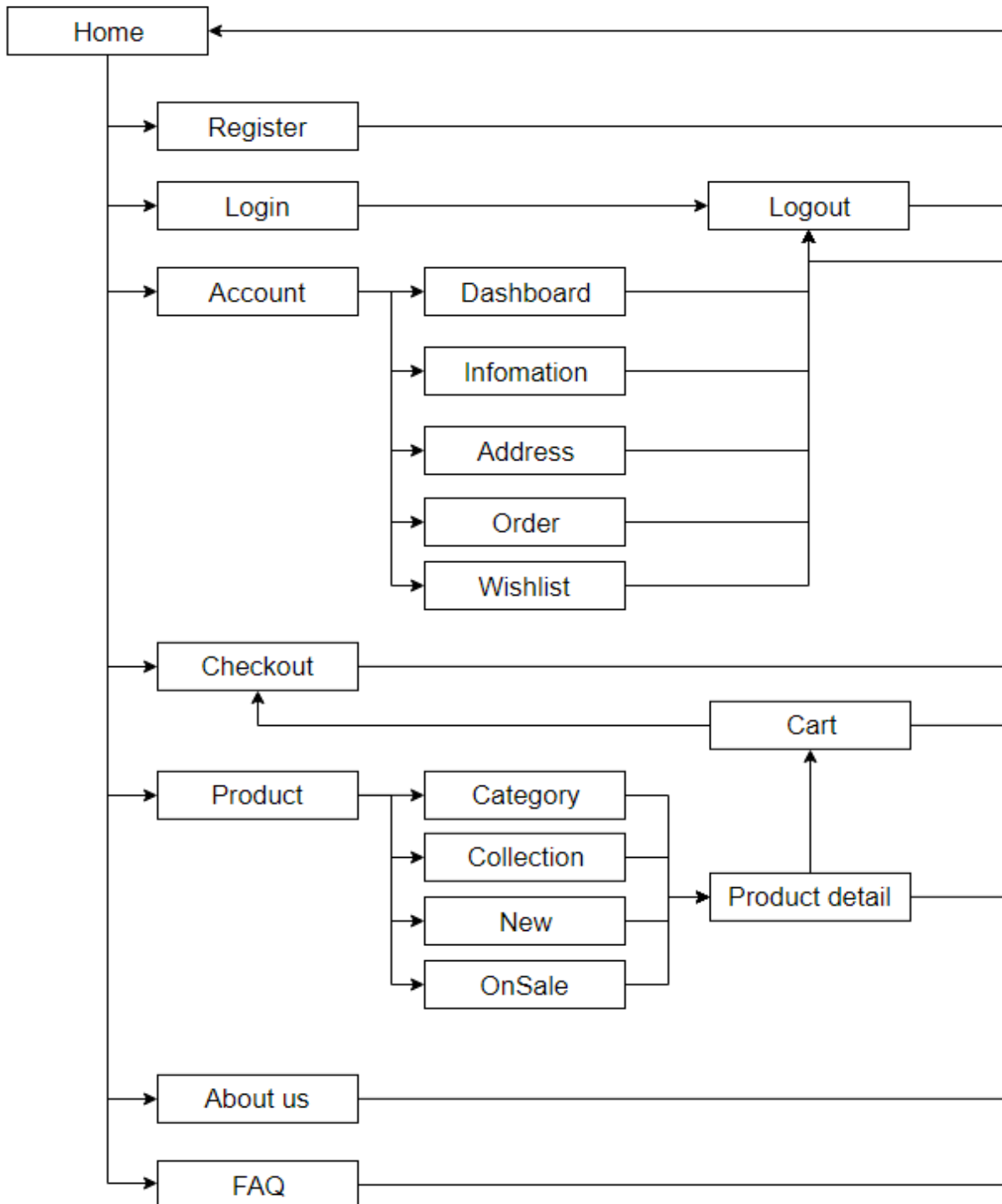
1.2 Admin's Site Map
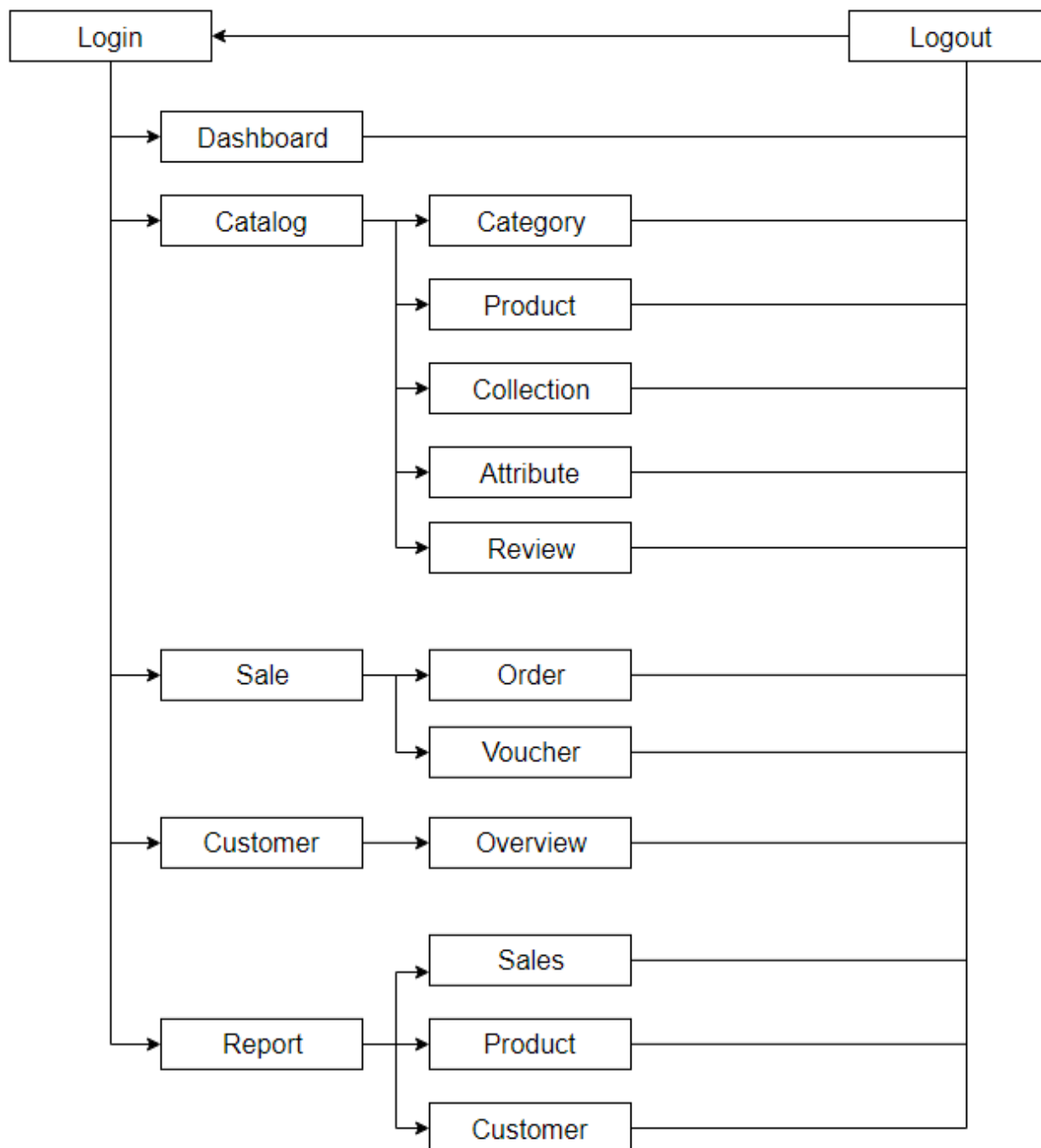
2. GUI DESIGN

2.1 Client's Side

2.1.1 Home Page
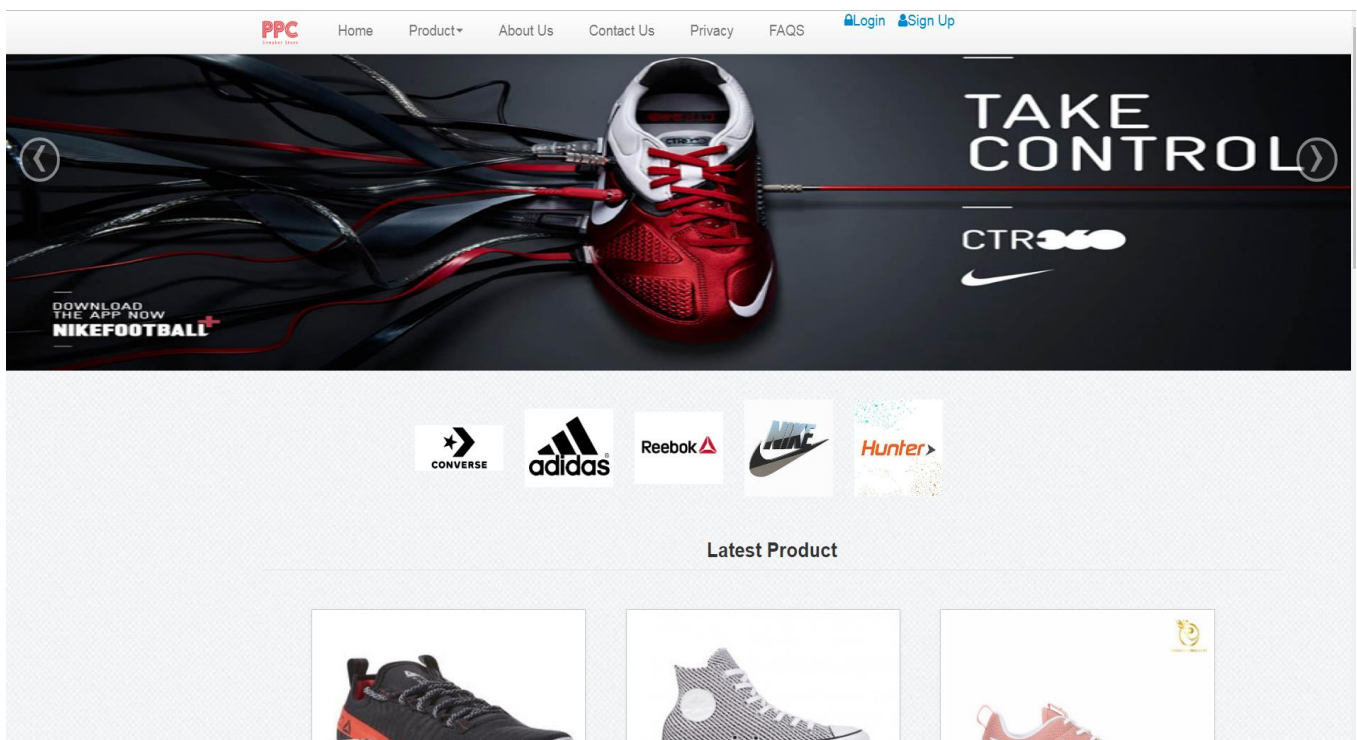
Description	Home page
Connect From	N/A
Connect To	Login page, Product page, Profile, Cart, Checkout, Compare
Validation	N/A
Initial Values	N/A
Events	- Navigate the website by clicking on menu items or products.

2.1.2 Sign Up

Description	Guest signs up for new account
Connect From	Home
Connect To	Login page, Home
Validation	- All fields: not blank - First name & last name: must be not contains special characters - Username: must be unique - Email: must be valid email format - Password: must be between 6 to 20 characters - Confirm password: must be the same as password
Initial Values	N/A
Events	- When click button "Submit", check email and password. If success, go to login page

2.1.3 Login

Description	Login with email and password
Connect From	Home
Connect To	Customer's profile, Forget password
Validation	All fields: not blank - Email: must be valid email format - Password: must be more than 6 characters - Email & Password must be the same with database
Initial Values	N/A
Events	- When click button "Login", check email and password, then login. Login success, go to profile page - When click "Forgot Your Password?" link, go to Forgot password page

2.1.4 Product's Details
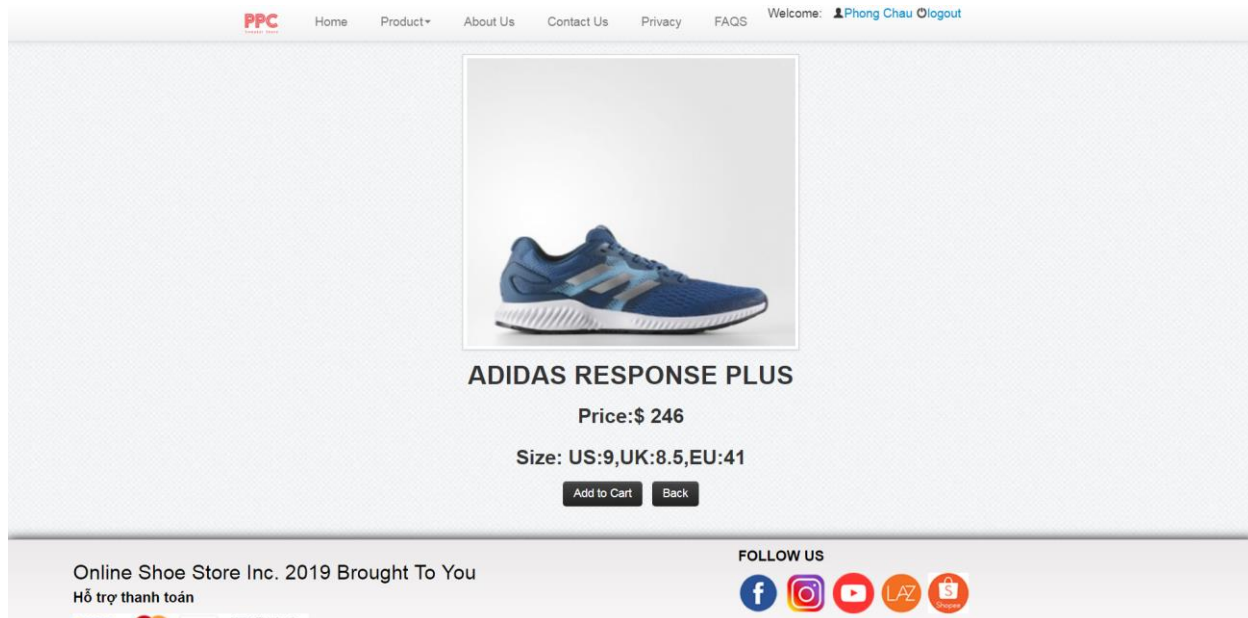
Description	Customer's dashboard (profile)
Connect From	Home, Login page
Connect To	Add to cart, Update Product, Contact message, Order details
Validation	Must log in to view
Initial Values	N/A
Events	- When click tab "Account Information", view customer's profile - When click tab "Address Book", view all addresses - When click "View Order", view Order details - When click "Change info", view Update profile page

2.1.5 Customer's Cart
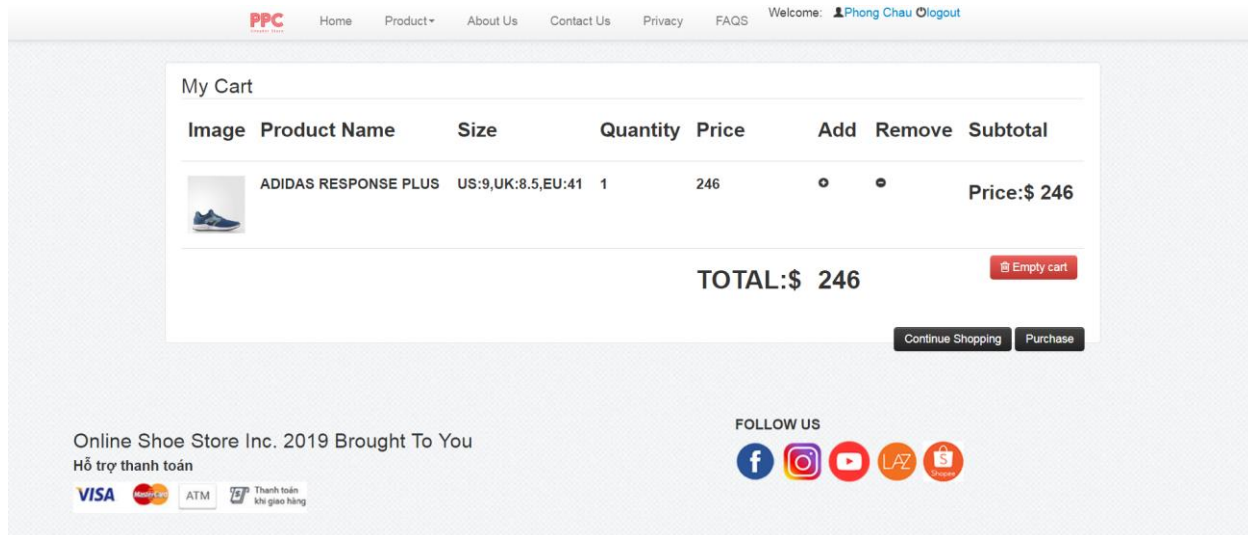
Description	Show customer's wish list (bookmarks)
Connect From	Customer's dashboard
Connect To	Cart, share wish list
Validation	Customer is logged
Initial Values	List of bookmarked products
Events	- When click button "Add to cart", add selected product to shopping cart - When click button "Add all to cart", add all products to shopping cart - When click button "Share", share all product to customer's friends via email.

2.1.6 Update Customer's Profile

Description	Customer's profile Edit form
Connect From	Customer's home
Connect To	Customer's home
Validation	- All fields cannot be blank - First Name is no more than 50 characters - Last Name is not more than 50 characters - Current password must be valid - New Password must be between 6 – 24 characters - Confirm New Password must match New Password
Initial Values	- First Name - Last Name - Gender - Date of Birth
Events	- When click button "Save", update customer's information in database - When check 'Change password', allow customer to change their password.

2.1.7 Product

Description	Show list of products
Connect From	Home, top Navigation
Connect To	Product detail, cart, compare list
Validation	N/A
Initial Values	List of products following given criteria (category, collection, attributes, price, etc.)
Events	- When click on product, redirect to product detail - When click on "Quick View", open Product quick view - When click on "Compare" icon, add Product to compare list - When choose "Sort from Newest to Oldest", sort products from newest to oldest, and vice versa - When choose "Sort from Lowest Price to Highest Price, sort products from lowest price to highest price, and vice versa

2.1.8 Product's Category
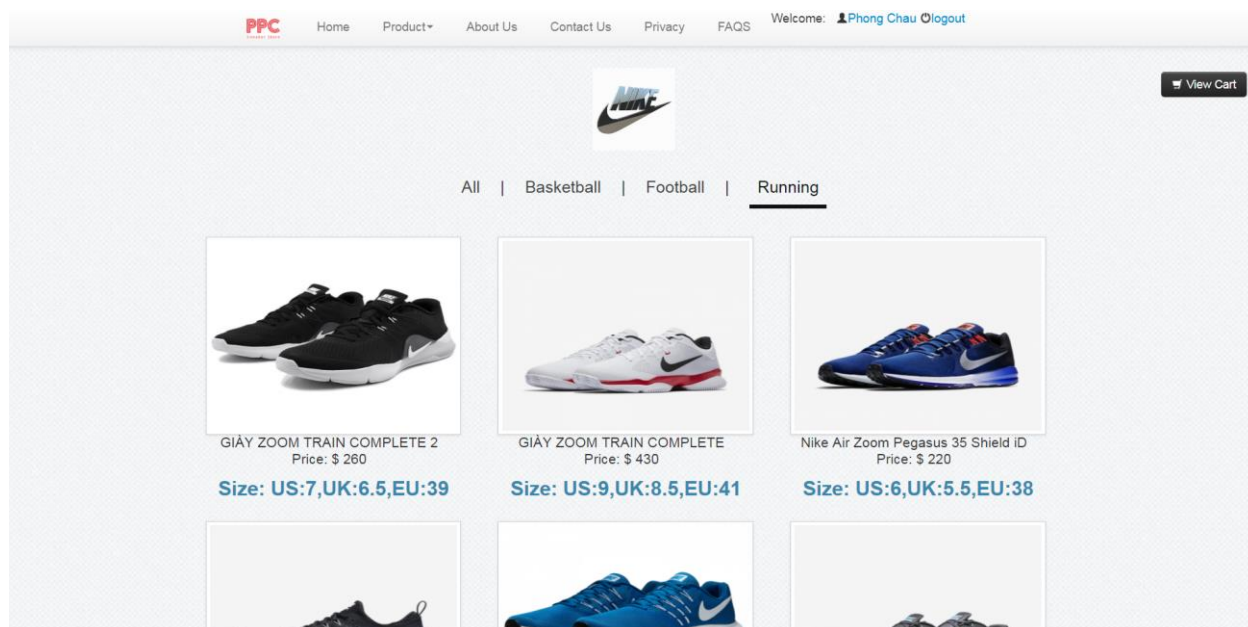
Description	Show product's Category
Connect From	Home, product page, cart, compare list
Connect To	Cart, Review
Validation	N/A
Initial Values	Product's detail: name, price, size, attribute, discount value, description
Events	- When click button "Add To Cart", add product to cart - When choose a different size, reload price.

2.1.9 Product Review

Description	Write review for product
Connect From	Product's detail
Connect To	Product's detail
Validation	- Customer is logged in - Customer has bought product - All fields: not blank - Review Summary: 5 – 30 characters - Write your review: 50 – 1000 characters
Initial Values	N/A
Events	- When click button "Submit review", save customer's review to database.

2.1.10 Add to cart
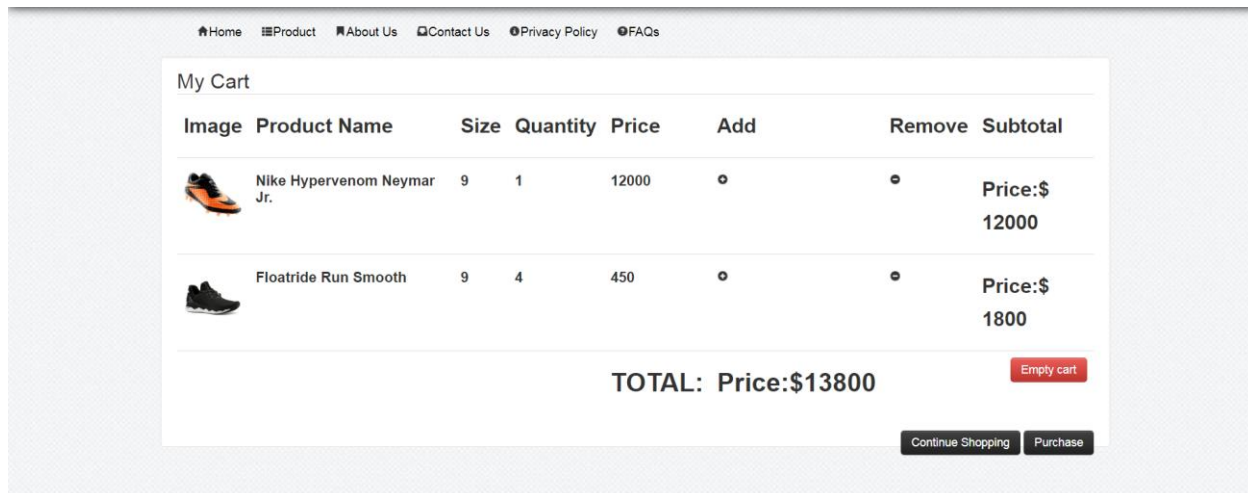
Description	Show a list of products which have been added to cart
Connect From	Home, Product page, Product's detail
Connect To	Checkout page
Validation	N/A
Initial Values	List of products added to cart
Events	- When click button "Continue Shopping", go to product store - When click button "Empty Cart", empy page - When click "purchase" button, go to the ordef page

2.1.11 Summary's Order

| Description	Summary's Order
Connect From	Top Navigation
Connect To	Place Order page
Validation	Cart is not empty
Initial Values	List of products in cart
Events	- If customer is logged in, they can submit a voucher for discount - Customer can estimate shipping fee by submit their address - When click "Proceed To Checkout" button, redirect to Place Order page - When adjust quantity, update quantity and subtotal - When click "x" icon, remove item from cart

2.2   Admin's Side

1.2.1   Admin Login

| Description	Login as admin or super admin
Connect From	N/A
Connect To	Admin's dashboard
Validation	- All fields: not blank - username must be more than 5 character - Password must be more than 6 character
Initial Values	N/A
Events	- When click button "Sign in", check username and password, then login - When click checkbox "Remember", save username and password on browser's cookie

1.2.2   Admin's Dashboard
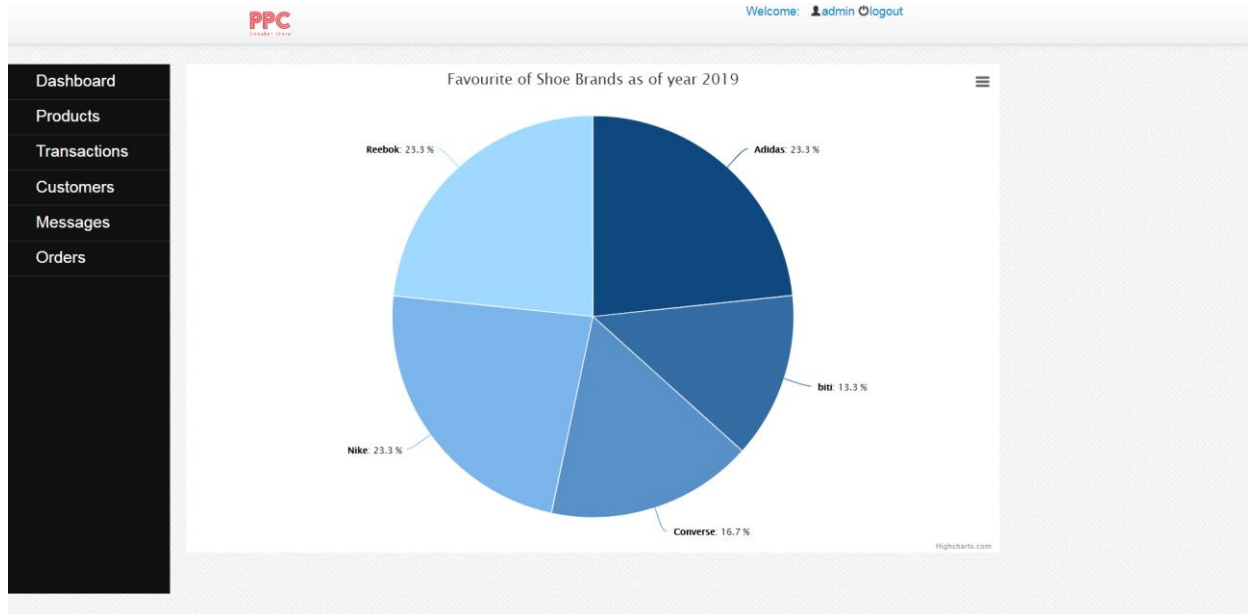
Description	Admin Dashboard
Connect From	Login page
Connect To	All
Validation	N/A
Initial Values	N/A
Events	- When click on menu tabs, redirect to respective pages

1.2.3   Report's Product
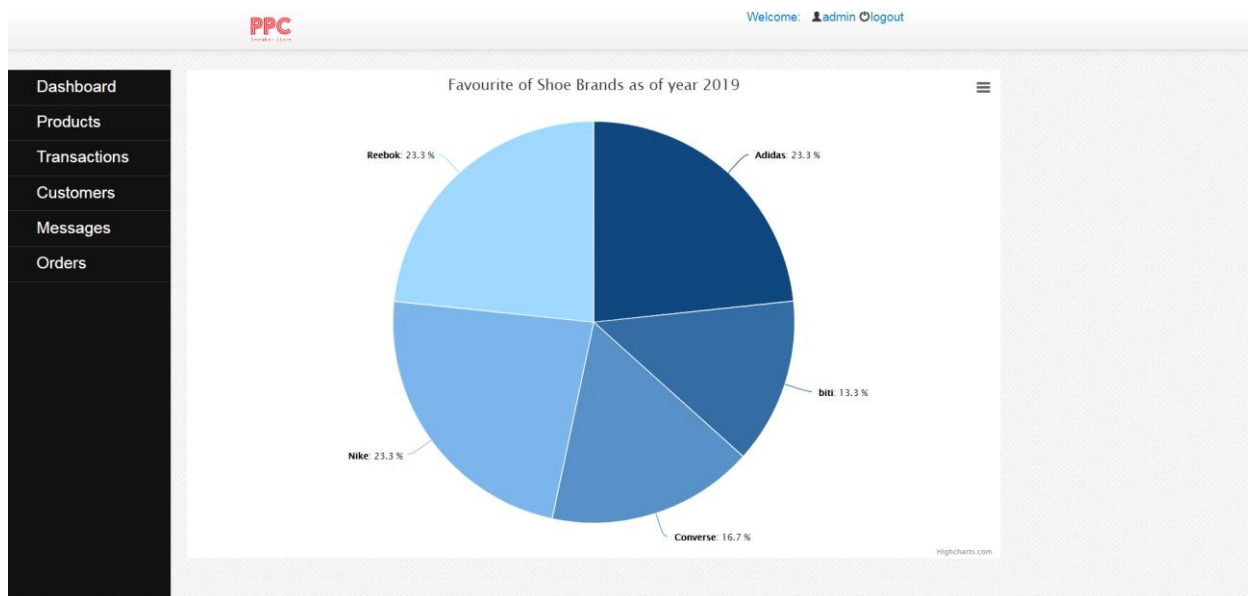
Description	Show report's product
Connect From	admin-product
Connect To	transaction
Validation	N/A
Initial Values	Offical Receipt

1.2.4   Product List

| Description	Product overview
Connect From	Dashboard
Connect To	Product: Stock in, Stock out
Validation	N/A
Initial Values	Category list
Events	- when select "Show" option, show result with amount record selected - when input text field search, show result Category match keyword - when click "Update" button, go to category-update page - when click "Delete" button, check and delete category in database

1.2.5   Product Add
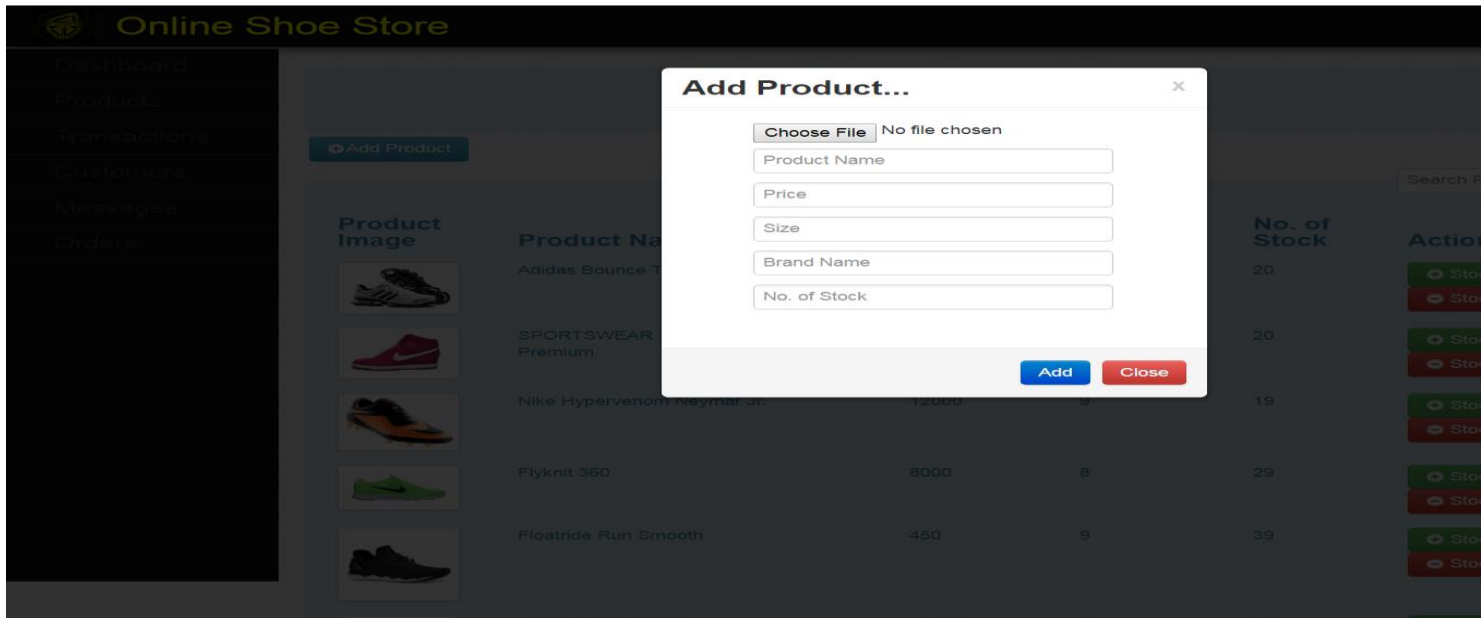
| Description	Insert new Product
Connect From	Product-overview page
Connect To	Product-overview page
Validation	- Not Blank: Productname - Product name is unique
Initial Values	Product parent list
Events	- when click "Add" button, addnew category to database and go to category-overview page - when click "Close" button, close the form

1.2.6   Product Update

Description	Update product
Connect From	product-overview page
Connect To	product-overview page
Validation	- Not Blank: product name - product name is unique
Initial Values	product parent list
Events	- when click "Save" button, update category to database and go to product -overview page - when click "close" button below , close the filed

1.2.7   Product Delete
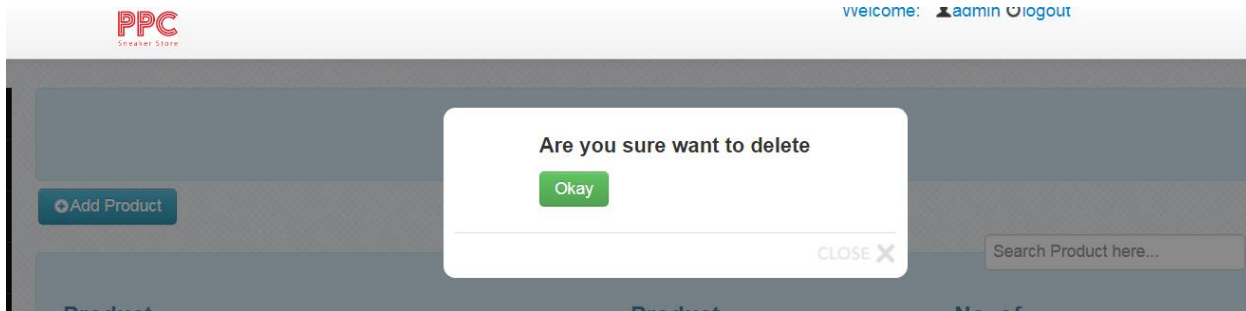
Description	Delete product
Connect From	product-overview page
Connect To	product-overview page
Validation	N/A
Initial Values	product parent list
Events	- when click "Okay" button, Delete category to database and go to product -overview page - when click "close" button below , close the filed

1.2.8   Update Product's Stock

| Description	**Update Product's Stock**
Connect From	product-overview page
Connect To	product-overview page
Validation	N/A
Initial Values	product parent list
Events	- when click "Okay" button, Update Stock to database and go to product -overview page - when click "close" button below , close the filed

1.2.9 Delete Product's Stock

| Description	**Delete Product's Stock**
Connect From	product-overview page
Connect To	product-overview page
Validation	N/A
Initial Values	product parent list
Events	- when click "Okay" button, Delete Stock to database and go to product -overview page - when click "close" button below , close the filed

1.2.10 Product's Search

Description	Search product's List
Connect From	product-overview page
Connect To	product-overview page
Validation	N/A
Initial Values	product parent list
Events	- When you enter the product name, it will display the product information you need to find.

1.2.11 Transaction

| Description	show list transaction
Connect From	admin-page
Connect To	Transaction page
Validation	N/A
Initial Values	transaction
Events	- when select "Show" option, show customer'information sign up the page

1.2.12 Transaction's Confirm

| Description	show details transaction
Connect From	admin-page
Connect To	Transaction' s detail page
Validation	N/A
Initial Values	Transaction 's detail
Events	- when click "view" option, show receipt of customer's product

1.2.13 Report's Tramsaction

Description	Show report's transaction
Connect From	admin-page
Connect To	transaction
Validation	N/A
Initial Values	Offical Receipt

Events	- when click "Print Receipt" button, print out a receipt for the product receipt

1.2.14 Order list

Description	show Information order
Connect From	Dashboard
Connect To	N/A
Validation	N/A
Initial Values	Order List
Events	-Show all of product's order

1.2.15 Report's Order

Description	show order of Report
Connect From	Dashboard
Connect To	N/A
Validation	N/A
Initial Values	Order List
Events	-Show Report of Order

1.2.16 Message

Description	show list review of customers
Connect From	admin-page
Connect To	review-response page
Validation	If review does not has admin response, background color of that review row is pink
Initial Values	- Review List
Events	- when click "Contact Us" button, go to review-response page to response that review

1.2.17 Customer's Information

Description	show list information of customers
Connect From	Customer page
Connect To	review-response page
Validation	If review does not has admin response, background color of that review row is pink
Initial Values	- Review List
Events	- when click "Customer" button, go to list of information of customer

REVIEW 3 – TASK SHEET

No.	Contents	Member	Activity Plan	Preparation	
			Start Date	Actual Days	Status
	Client	Le Gia Phúc	10/01/2019	15	Completed
1	Home Page				
2	Product Details				
3	Product: view by All				
4	Product's Category				
	Admin				
5	Product List				
6	Product Add				
7	Product Delete				
8	Delete Product's Stock				
9	Report Product				
	Client	Chau Thanh phong	10/1/2019	15	Completed
1	Login/Logout				
2	Sign Up				
3	Update Customer's Profile				

4	Contact Us				
	Admin				
5	Admin Login/Logout				
6	Transaction				
7	Transaction Confirm				
8	Product's Search				
9	Report: Transaction				
	Client				
1	Customer: 's Cart				
2	Add to cart				
3	Summary's Order				
	Admin				
4	Update Product Stock				
5	Admin's Dashboard	Vo Duy Cuong	10/01/2019	15	Completed
6	Message				
7	Order List				
8	Update Product				
9	Customer'sInforamtion				
9	Report::Order Details				

Plan prepared by: Group 3   January 10th, 2019

Group Leader   **Faculty**

Vo Duy Cuong   **Mr. Ngo Phuoc Nguyen**