



WEBSITE ORGANIC SHOP

Member

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I.Introduction

1. Problem definition

Today, online selling has been widely popular in the world, this form of sale not only helps distributors quickly and fully product, saving costs, travel time. The website is based on a traditional shop and an online store. Instead of a showroom, our website now displays all the products and customers can order them anytime and anywhere. Along with a friendly interface, the website will help customers easily select and buy the products they like. In addition, coming to our Website, you will enjoy the taste of extremely clean food, and some fresh, clean food, cheap and with the enthusiastic support of the staff.

The entire process is virtually done and there is no need for the person to be physically present at the place at the moment. It is an extensively fuss-free process which has saved a lot of precious time of people who are busy with their daily life.

"Say no to fake, shoddy food. Protection of consumer rights. Welcome to us KVT is pleased to welcome you"



2. Customer Requirement Specification

This application is simulation for Online shopping website build and the user can search for the products and buy them online as a best practise:

a) Interface requirements

- There are additional promotional images, along with notifying customers when adding to the cart
- Web operations must be familiar and easy to use with users, allowing operation by both mouse and keyboard.
- Has illustrative images, clear and detailed content and well-organized content structure.
- Beautiful and user friendly interface.

b) Functional requirements

- Can add, edit, delete, search products quickly and easily.
- Have a function of history order management, user management, product management, add slider for web advertisement management.
- Registration, login, and logout functions.
- Manipulate the cart, payment.
- Scratch card for user and admin can scratch card management
- High security, maintainability, and easy system development

c) Customer's requirement

- Easy to find, fast, accurate search by name, search by price, and search by category for product
- Can check infomation account and edit it, see the products in the cart.
- Payment is quick, easy and confidential.



3. Hardware and Software Requirement

a) Hardware

Servers

Hardware requirement (minimal configuration)	Hardware requirement (recommended configuration)
<ul style="list-style-type: none">CPU: 500 MHz processorRAM: 2GB RAMHDD: 500MB of free disk space	<ul style="list-style-type: none">CPU: 4GHZ Dual Core or 3GHZ processorRAM: 4GB RAMHDD: 1GB of free disk space

Client

Hardware requirement (minimal configuration)	Hardware requirement (recommended configuration)
<ul style="list-style-type: none">CPU: 500 MHz processorRAM: 2GB RAMHDD: 500MB of free disk space	<ul style="list-style-type: none">CPU: 4GHZ Dual Core or 3GHZ processorRAM: 4GB RAMHDD: 1GB of free disk space

b) Software
 **Server**

Software requirement

- Window 7 or higher
- JRE 1.7 or higher

 **Client**

Software requirement

- Window 7 or higher
- JRE 1.7 or higher

II. Role, Github, Gantt diagram, meeting schedule and checklist

1. Role

No	Name of member	Role	Responsibility	Note
1	Khang	Leader	Assignment of tasks	Complete
2	Khang, Tú, Vinh	Analyst	Define problem, input, output, process	Complete
3	Khang, Tú, Vinh	Design	Design interface	Complete
4	3-9 Khang 1,2,10 Tú	Coder	<p>User Features:</p> <ol style="list-style-type: none"> 1. User can sign up for the first time 2. User can sign in. 3. User can view products 4. User can add products to cart 5. User can delete products from cart 6. User can decrease quantity of a product in the cart. 7. User search for products 8. User can charge his balance 9. User can pay cash to get the product 10. User can logout from the site. 	Complete
5	1 Khang 2-9 Vinh 10-14 Tú	Coder	<p>Admin Features:</p> <ol style="list-style-type: none"> 1. Admin can view products 2. Admin can add product 3. Admin can delete product 4. Admin can edit product 5. Admin can add products to the slider 6. Admin can add scratch cards 7. Admin can view history 8. Admin can add new category 9. Admin can delete category 10. Admin can add ads 11. Admin can remove ads 12. Admin can view users 13. Admin can edit users profiles 14. Admin can view the history 	Complete
10	Khang, Tú, Vinh	Tester	Testing all functions for project	Complete
11	Khang, Tú, Vinh	Maintenancer	Check and backup data	Complete

2. Link Github

https://github.com/nguyenvukhang2000/KVTGroup_PRJ321_SE1403_Website

3. Gantt diagram

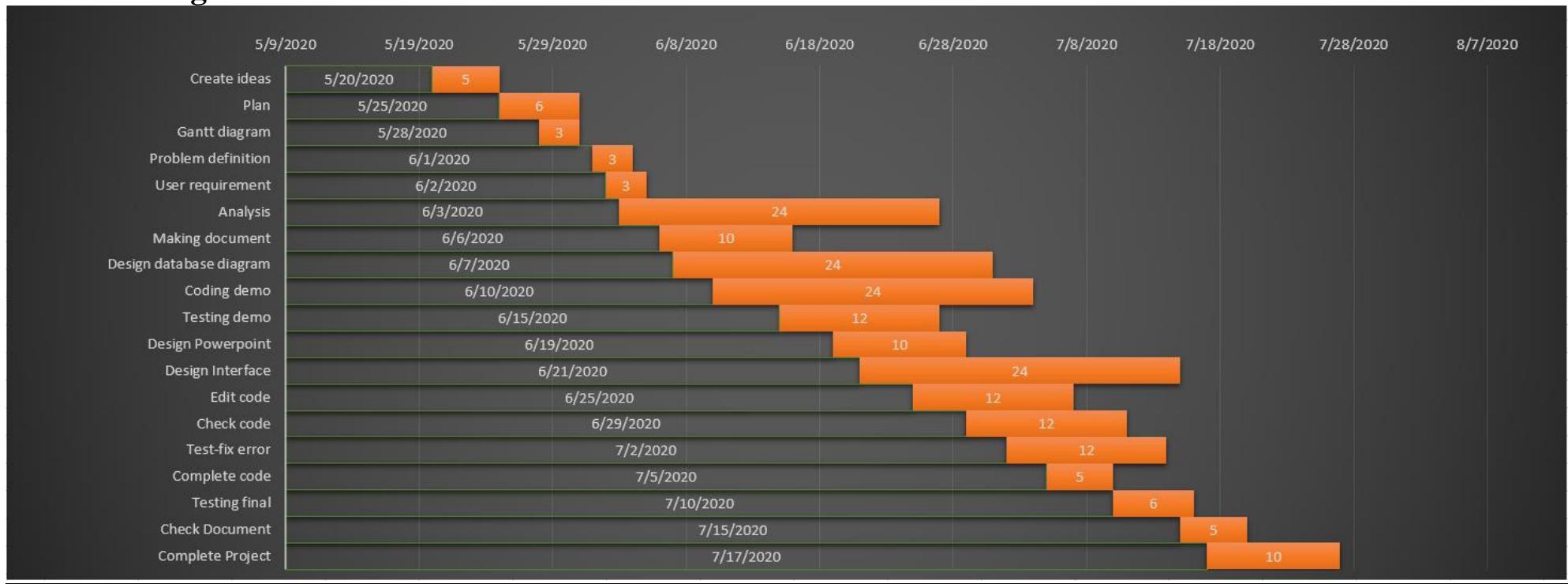


Figure 1: Gantt diagram

4. Meeting schedule

No.	Date	Form	Place	Members	Content
1	07/06/2020	Offline	FPT University	Khang, Vinh Tú	Progress reports
2	21/06/2020	Online	Teamviewer	Khang, Vinh Tú	Progress reports
3	26/06/2020	Offline	FPT University	Khang, Vinh Tú	Progress reports
4	01/07/2020	Online	Teamviewer	Khang, Vinh Tú	Progress reports
5	08/07/2020	Offline	FPT University	Khang, Vinh Tú	Progress reports
6	14/07/2020	Offline	FPT University	Khang, Vinh Tú	Progress reports
7	15/07/2020	Offline	FPT University	Khang, Vinh Tú	Progress reports

5. Checklist

No.	Document Name	Date (MM/dd/yyyy)	Estimated number of hours completed	Complete Time (MM/dd/yyyy)	Real time	Member names	Note
1	Create ideas	5/20/2020	5	22:00 5/20/2020	3	Khang, Tú, Vinh	Complete
2	Plan	5/25/2020	6	14:00 5/26/2020	4	Khang, Tú, Vinh	Complete
3	Gannt diagram	5/28/2020	3	20:00 5/29/2020	3	Khang	Complete
4	Problem definition	6/1/2020	3	16:00 6/1/2020	3	Tú	Complete
5	User requirement	6/2/2020	3	23:00 6/2/2020	3	Khang, Vinh	Complete
6	Analysis	6/3/2020	24	23:00 6/5/2020	24	Khang, Vinh, Tú	Complete
7	Making document	6/6/2020	10	20:00 6/7/2020	9	Khang, Vinh, Tú	Complete
8	Design database diagram	6/7/2020	24	22:30 6/9/2020	24	Khang, Vinh, Tú	Complete
9	Coding demo	6/10/2020	24	23:00 6/13/2020	24	Khang, Vinh, Tú	Complete
10	Testing demo	6/15/2020	12	15:00 6/18/2020	13	Khang, Vinh, Tú	Complete
11	Design Powerpoint	6/19/2020	10	20:00 6/20/2020	8	Khang, Vinh, Tú	Complete
12	Design Interface	6/21/2020	24	23:00 6/24/2020	25	Khang, Vinh, Tú	Complete
13	Edit code	6/25/2020	12	22:00 6/28/2020	12	Khang, Vinh, Tú	Complete
14	Check code	6/29/2020	12	23h15 7/1/2020	13	Khang, Vinh, Tú	Complete
15	Test-fix error	7/2/2020	12	19:00 7/4/2020	11	Khang, Vinh, Tú	Complete
16	Complete code	7/5/2020	5	22:30 7/8/2020	5	Khang, Vinh, Tú	Complete
17	Testing final	7/10/2020	6	23:00 7/14/2020	6	Khang, Vinh, Tú	Complete
18	Check Document	7/15/2020	5	21:30 7/16/2020	4	Khang, Vinh, Tú	Complete
19	Complete Project	7/17/2020	10	23:45 7/23/2020	10	Khang, Vinh, Tú	Complete

III.Theory

1. Introduce to JSP

Java Server Pages (JSP) is a server-side programming technology that enables the creation of dynamic, platform-independent method for building Web-based applications. JSP have access to the entire family of Java APIs, including the JDBC API to access enterprise databases. This tutorial will teach you how to use Java Server Pages to develop your web applications in simple and easy steps.

Advantages

- Performance is significantly better because JSP allows embedding Dynamic Elements in HTML Pages itself instead of having separate CGI files.
- JSP are always compiled before they are processed by the server unlike CGI/Perl which requires the server to load an interpreter and the target script each time the page is requested.
- JavaServer Pages are built on top of the Java Servlets API, so like Servlets, JSP also has access to all the powerful Enterprise Java APIs, including **JDBC**, **JNDI**, **EJB**, **JAXP**, etc.
- JSP pages can be used in combination with servlets that handle the business logic, the model supported by Java servlet template engines.

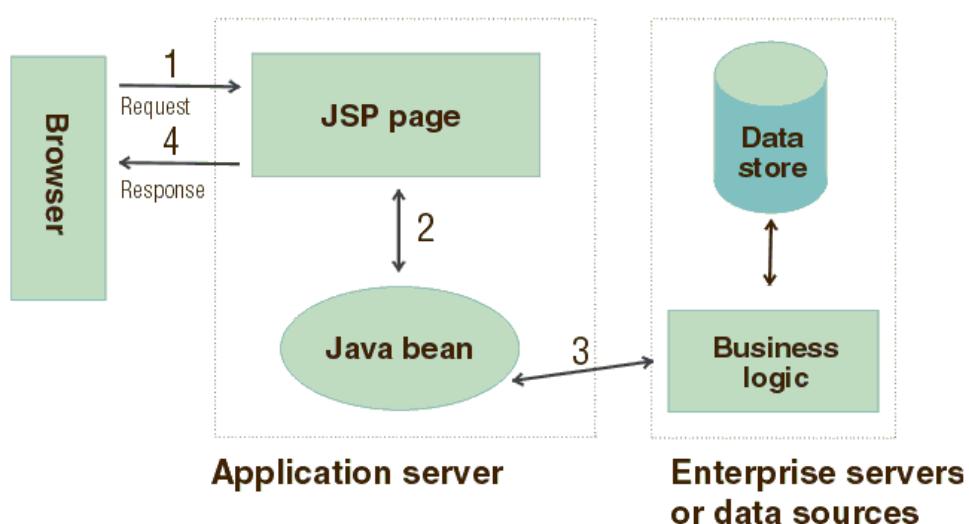


Figure 2: Example JSP connect browser and data store

2. Introduction to MVC in JSP

MVC stands for Model View and Controller. It is a **design pattern** that separates the business logic, presentation logic and data.

- M stands for Model
- V stands for View
- C stands for controller.

Model Layer

- This is the data layer which consists of the business logic of the system.
- It consists of all the data of the application
- It also represents the state of the application.
- It consists of classes which have the connection to the database.
- The controller connects with model and fetches the data and sends to the view layer.
- The model connects with the database as well and stores the data into a database which is connected to it.

View Layer

- This is a presentation layer.
- It consists of HTML, JSP, etc. into it.
- It normally presents the UI of the application.
- It is used to display the data which is fetched from the controller which in turn fetching data from model layer classes.
- This view layer shows the data on UI of the application.

Controller Layer

- It acts as an interface between View and Model.
- It intercepts all the requests which are coming from the view layer.
- It receives the requests from the view layer and processes the requests and does the necessary validation for the request.
 - This requests is further sent to model layer for data processing, and once the request is processed, it sends back to the controller with required information and displayed accordingly by the view.

Advantages

- Easy to maintain.
- Easy to extend.
- Easy to test.
- Navigation control is centralized.

3. Introduction to AJAX

AJAX = Asynchronous JavaScript and XML.

AJAX is not a programming language.

AJAX just uses a combination of:

- A browser built-in **XMLHttpRequest** object (to request data from a web server)
- JavaScript and HTML DOM (to display or use the data)

AJAX allows web pages to be updated asynchronously by exchanging data with a web server behind the scenes. This means that it is possible to update parts of a web page, without reloading the whole page.

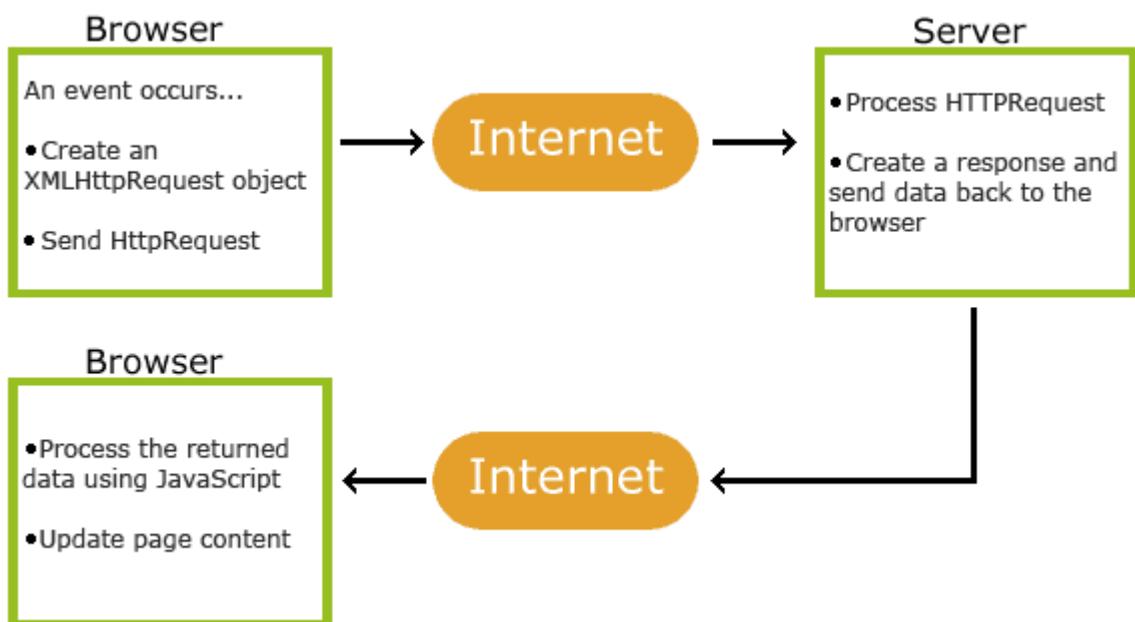


Figure 3: Example use AJAX

4. Introduction to Servlet

Servlet technology is used to create a web application (resides at server side and generates a dynamic web page).

Servlet technology is robust and scalable because of java language. Before Servlet, CGI (Common Gateway Interface) scripting language was common as a server-side programming language. However, there were many disadvantages to this technology. We have discussed these disadvantages below.

There are many interfaces and classes in the Servlet API such as Servlet, GenericServlet, HttpServlet, HttpServletRequest, HttpServletResponse, etc.

Servlet can be described in many ways, depending on the context.

- Servlet is a technology which is used to create a web application.
- Servlet is an API that provides many interfaces and classes including documentation.
- Servlet is an interface that must be implemented for creating any Servlet.
- Servlet is a class that extends the capabilities of the servers and responds to the incoming requests. It can respond to any requests.
- Servlet is a web component that is deployed on the server to create a dynamic web page.

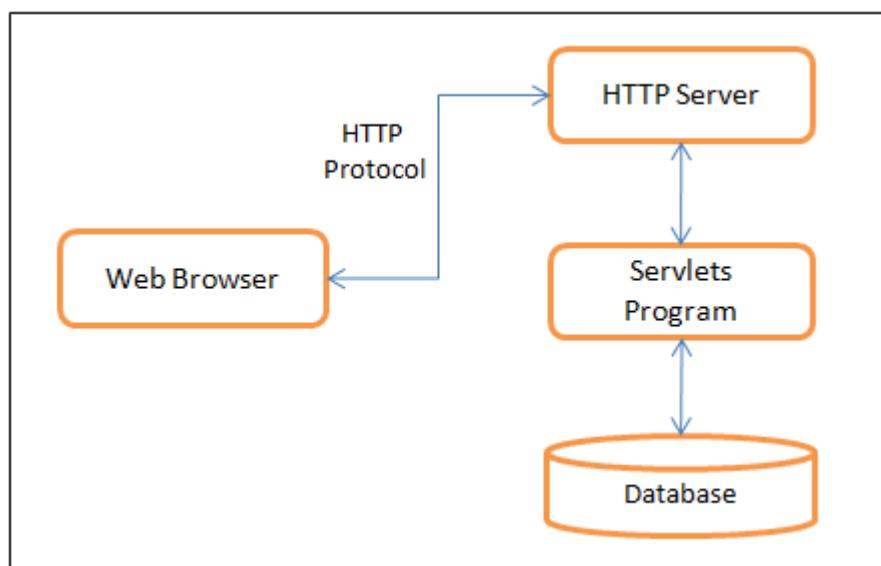


Figure 4: Example of Servlet

IV. Architecture System

1. Client - Server architecture

A Client-Server Architecture consists of two types of components: clients and servers.

A server component perpetually listens for requests from client components. When a request is received, the server processes the request, and then sends a response back to the client. Servers may be further classified as stateless or stateful. Clients of a stateful server may make composite requests that consist of multiple atomic requests. This enables more conversational or transactional interactions between client and server. To accomplish this, a stateful server keeps a record of the requests from each current client. This record is called a session.

In order to simultaneously process requests from multiple clients, a server often uses the Master-Slave Pattern. In this case, the Master perpetually listens for client requests. When a request is received, the master creates a slave to processes the request and then resumes listening. Meanwhile, the slave performs all subsequent communication with the client.

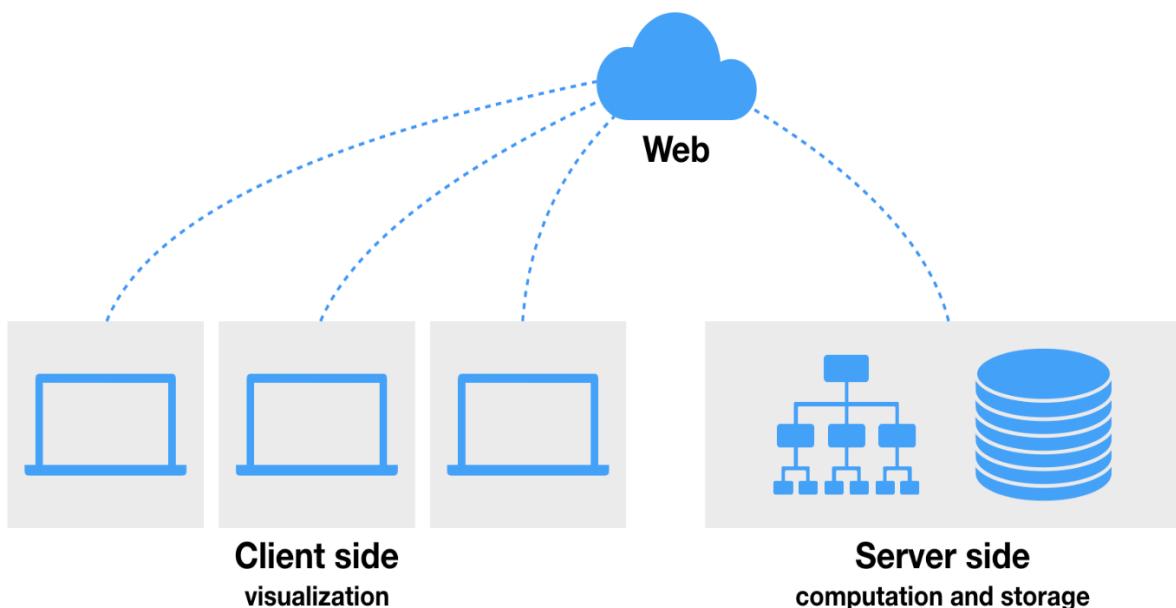


Figure 5: Client-Server Architectures

2. Entity Relationship Diagram

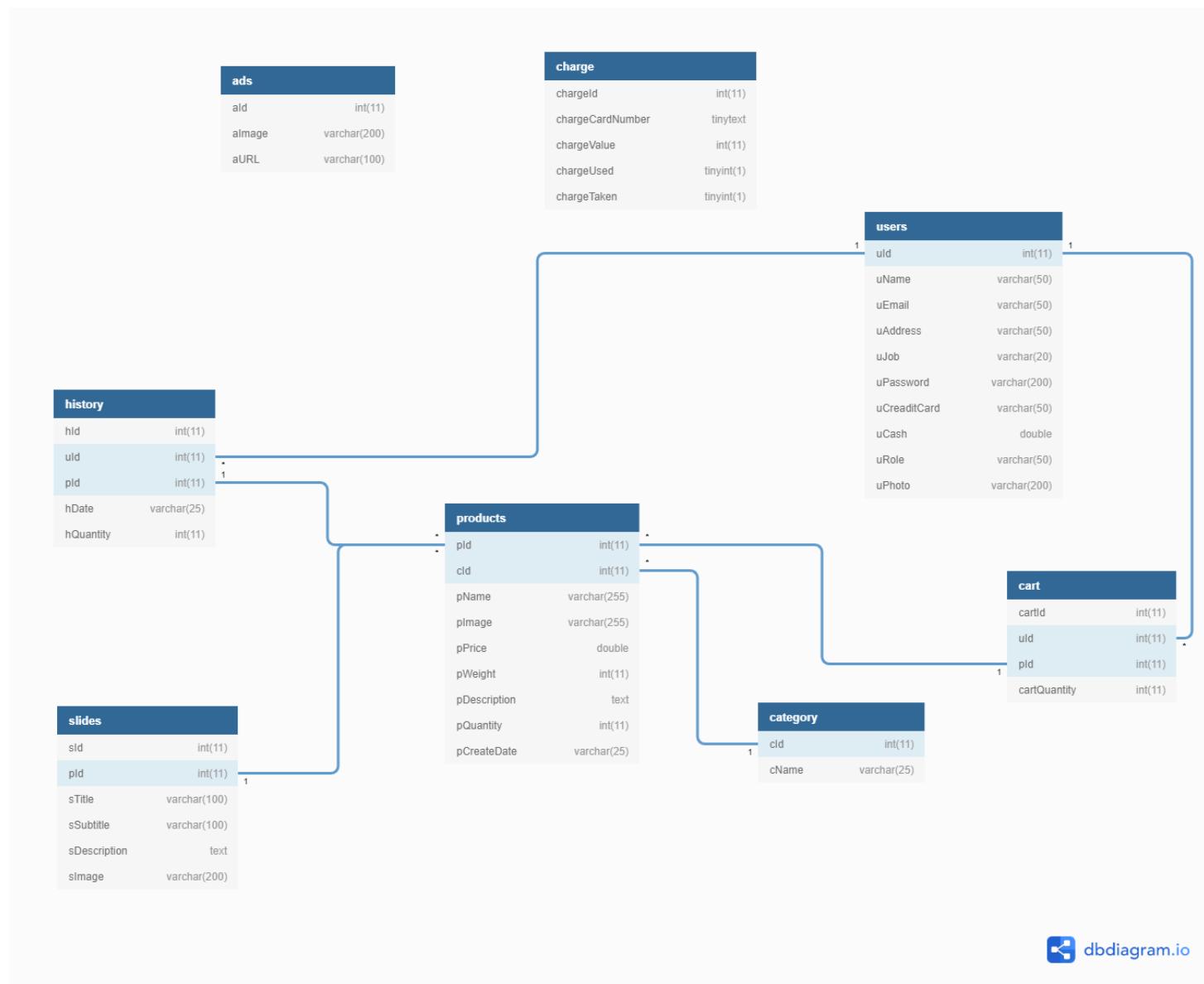


Figure 5.1: Database diagram of website organic shop

3. Class Diagram



Figure 5.1.1: Class diagram of website organic shop

4. Use-case Diagram

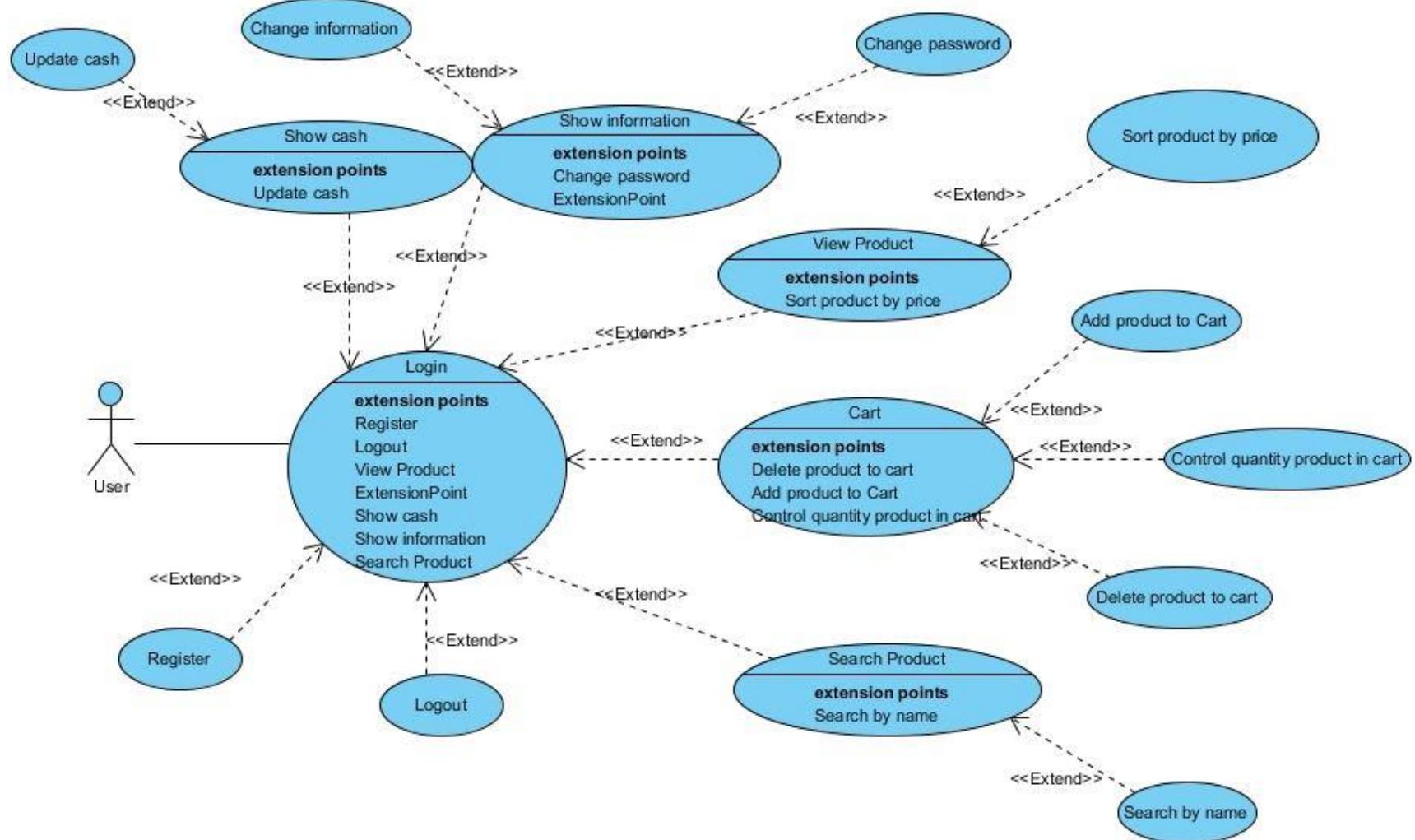


Figure 5.2: Users use-case diagram

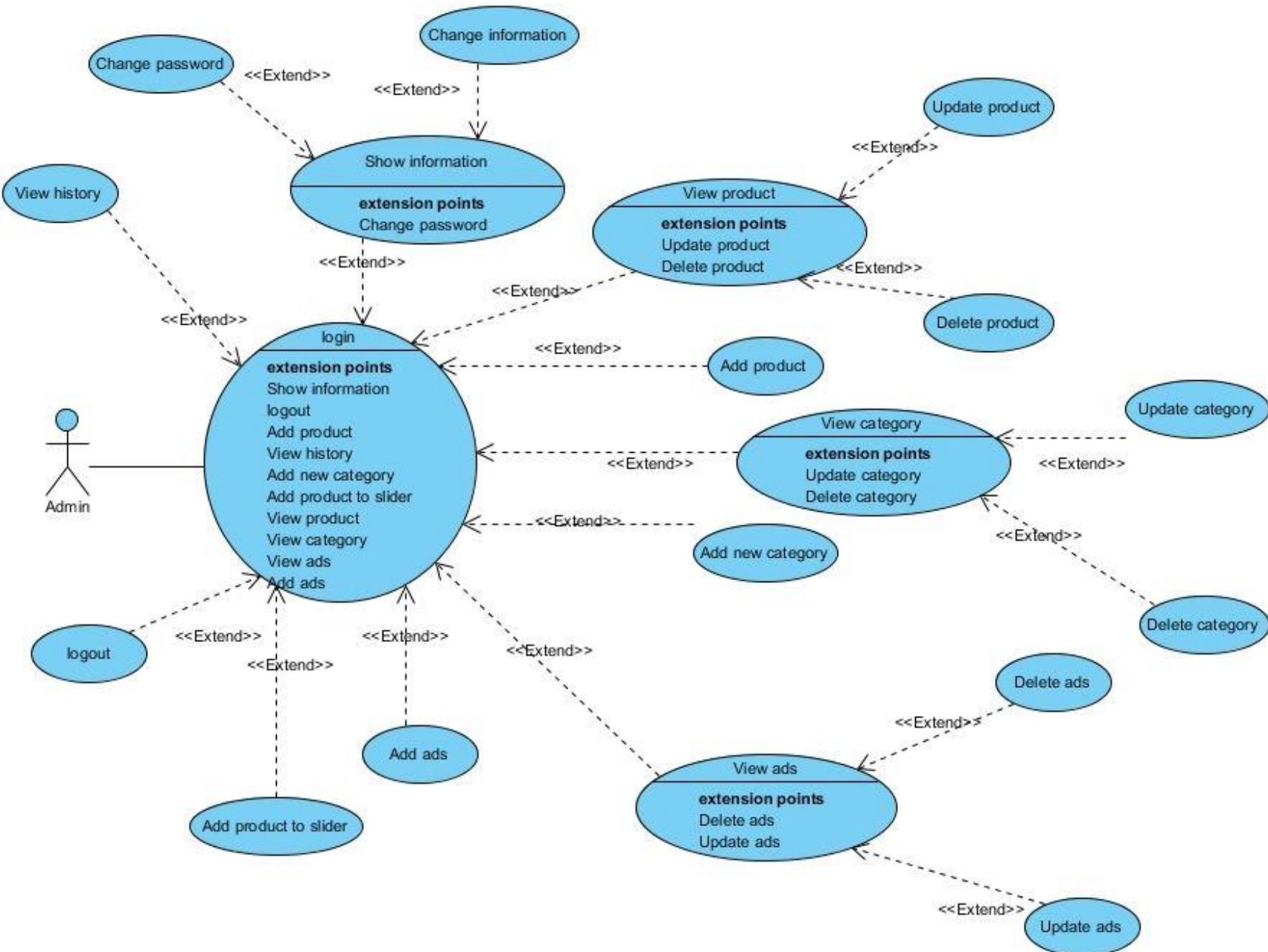


Figure 5.3: Admin use-case diagram

5. Activity Diagram

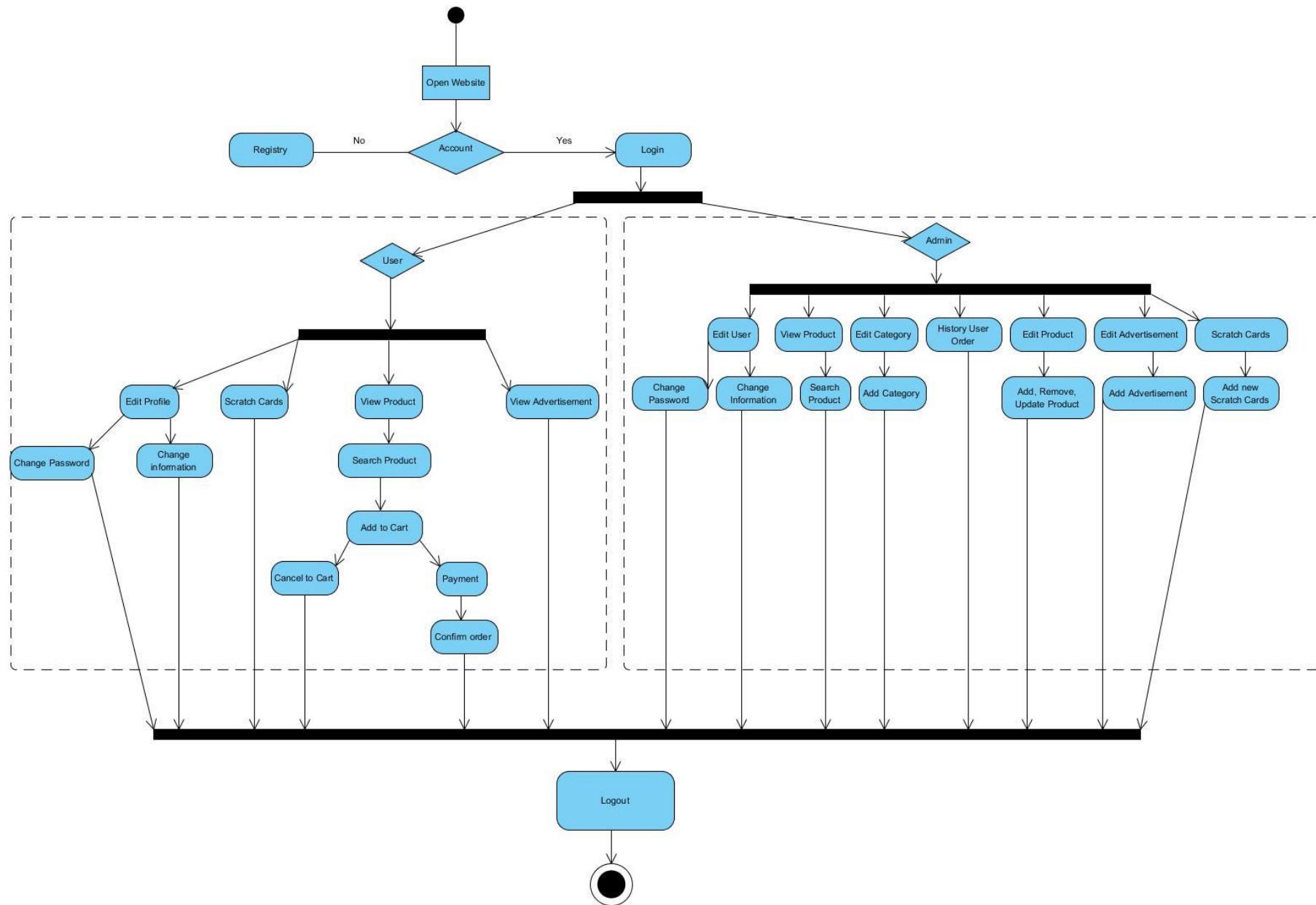


Figure 5.4: Activity diagram

6. DFD

a) Data flow diagram symbol

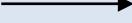
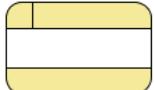
Symbol	Description
	Data Flow: Data flow are pipelines through the packets of information flow
	Process: A Process or task performed by the system
	Entity: Entity are object of the system. A source or destination data of a system
	Data Store: A place where data to be stored

Figure 5.5: Data flow diagram symbol

b) Level 0



Figure 5.6: Level 0

c) Level 1

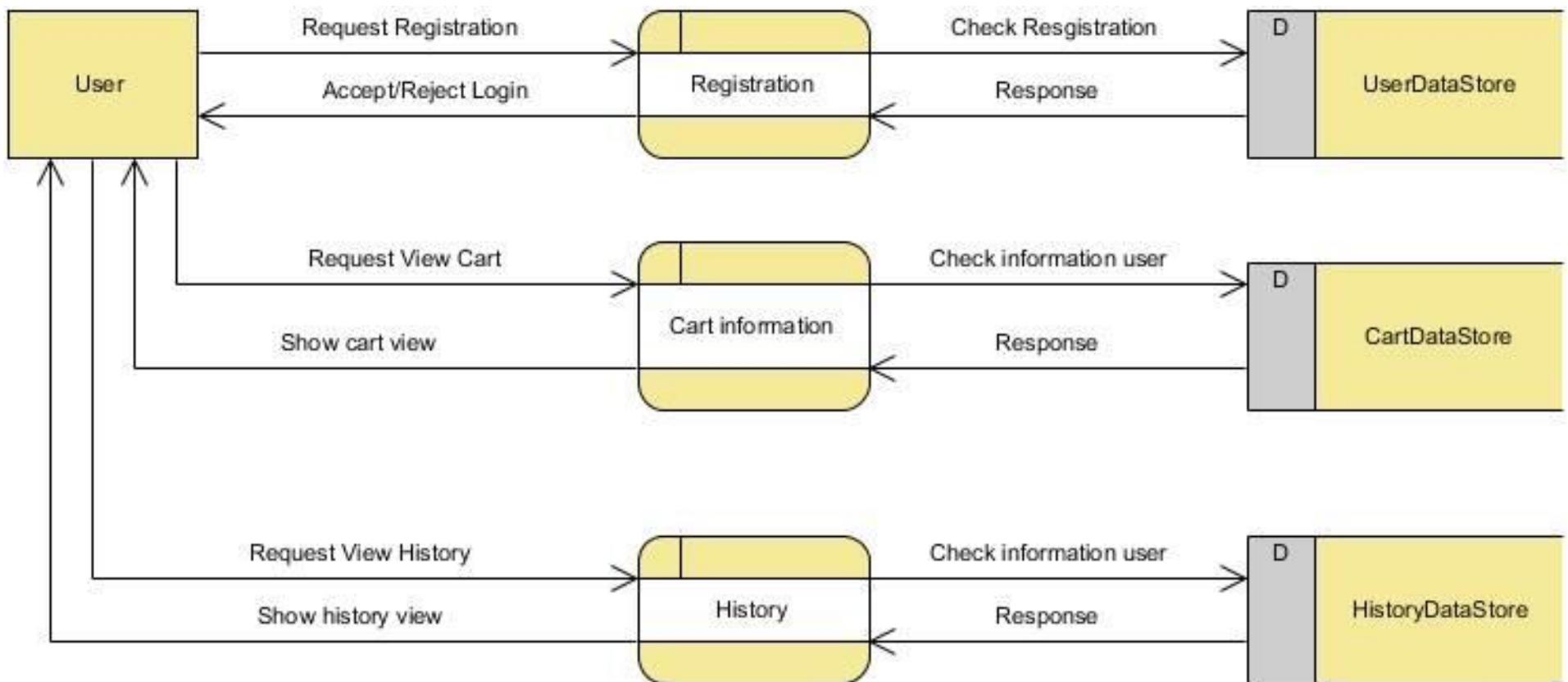


Figure 5.7: User Level 1



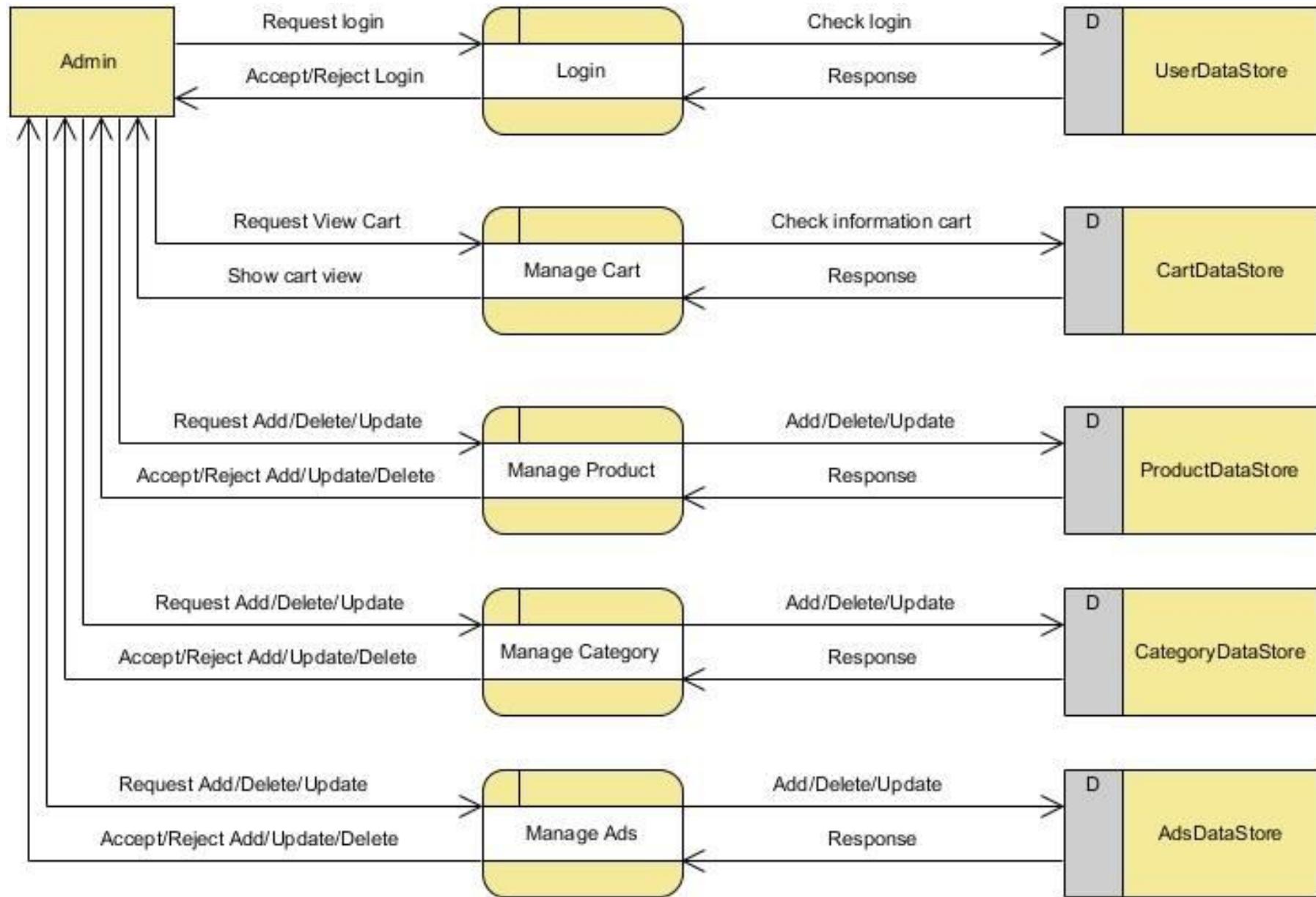


Figure 5.8: Admin Level 1

V.Functions, User Interfaces and Flow chart

1. Functions

a) User Features

- User can change information
- User can change password
- User can sign up for the first time
- User can sign in.
- User can view products
- User can add products to cart
- User can delete products from cart
- User can decrease quantity of a product in the cart.
- User search for products
- User can charge his balance
- User can pay cash to get the product
- User can logout from the site.

b) Admin Features

- Admin can login
- Admin can logout
- Admin can view products
- Admin can add product
- Admin can delete product
- Admin can edit product
- Admin can add products to the slider
- Admin can add scratch cards
- Admin can view history
- Admin can add new category
- Admin can delete category
- Admin can add ads
- Admin can remove ads
- Admin can view users
- Admin can edit users profiles

2. User Interface

The screenshot shows the homepage of the KVT Group website. At the top, there is a header bar with contact information (+84 35 373 8125 and kvtgroup2020@gmail.com), social media links (Facebook, Twitter, Instagram, and Google+), and account options (Signup and Login). Below the header is the KVT Group logo, which includes a stylized plant icon. The main content area features a large image of several ripe red tomatoes. To the left of the image, the text "Tomato Malaysia" is displayed in a large, light gray font. Below it, a bold statement reads "Tomato is a great source of vitamin C, potassium, folate, and vitamin K". A green button labeled "Get it now" is positioned at the bottom left of the image. At the very bottom of the page, there are three small circular navigation dots.

Figure 6: Home page

CATEGORY

- VEGETABLE
- FRUITS
- MEAT

PRICE RANGE

C
\$ 0
\$335000

NEW ITEMS



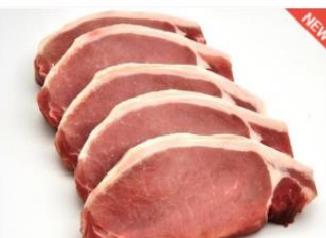
108000.0 VND

Fish



80000.0 VND

Chicken



220000.0 VND

Pork



335000.0 VND

Beef



60000.0 VND

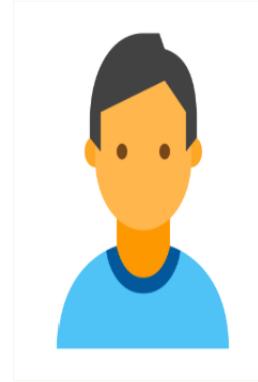
Mango



65000.0 VND

Kiwi

Figure 6.1: Shop page



tu
Account Setting
Name
tu
E-mail
HuyNDQCE140623@fpt.edu.vn
Password
Password
Confirm Password
Confirm Password
Address
ST
Job
Teacher
Credit Card
7777-7777-7777-7777
Image
 No file chosen

Figure 6.2: Update info user page

[Home](#) [Shop](#)

Review & Payment

Item	Price	Quantity	Total	
	Product ID: 2	70000.0 VND	<input type="button" value="+"/> <input type="text" value="1"/> <input type="button" value="-"/>	70000.0 VND 
	Product ID: 22	80000.0 VND	<input type="button" value="+"/> <input type="text" value="1"/> <input type="button" value="-"/>	80000.0 VND 
	Product ID: 29	80000.0 VND	<input type="button" value="+"/> <input type="text" value="1"/> <input type="button" value="-"/>	80000.0 VND 
			Cart Sub Total	230000.0 VND
			Shipping Cost	Free
			Total	230000.0 VND

[Pay](#)**Figure 6.4:** Cart page



Login to your account

username

password

Login

Forget passWord ?

OR

New User Signup!

Name

Email Address

Password

ConfirmPassword

Address

Job

CreditCard

Signup

Figure 6.5: Login page

CATEGORY

VEGETABLE
FRUITS
MEAT

PRICE RANGE

\$ 0 \$335000

Submit

SCRATCH CARDS



50000 VND

Charge with 50000 VND



100000 VND

Charge with 100000 VND



200000 VND

Charge with 200000 VND



500000 VND

Charge with 500000 VND



Figure 6.6: Cratch card page



Panel

ADMIN PANEL Online Users : 1 | profit : 0

PRODUCTS

USERS

CATEGORY

HISTORY

SLIDER

SCRATCH CARDS

ADS

Product details products

Users details Users

Categories Categories

History History

Slider Slider

Scratch Cards VISA Scratch Cards

Ads Ads

Figure 6.7: Admin home page

Panel

ADMIN PANEL					
PRODUCTS	Products			New Product	
ITEM	PRICE	QUANTITY			
	Fish	\$108000.0	94	  	
	Chicken	\$80000.0	98	  	
	Pork	\$220000.0	100	  	
	Beef	\$335000.0	99	  	
	Mango	\$60000.0	100	  	
	Kiwi	\$65000.0	100	  	

Figure 6.8: Admin manage products

Panel

ADMIN PANEL

PRODUCTS
USERS
CATEGORY
HISTORY
SLIDER
SCRATCH CARDS
ADS

Users

User
 tu HuyNDQCE140623@fpt.edu.vn 
 khang asd123@gmail.com 
 vinh khangnvce140224@fpt.edu.vn 

KVTGROUP
Address: 600, Nguyen Van Cu
street, An Binh ward, Ninh Kieu
district, Can Tho city Phone:
+84 35.373.8125
Email:KTV_Group6@gmail.com



VietNam , CanTho

Figure 6.9: Admin manage users

ADMIN PANEL

PRODUCTS
USERS
CATEGORY
HISTORY
SLIDER
SCRATCH CARDS
ADS

History

HistoryId	UserId	ProductId	Date	Quantity
1	2	16	2020-07-22T21:06:41.848	1
2	6	17	2020-07-22T21:49:21.136	1
3	2	16	2020-07-22T21:57:08.473	1
4	2	16	2020-07-22T22:01:03.942	1
5	2	23	2020-07-23T13:12:21.023	1
6	2	16	2020-07-23T13:25:47.285	4
7	2	10	2020-07-23T13:36:34.490	1

KVTGROUP

Address: 600, Nguyen Van Cu
street, An Binh ward, Ninh Kieu
district, Can Tho city Phone:
+84 35.373.8125
Email:KTV_Group6@gmail.com



VietNam , CanTho

Figure 6.10: Admin manage history

ADMIN PANEL

Sidebar

Item	Title	productId	Action
	Strawberry	22	
	Tomato Malaysia	2	
	Chicken	29	

KVTGROUP

Address: 600, Nguyen Van Cu
street, An Binh ward, Ninh Kieu
district, Can Tho city Phone:
+84 35.373.8125
Email:KTV_Group6@gmail.com



VietNam , CanTho

Figure 6.11: Admin manage slider

Panel

ADMIN PANEL

- [PRODUCTS](#)
- [USERS](#)
- [CATEGORY](#)
- [HISTORY](#)
- [SLIDER](#)
- [SCRATCH CARDS](#)
- [ADS](#)

Scratch Card

Cards	Number Of Cards Available
50000VND	5
100000VND	5
200000VND	5
500000VND	5

[New Card](#)

KVTGROUP

Address: 600, Nguyen Van Cu
street, An Binh ward, Ninh Kieu
district, Can Tho city Phone:
+84 35.373.8125
Email:KTV_Group6@gmail.com



VietNam , CanTho

Figure 6.12: Admin manage cards

ADMIN PANEL

- PRODUCTS
- USERS
- CATEGORY
- HISTORY
- SLIDER
- SCRATCH CARDS
- ADS

Advertisement

New Advertisement

Advertisement

×
×
×

KVTGROUP

Address: 600, Nguyen Van Cu
street, An Binh ward, Ninh Kieu
district, Can Tho city Phone:
+84 35.373.8125
Email:KTV_Group6@gmail.com

VietNam, CanTho

Figure 6.14: Admin manage advertisement

Panel

ADMIN PANEL

Category	
ID	Name
1	Vegetable
2	Fruits
3	Meat

[New Category](#)

- PRODUCTS**
- USERS**
- CATEGORY**
- HISTORY**
- SLIDER**
- SCRATCH CARDS**
- ADS**

Figure 6.15: Admin manage category

3. Flowchart

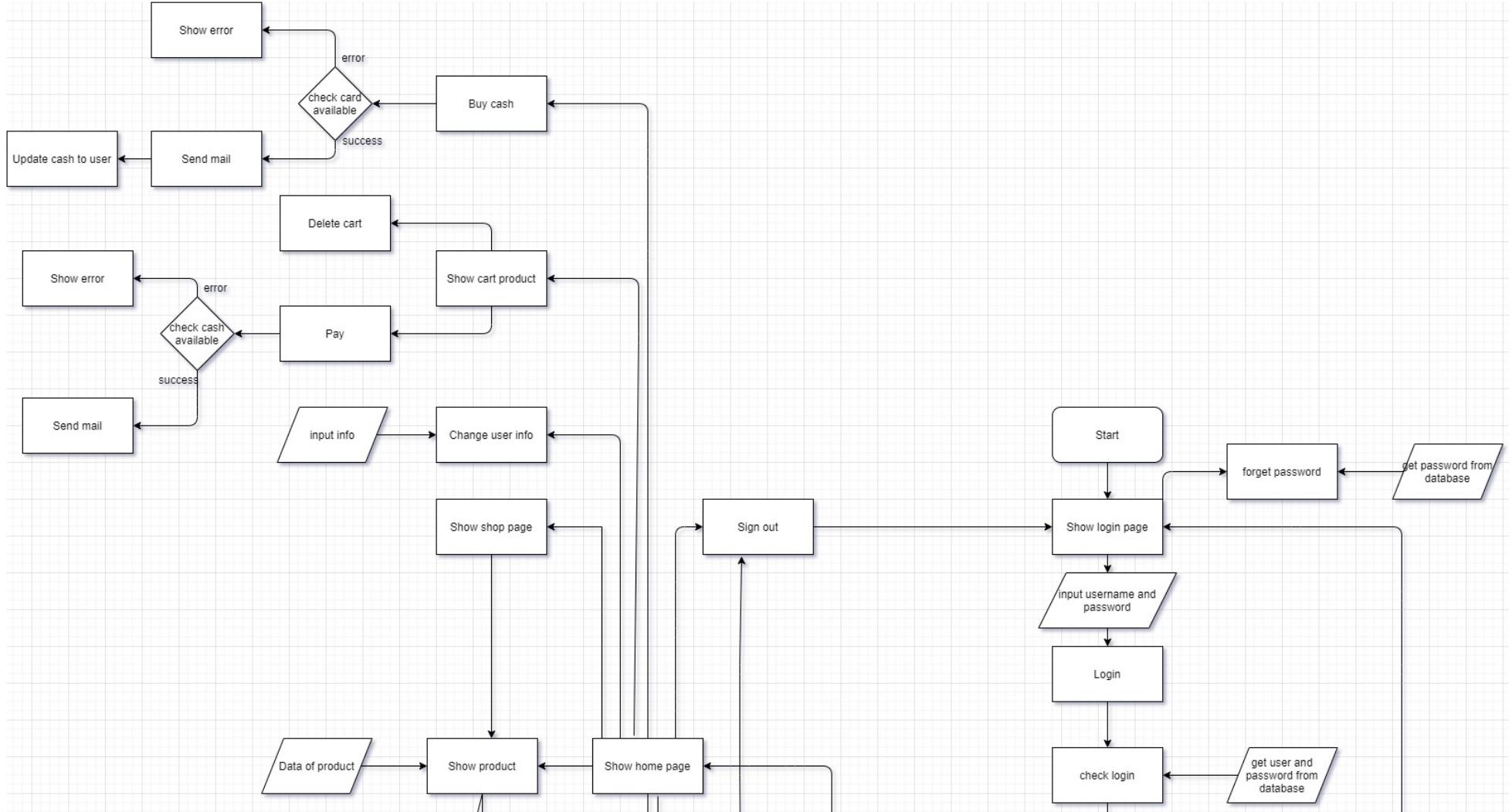
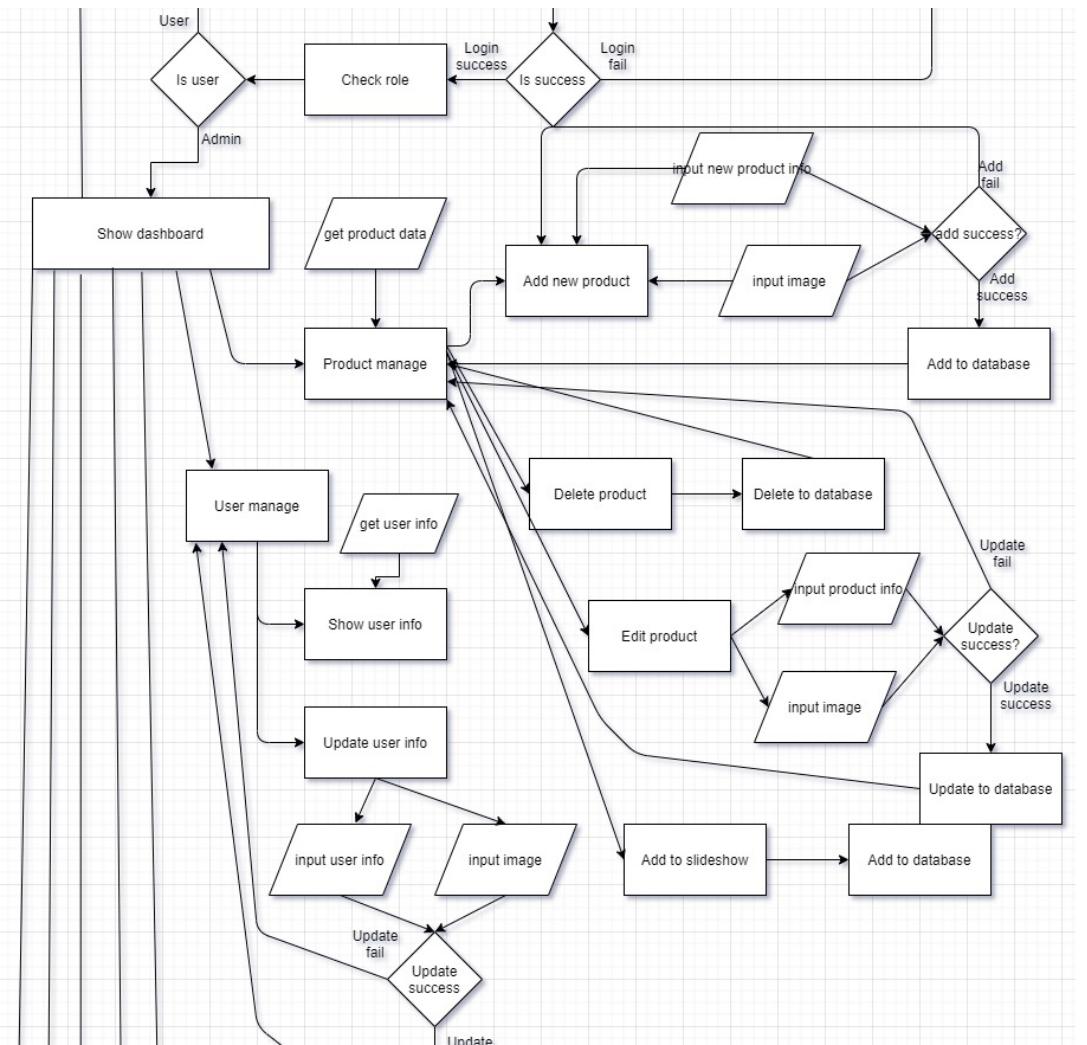
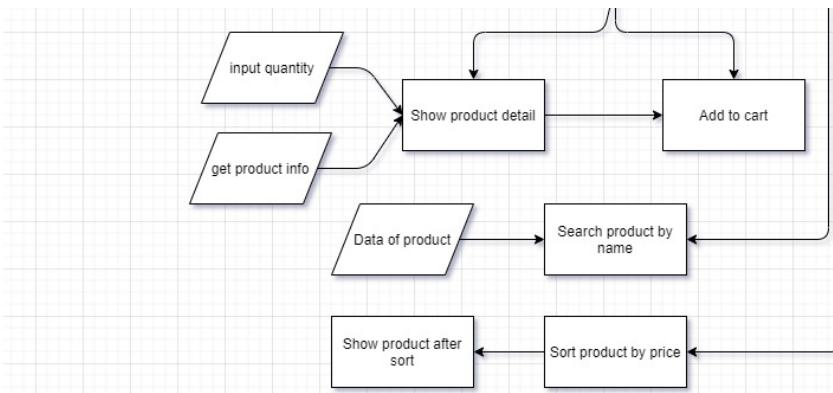
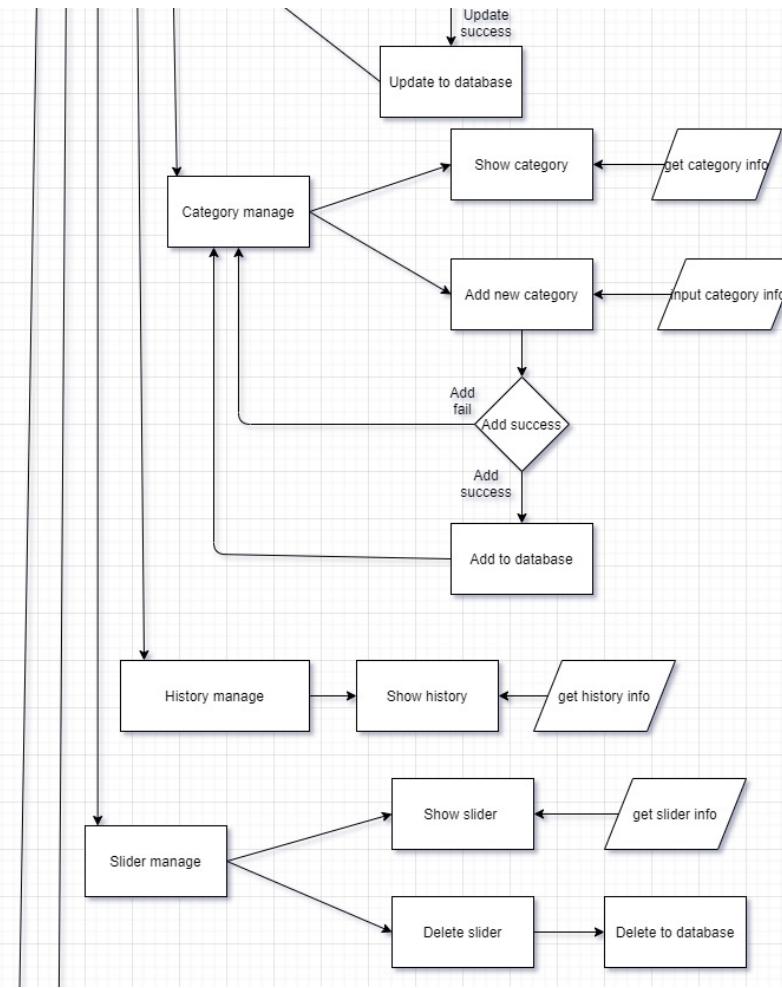
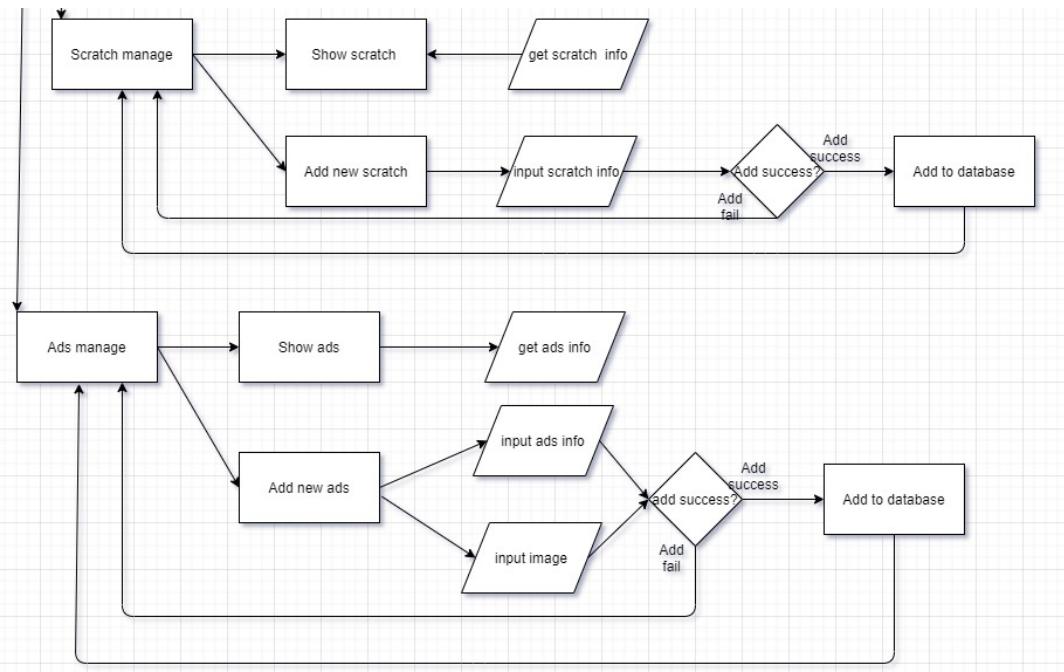


Figure 6.17: Flowchart







VI. Conclusion

This is to conclude that the project that I undertook was worked upon with a sincere effort. Most of the requirements have been fulfilled up to the mark and the requirement which have been remaining, can be completed with a short extension.

The project made here is just to ensure that this product could be valid in today real challenging world. Here all the facilities are made and tested.

In near future it will be extended for many types of features so that efficiency can be improved.

