

TRƯỜNG ĐẠI HỌC FPT



ACCOUNT GAME 'S STORE

Group 4

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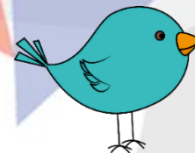


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I. Chapter 1: Introduction

1. Problem definition

Today esports are becoming more and more popular. Helps reduce stress after working and studying hours.

Besides, the trading of game accounts between gamers is indispensable. So we decided to create a website that sells game accounts, so that gamers can conveniently buy and sell accounts, quickly and securely. The types of accounts our website sells include, League of legends, Arena of valor and fifa online 4. Because these games are very popular and are played by many people.

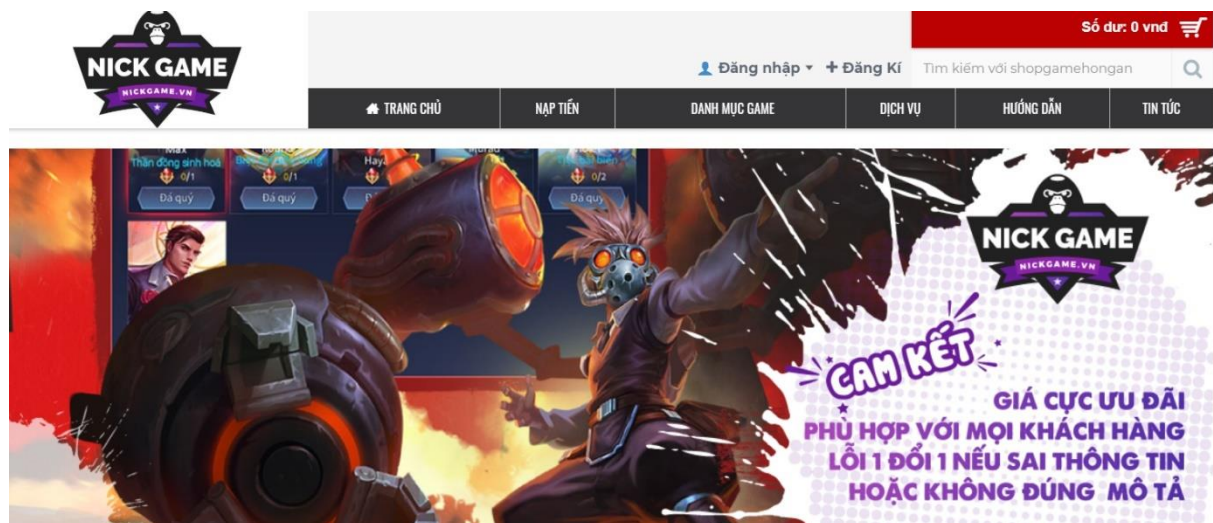
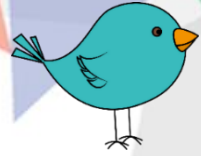


Figure 1. Demo Account game store



2. Customer Requirement Specification

Functions

a) For manager by role

- Login, logout
- Change information account
- Manage account buy: search account buy, looking for bad seller account buy, looking for best seller account buy.
- Manage staff: search staff, productivity charts are employee jobs.

b) For admin by role

- Login, logout
- Manager account: customer, create account, change info, delete account, change pass, create status.
- Manager type of product: create type, edit type, delete type, create status.
- Manager account buy: create account buy, edit account buy, delete account buy, create status
- Manager account admin: create account, delete account, change info, change pass

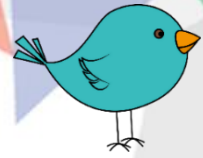


c) For employee by role

- Register: input information, input password
- Login, logout
- Employee: view information, change information, save
- Search
 - + Search product: price product, information product, color
 - + Search infor customer: name, number phone, address, identity card
- Create bill
 - + Information customer: export bill
 - + Information product: export bill
 - + Date sell: export bill
 - + Code bill: export bill
 - + Information employee: export bill

d) For customer by role

- Login, logout
- View account infor: change account info, change password
- View product
 - + Choose account buy
 - + Buy product: choose payment type, choose transpot type, input name and address, bill
- Search products: Name account, price account.



3. Hardware and Software Requirement

a. Hardware

Minimum Hardware Configurations

Microsoft Windows Vista SP1/Windows 7

Professional:

Processor: 800MHz Intel Pentium III or equivalent

Memory: 512 MB

Disk space: 750 MB of free disk space

Ubuntu 9.10:

Processor: 800MHz Intel Pentium III or equivalent

Memory: 512 MB

Disk space: 650 MB of free disk space

Macintosh OS X 10.7 Intel:

Processor: Dual-Core Intel

Memory: 2 GB

Disk space: 650 MB of free disk space



Recommended Hardware Configurations

Microsoft Windows 7 Professional/Windows

8/Windows 8.2:

Processor: Intel Core i5 or equivalent

Memory: 2 GB (32-bit), 4 GB (64-bit)

Disk space: 1.5 GB of free disk space

Ubuntu 15.04:

Processor: Intel Core i5 or equivalent

Memory: 2 GB (32-bit), 4 GB (64-bit)

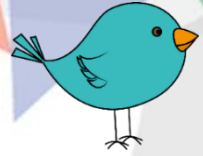
Disk space: 1.5 GB of free disk space

OS X 10.10 Intel:

Processor: Dual-Core Intel

Memory: 4 GB

Disk space: 1.5 GB of free disk space



b. Required Software

- NetBeans IDE runs on the Java SE Development Kit (JDK) which consists of the Java Runtime Environment and developer tools for compiling, debugging, and running applications written in the Java language.
- The tested JDK for this release is JDK 8u101 for Windows, Linux, and OS X. The 8.2 version of the IDE cannot be installed or run on the JDK older than JDK 8.
- Note:
 - The PHP and C/C++ NetBeans bundles only require the Java Runtime Environment (JRE) 8 to be installed and run.
 - Java features in the IDE and JavaFX 8 features require JDK 8.
- Download Tomcat for webserver, XAMPP for database.

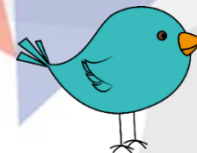


II. Schedule and role, Gantt diagram, Meeting and link Github

1. Role

No	Name of member	Role	Responsibility
1	HaoNS	Leader	Assignment of tasks
2	CuongPN, HaoNS	Analyst	Define problem, input, output, process
3	HienNTQ, QuiT, CuongPN	Design	Design interface
4	HaoNS, HienNTQ, QuiT, CuongPN	Coder	Program all functions for project
5	HaoNS, HienNTQ, QuiT, CuongPN	Tester	Testing all functions for project
6	HaoNS, HienNTQ, QuiT, CuongPN	Maintenance	Check and backup data

Figure 1: Role

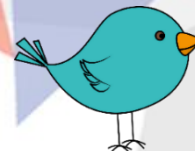


2. Schedule

Task No	Task Description	Expected Completion Date	Expected Time Needed(hrs)	Members in charge	Status
1	Web design ideas	02/06/2020	1	HaoNS, HienNTQ, CuongPN, QuiT	Done
2	Focus group discussion	04/06/2020	1	HaoNS, HienNTQ, CuongPN, QuiT	Done
3	Assign work to members	05/06/2020	1	HaoNS	Done
4	Team members take jobs	06/06/2020	1	HaoNS, HienNTQ, CuongPN, QuiT	Done
5	Web design	08/06/2020	168	HaoNS, HienNTQ, CuongPN, QuiT	Done
6	Database design	17/06/2020	3	HaoNS, HienNTQ, CuongPN, QuiT	Done
7	Making classdiagram	18/06/2020	4	HienNTQ	Done
8	Write a document	23/06/2020	4	HaoNS, HienNTQ, CuongPN, QuiT	Done
9	Function insert account buy code	24/06/2020	3	HaoNS	Done
10	Function insert user code	24/06/2020	3	HienNTQ	Done
11	Function insert bill code	24/06/2020	3	HaoNS	Done
12	Function update account buy code	27/06/2020	3	QuiT	Done

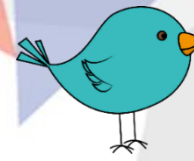


13	Function update user code	27/06/2020	3	HienNTQ	Done
14	Function update bill buy code	27/06/2020	3	HaoNS	Done
15	Function delete account buy code	30/06/2020	3	CuongPN	Done
16	Function delete user buy code	30/06/2020	3	QuiT	Done
17	Function delete bill buy code	30/06/2020	3	HaoNS	Done
18	Function selected account buy code	03/07/2020	3	HienNTQ	Done
19	Function selected user code	03/07/2020	3	QuiT	Done
20	Function selected bill code	03/07/2020		HaoNS	Done
20	Login function code	06/07/2020	3	CuongPN	Done
21	Account creation function code	06/07/2020	3	CuongPN	Done
22	Cart code	06/07/2020	3	HaoNS	Done
23	Code search by price	06/07/2020	3	QuiT	Done
24	Search code by name	08/07/2020	3	HienNTQ	Done
25	Code page buy account Lien Quan	10/07/2020	3	HaoNS	Done
26	Code page buy account Lien Minh	10/07/2020	3	HaoNS	Done
27	Code page buy account Fifa	10/07/2020	3	QuiT	Done
28	Group discussion to include code	15/07/2020	5	HaoNS, HienNTQ, CuongPN, QuiT	Done
29	Testing and	17/07/2020	4	HaoNS,	Done



	fixcode			HienNTQ, CuongPN, QuiT	
30	Complete the code	20/07/2020	5	HaoNS, HienNTQ, CuongPN, QuiT	Done
31	Complete website	22/07/2020	5	HaoNS, HienNTQ, CuongPN, QuiT	Done
32	Deadline	25/07/2020	1		Done

Figure 2: Schedule



3. Diagram Gantt

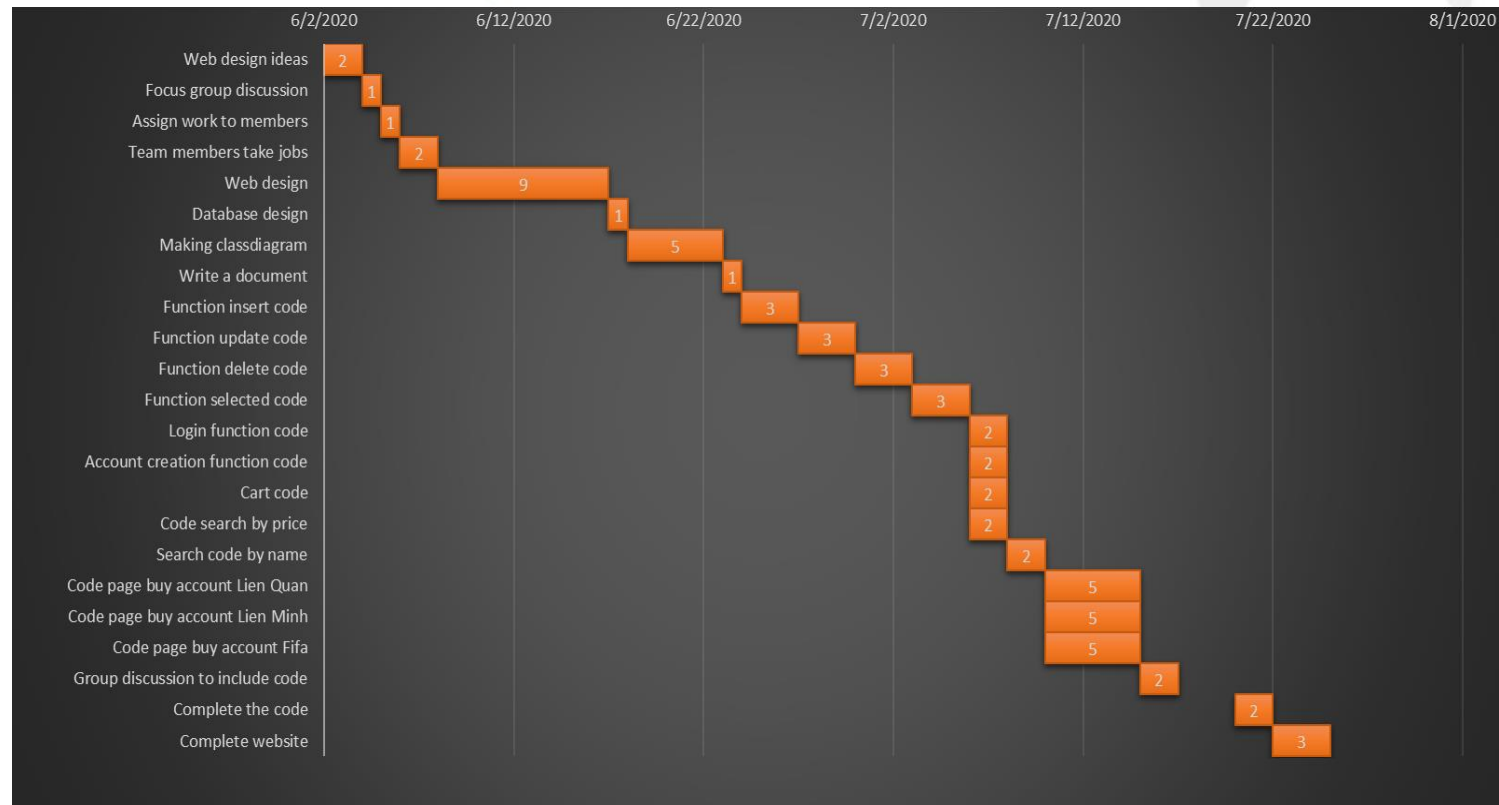
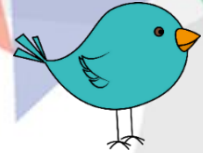


Figure 3: Gantt diagram



4. Meeting schedule

Meeting schedule			
Date	Content	Form	Time
22/06/2020	Discuss the function of insert, update account buy, user, bill	Offline	19:00 H
25/06/2020	Discuss delete and select product, user, bill, progress report	Offline	19:00 H
06/07/2020	Discuss login, create account, cart, search by price, search by name.	Offline	19:00 H
09/07/2020	Discuss created some page by account.	Offline	19:00 H
14/07/2020	Discuss interface design, fix bugs.	Offline	19:00 H
17/07/2020	Edit document and do PowerPoint	Offline	19:00 H

Figure 4: Meeting schedule

5. Link GitHub

https://github.com/nguyensonhao/Prj321_SE1403_Group4_WebsiteBanAccountGame



III. Chapter 2: Theory

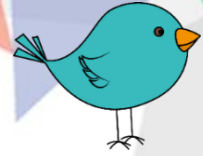
1. Introduction to JSP

a. What is JSP?

- It stands for **Java Server Pages**.
- It is a server side technology.
- It is used for creating web application.
- It is used to create dynamic web content.
- In this JSP tags are used to insert JAVA code into HTML pages.
- It is an advanced version of Servlet Technology.
- It is a Web based technology helps us to create dynamic and platform independent web pages.
- In this, Java code can be inserted in HTML/ XML pages or both.
- JSP is first converted into servlet by JSP container before processing the client's request.

b. Advantages of JSP over Servlet

- Extension to Servlet: JSP technology is the extension to Servlet technology. We can use all the features of the Servlet in JSP. In addition to, we can use implicit objects, predefined tags, expression language and Custom tags in JSP, that makes JSP development easy
- Easy to maintain: JSP can be easily managed because we can easily separate our business logic with presentation logic. In Servlet technology, we mix our business logic with the presentation logic.
- Fast Development: No need to recompile and redeploy. If JSP page is modified, we don't need to recompile and redeploy the



project. The Servlet code needs to be updated and recompiled have to change the look and feel of the application.

- Less code than Servlet: In JSP, we can use many tags such as action tags, JSTL, custom tags, etc. that reduces the code. Moreover, we can use EL, implicit objects, etc.

c. The Lifecycle of a JSP Page

- Translation of JSP page
- Compilation JSP page
- Classloading
- Instantiation (Object of the Generated Servlet is created).
- Initialization (the container invokes `jspInit()` method).
- Request processing (the container invokes `_jspService()` method).
- Destroy (the container invokes `jspDestroy()` method).

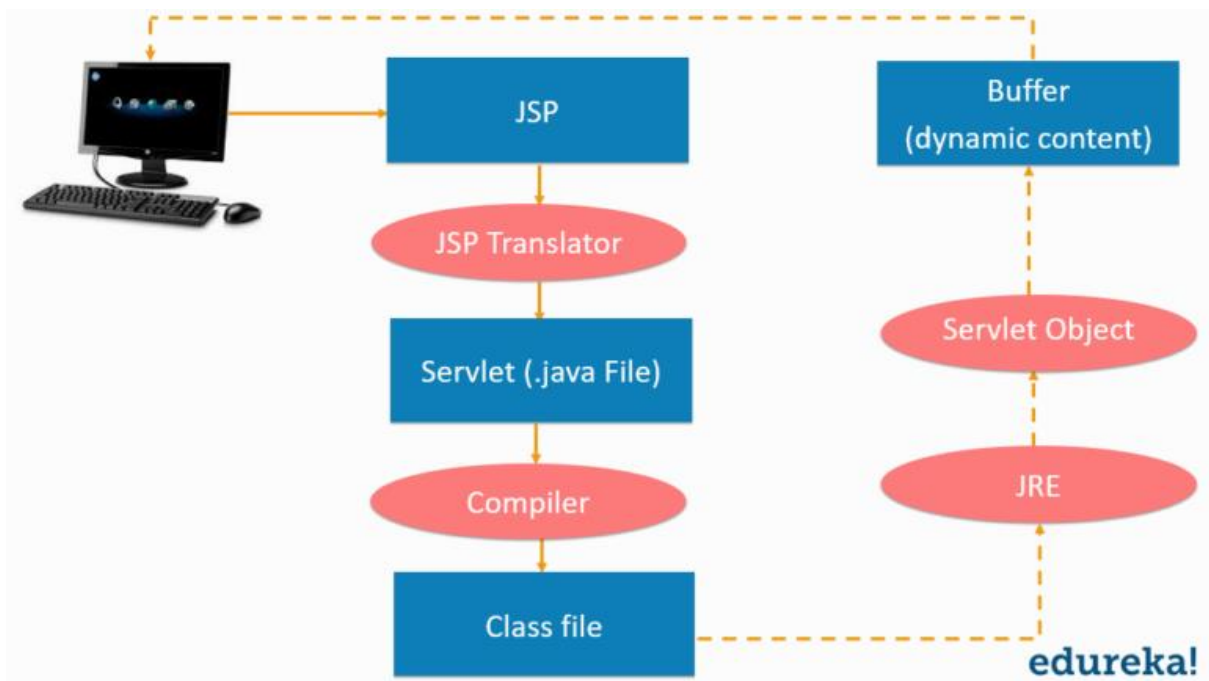




Figure 4: Introduction to JSP

2. Introduction to MVC in JSP

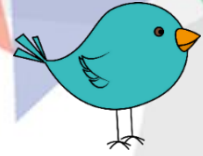
a. What is MVC?

- MVC is an architecture that separates business logic, presentation and data. In MVC, M stands for Model, V stands for View, C stands for controller.
- MVC is a systematic way to use the application where the flow starts from the view layer, where the request is raised and processed in controller layer and sent to model layer to insert data and get back the success or failure message.

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 according by the view.

b. The advantages of MVC

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

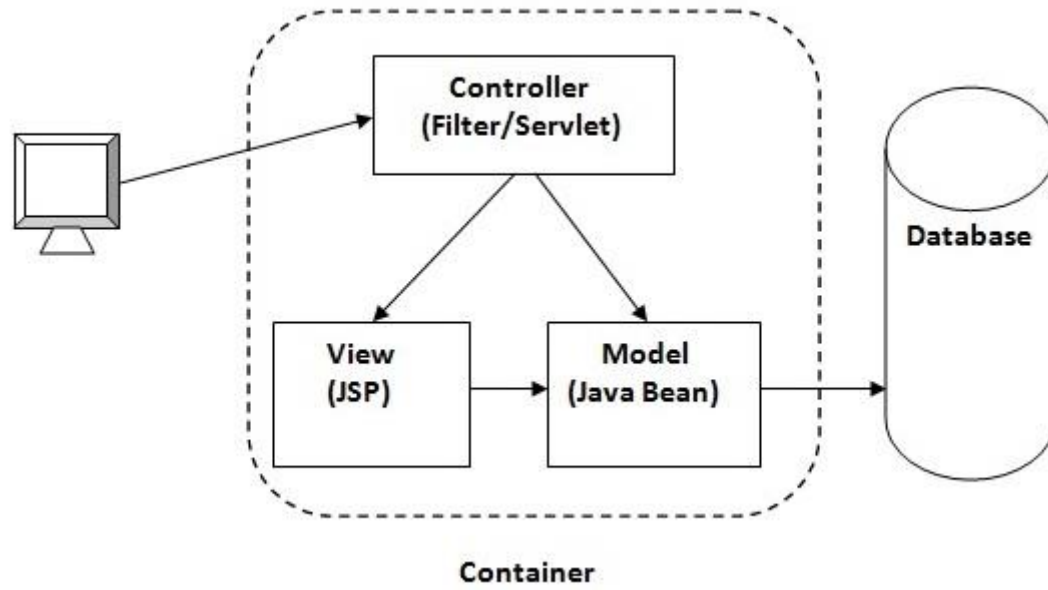
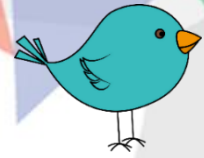


Figure 5: MVC Architecture



IV. Chapter 3: Architecture System

1. Client-Server Architectures

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 process the request and then resumes listening. Meanwhile, the slave performs all subsequent communication with the client.

Internally, the client component may consist of a ClientUI that forwards user requests to a controller component. The controller component forwards the request across a process or machine boundary to a RequestListener inside the server. The listener, which acts like a master, creates a RequestHandler slave and forwards the request to it:



2. Use-case Diagram

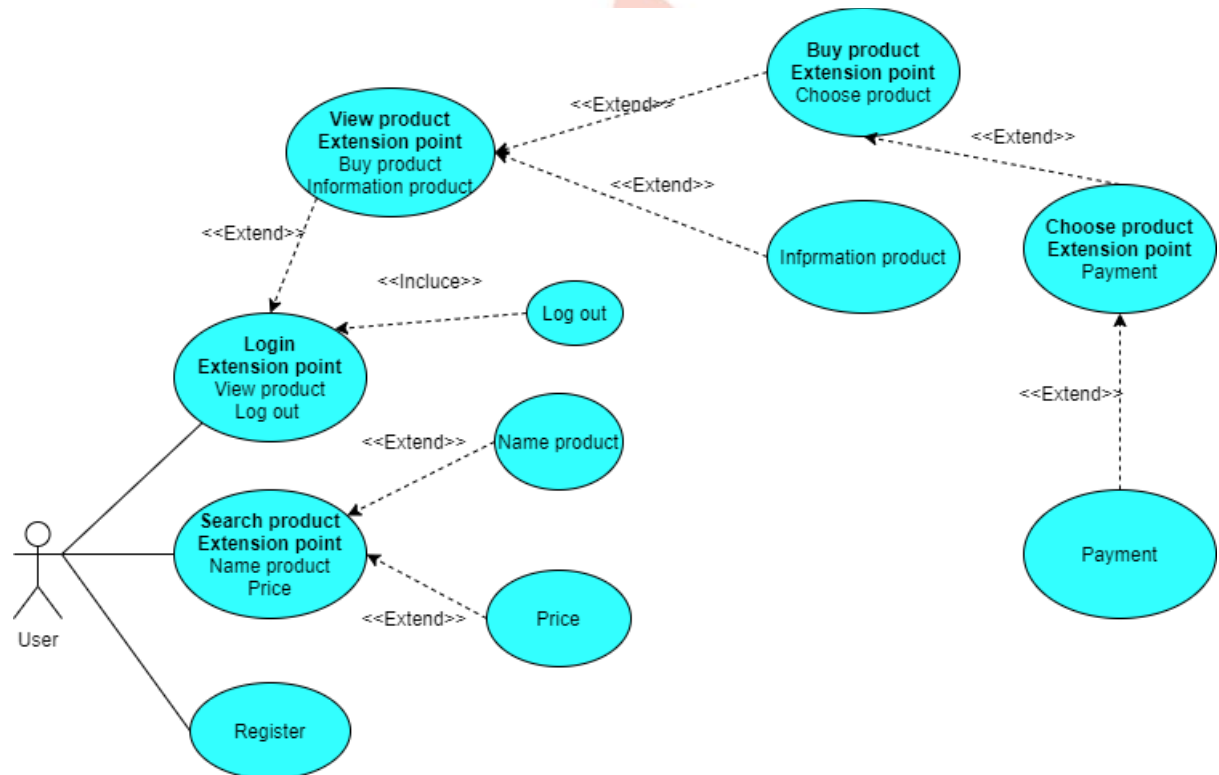


Figure 6: Use case Shop account game of User

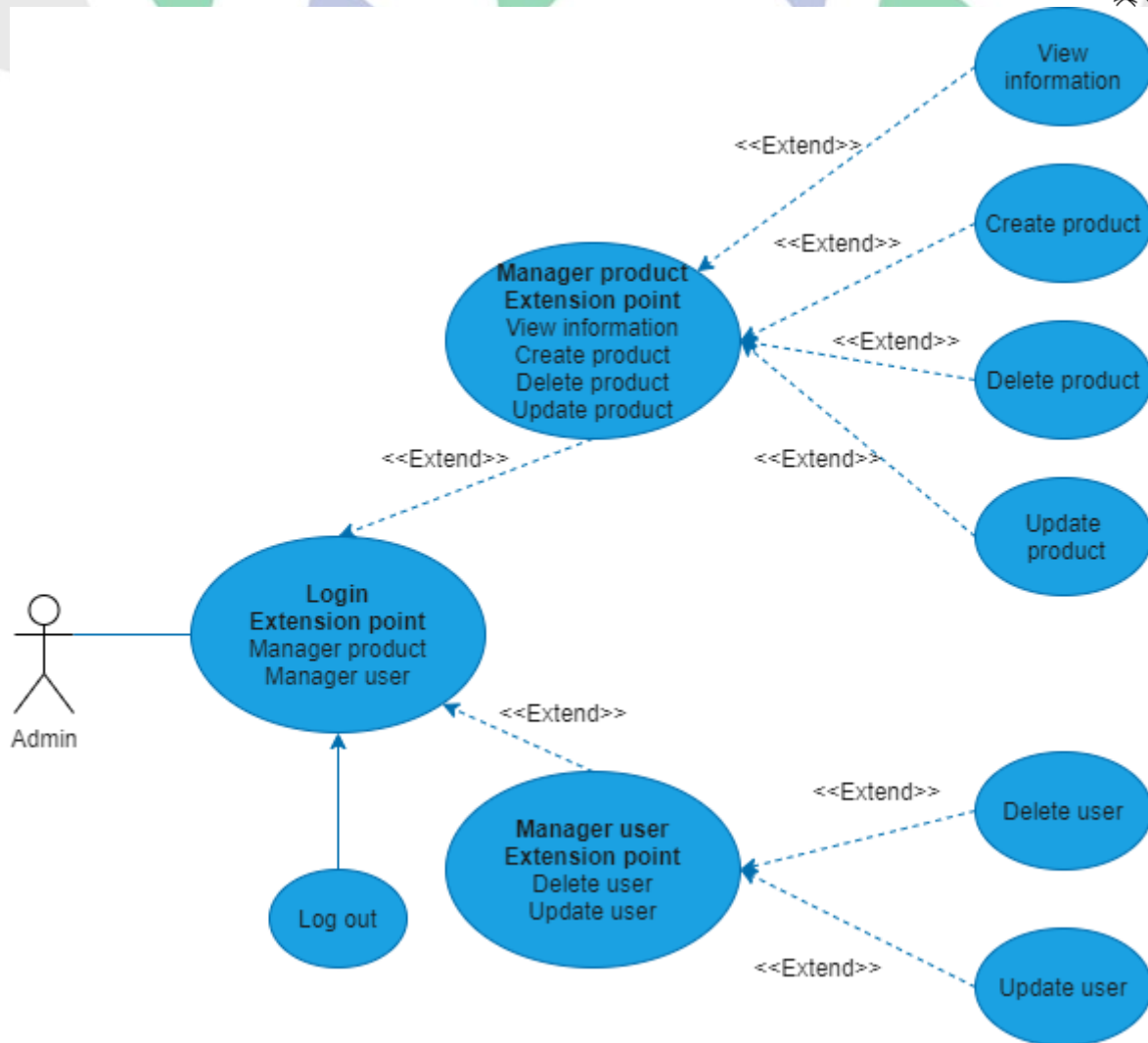
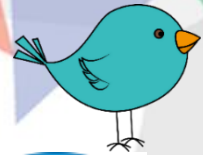


Figure7: Use case Shop account game of Admin



3. Class diagram

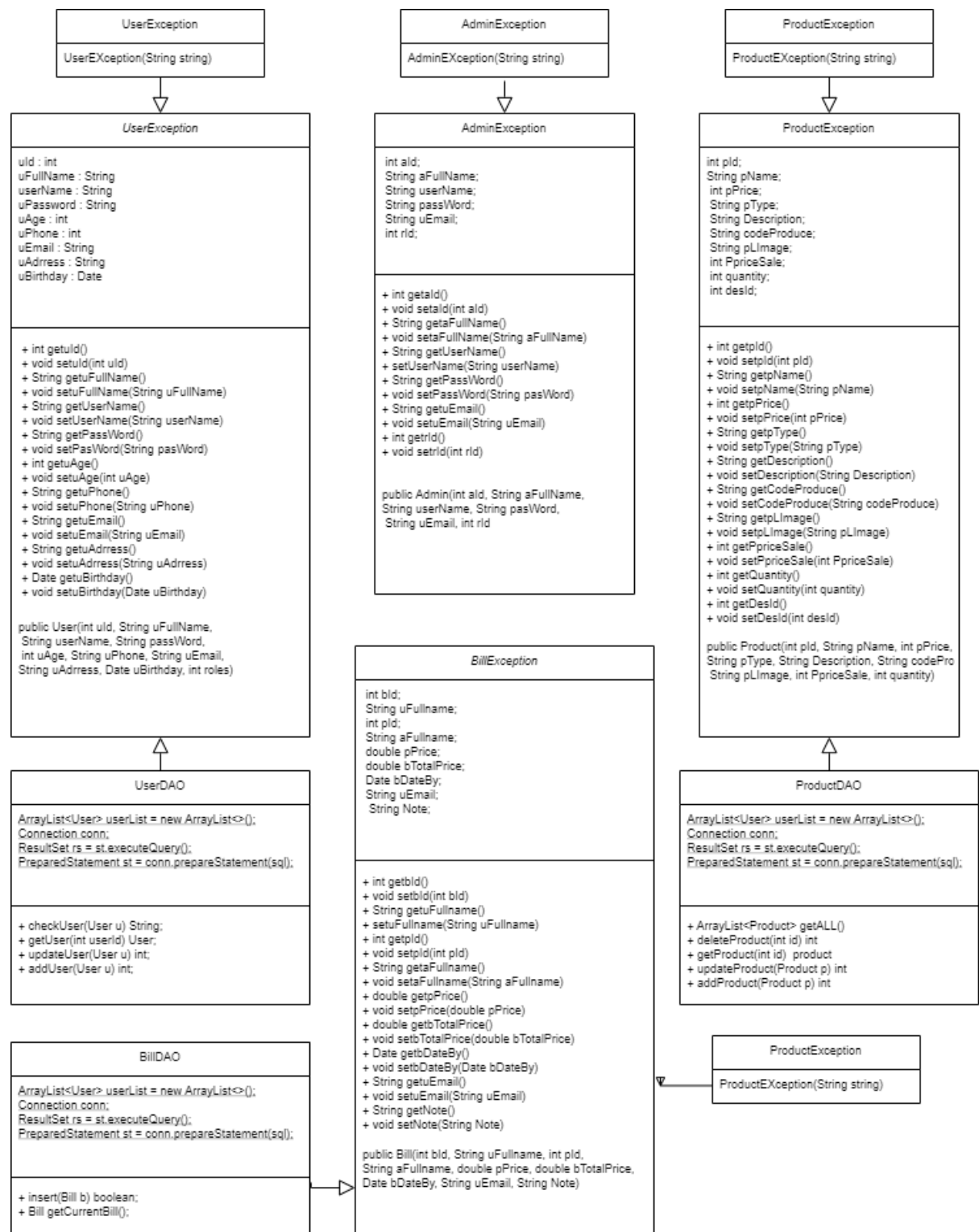
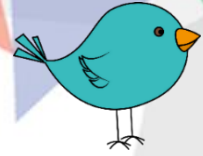


Figure7: Class diagram



4. Entity relationship diagram

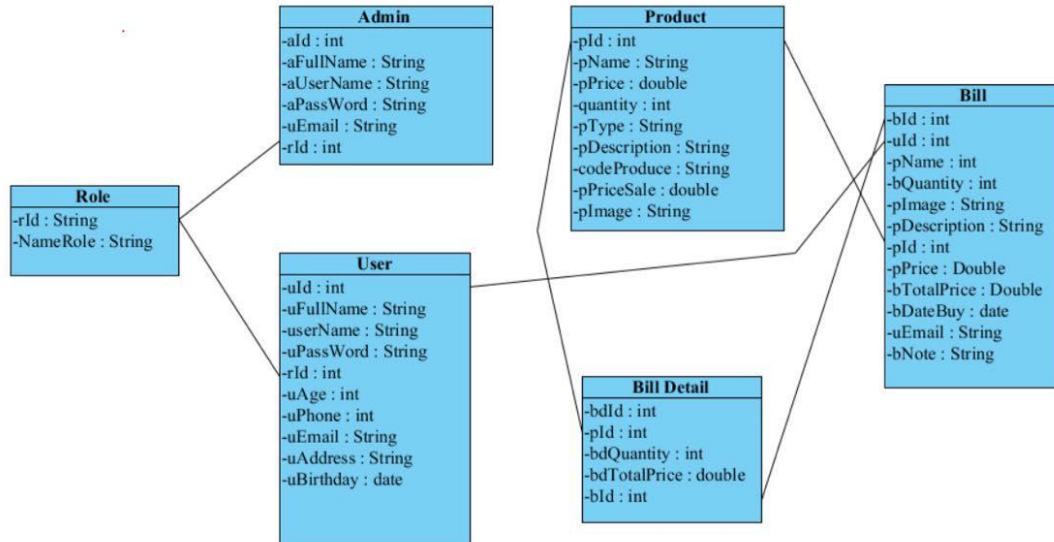
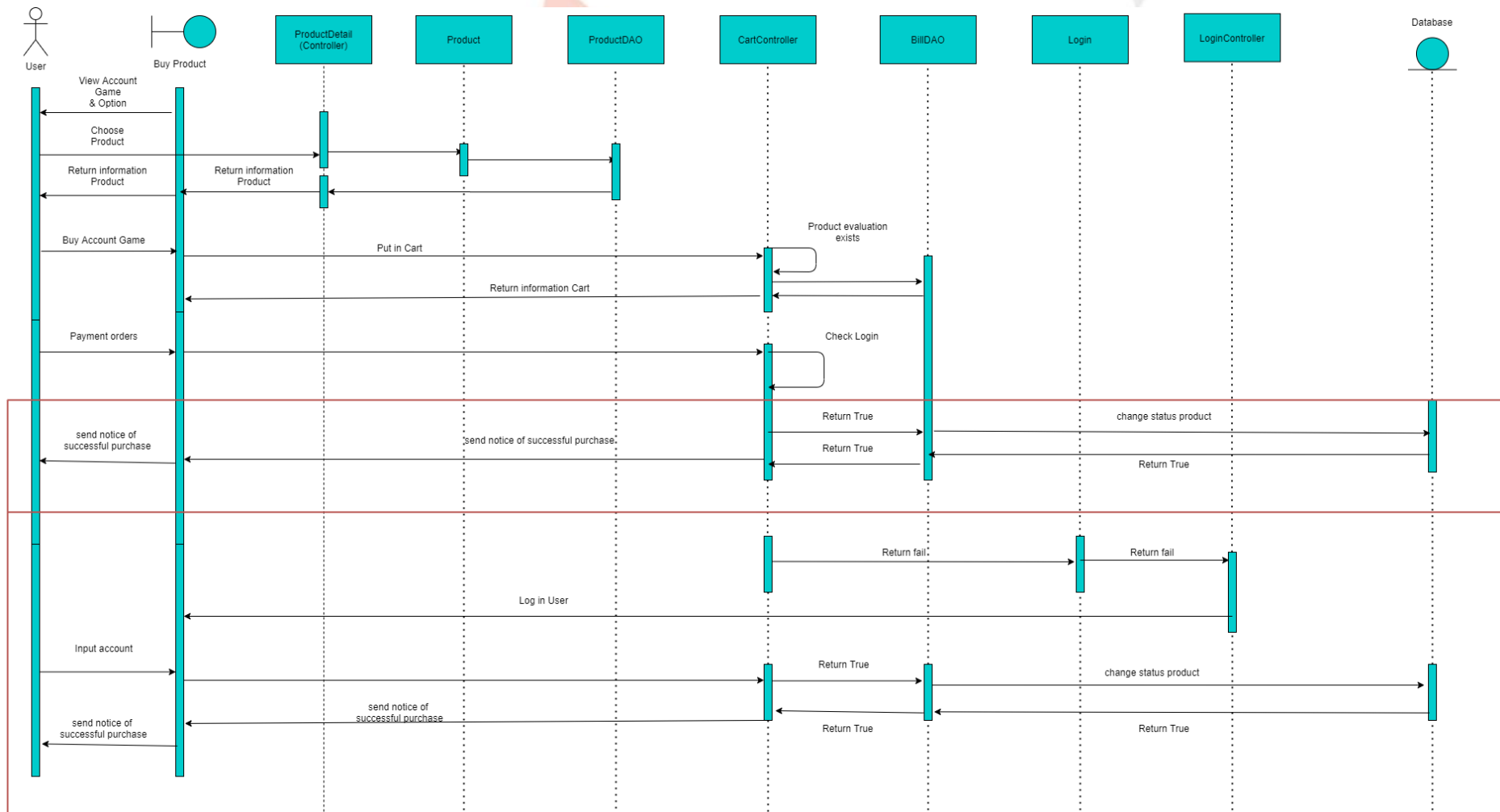
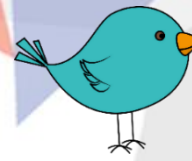


Figure7: Database diagram of Shop account game

5. Sequence diagram



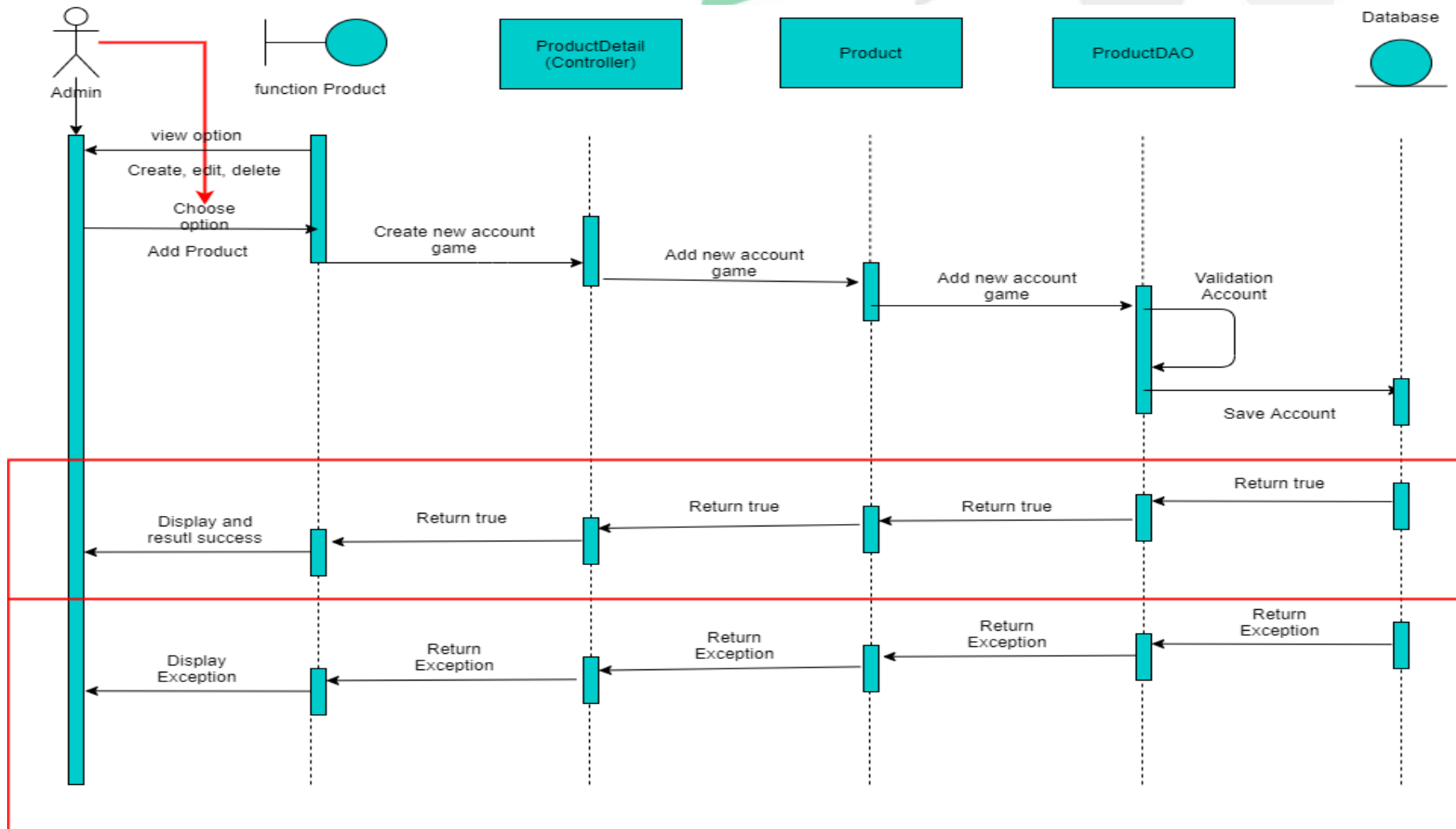
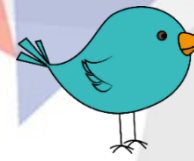


Figure 8: Sequence diagram



6. DFD

a. Data flow diagram symbol


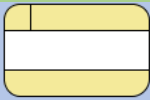


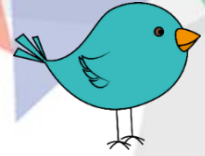
Symbol	Description
	Data Flow: Data flow are pipelines through the packets of information flow.
	Process: A Process or task performed by the system.
	Entity: Entity are object of the system. A source or destination data of a system.
	Data Store: A place where data to be stored.

Figure 9: Data flow diagram symbol



b. Contextual Level 0

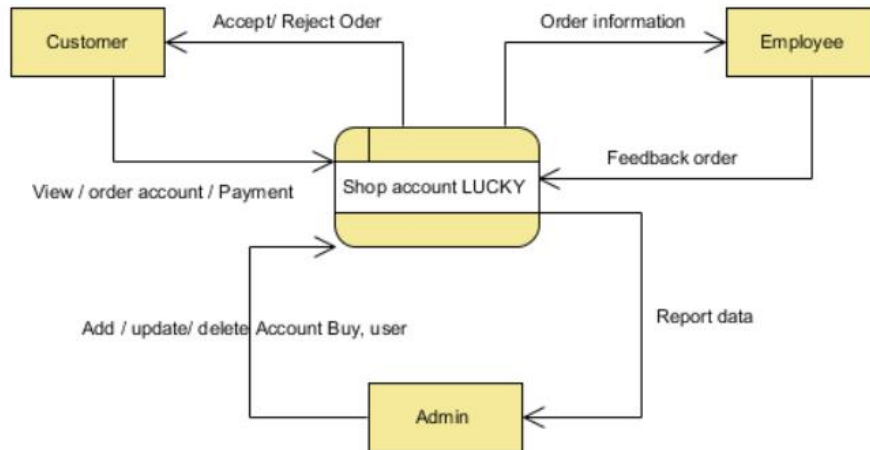


Figure10: Contextual Level 0



c. Level 1

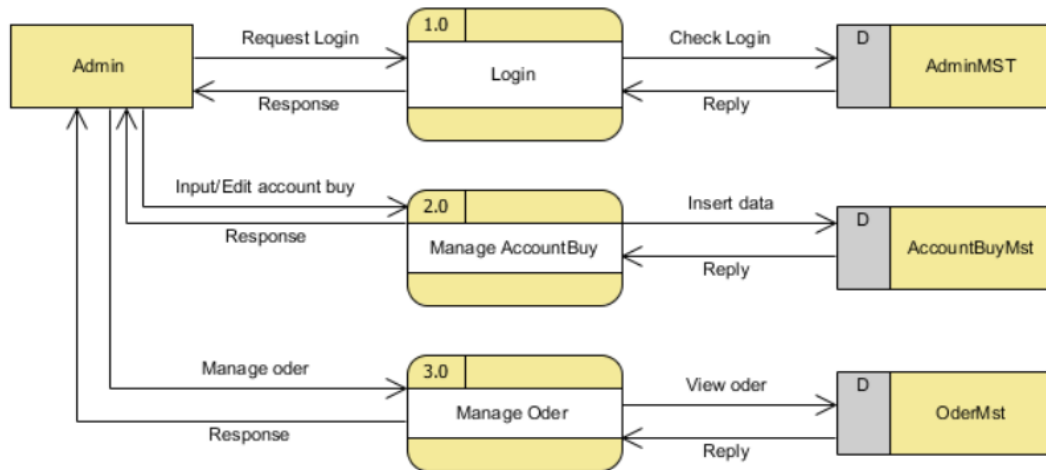


Figure 11: Admin Level 1

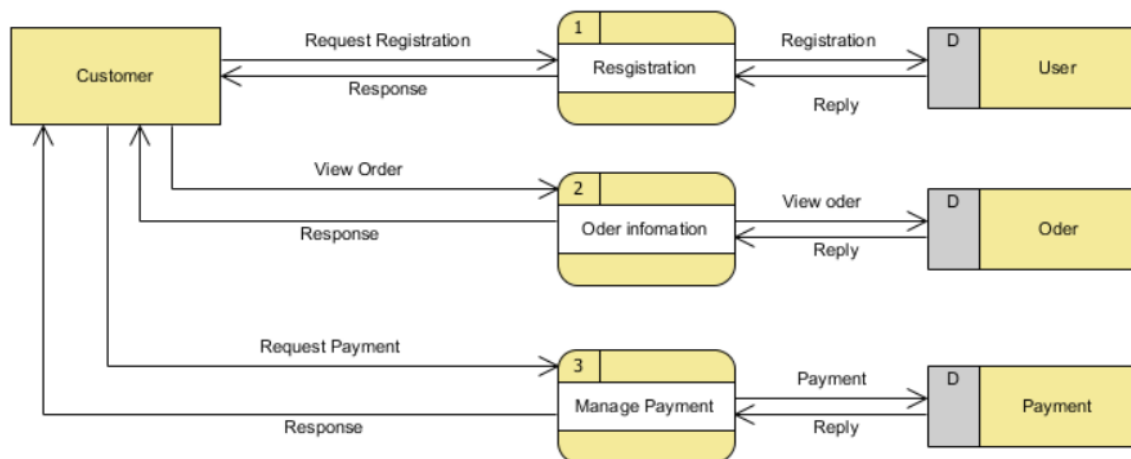
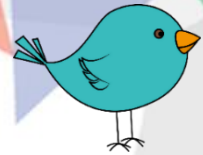


Figure 11: Customer Level 1



d. Level 2

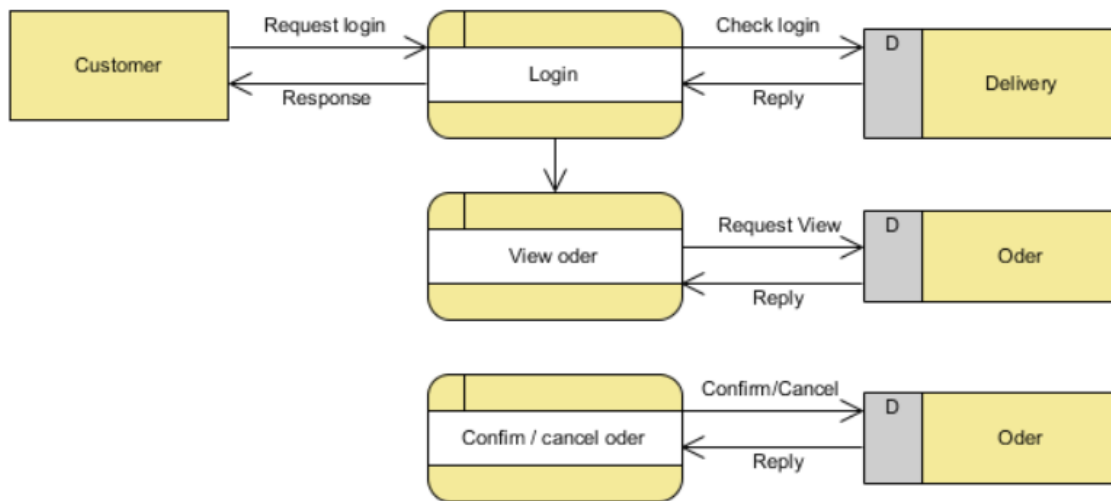


Figure 12: Customer level 2

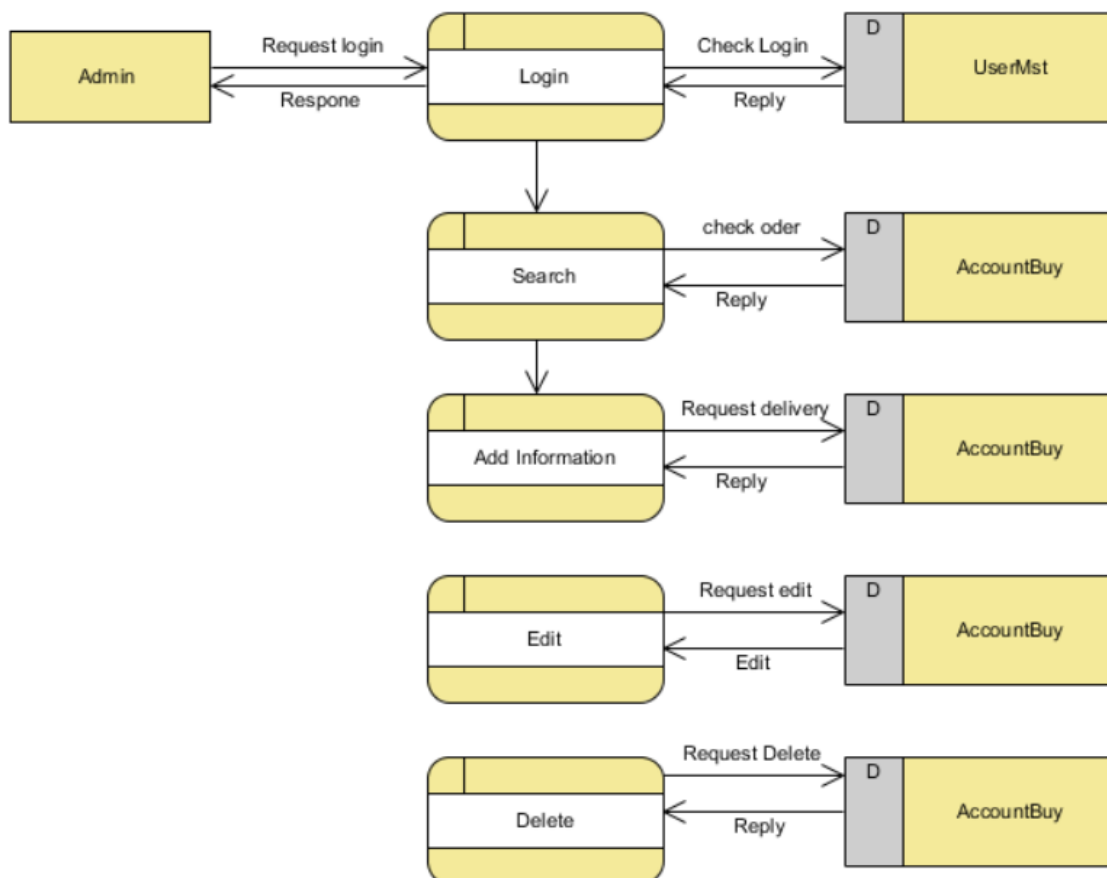


Figure 12: Admin level 2



V. Chapter 4: Functions, User Interfaces and Flow chart

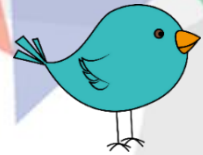
1. Functions

- Login
- Register
- Logout
- Add account buy
- Update account buy
- Delete account buy
- Search account buy
- Add to cart
- Show account buy with the same price
- Buy product send mail.

2. Table structure

Table 1. Account admin

Field Name	Data Type	Constraint	Description
ald	int	PRIMARY KEY	ID's admin
aFullName	varchar(50)	NOT NUL	Full name's admin
aUserName	varchar(50)	NOT NULL	Username's admin
aPassWord	varchar(50)	NOT NULL	Password's admin
uEmail	varchar(50)	NOT NULL	Email's admin
rld	int	NOT NULL	Role's admin


Table 2. Account User

Field Name	Data Type	Constraint	Description
uld	int	PRIMARY KEY	ID's customer
uFullName	varchar(50)	NOT NUL	Full name's customer
userName	varchar(50)	NOT NULL	Username's customer
uPassWord	varchar(50)	NOT NULL	Password's customer
rid	int	NOT NULL	Role's customer
uAge	int	NOT NULL	Age's customer
uPhone	int	NOT NULL	Phone's customer
uEmail	varchar(50)	NOT NULL	Email's customer
uAddress	varchar(50)	NOT NULL	Address's customer
uBirthday	date	NOT NULL	Birthday's customer

Table 3. Product

Field Name	Data Type	Constraint	Description
pId	int	PRIMARY KEY	ID's product
pName	varchar(50)	NOT NULL	Name's product
pPrice	int	NOT NULL	Price's product
quantity	int	NOT NULL	Quantity's product
pType	varchar(50)	NOT NULL	Type's product
pDescription	varchar(500)	NOT NULL	Description's product
codeProduce	varchar(100)	NOT NULL	code's product
PpriceSale	int	NOT NULL	Sale's product
pImage	varchar(150)	NOT NULL	Image's product
dId	int	NOT NULL	id's product



Table 4. Bill

Field Name	Data Type	Constraint	Description
bld	int	PRIMARY KEY	ID's Bill
uld	int	NOT NULL	ID's User
pName	varchar(50)	NOT NULL	Name's Product
bQuantity	int	NOT NULL	Quantity's Bill
pImage	varchar(200)	NOT NULL	Image's Product
pDescription	varchar(200)	NOT NULL	Description's Product
pId	int	NOT NULL	ID's Product
pPrice	int	NOT NULL	Price's Product
bTotalPrice	int	NOT NULL	TotalPrice's Bill
bDateBuy	date	NOT NULL	DateBuy's Bill
uEmail	varchar(50)	NOT NULL	Email's User
bNote	varchar(100)	NOT NULL	Note's Bill

Table 5. Billdetail

Field Name	Data Type	Constraint	Description
bdld	int	PRIMARY KEY	ID's Bill
pId	int	NOT NULL	ID's Product
bdQuantity	int	NOT NULL	Quantity's Bill
bdTotalPrice	int	NOT NULL	TotalPrice's Bill

Table 6. Descriptiondetail

Field Name	Data Type	Constraint	Description
dld	int	PRIMARY KEY	ID's DesCription
dDetail	Text	NOT NULL	Detail's Description
dInfo	Text	NOT NULL	Info's Description
dImage	varchar(50)	NOT NULL	Image's Description

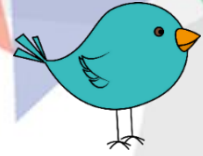


Table 7. Role

Field Name	Data Type	Constraint	Description
rld	int	NOT NULL	ID's Role
NameRole	varchar(50)	NOT NULL	Name's Role

3. User Interfaces

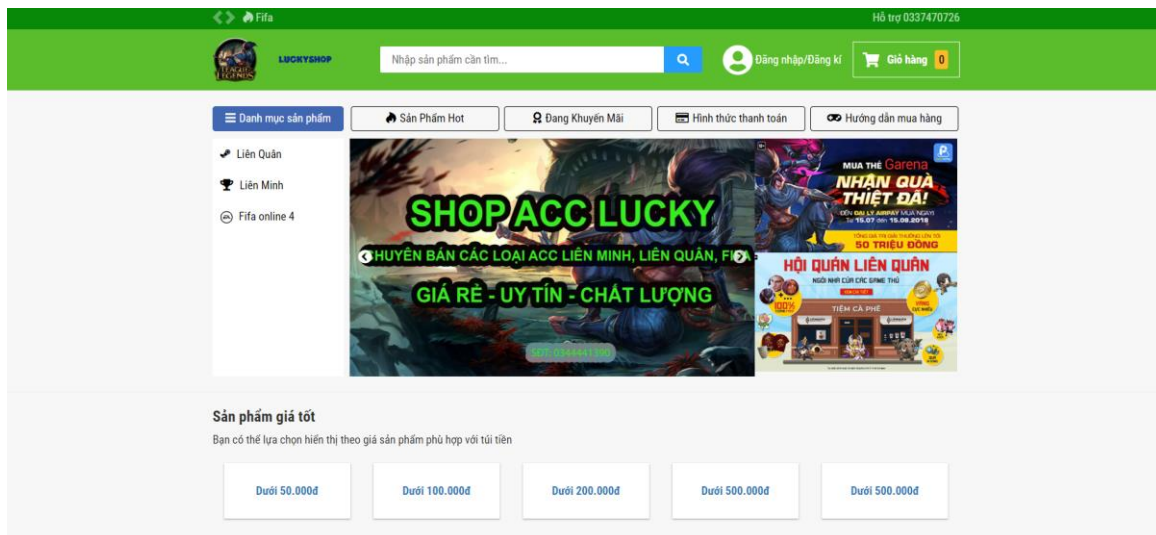


Figure 13: Home page

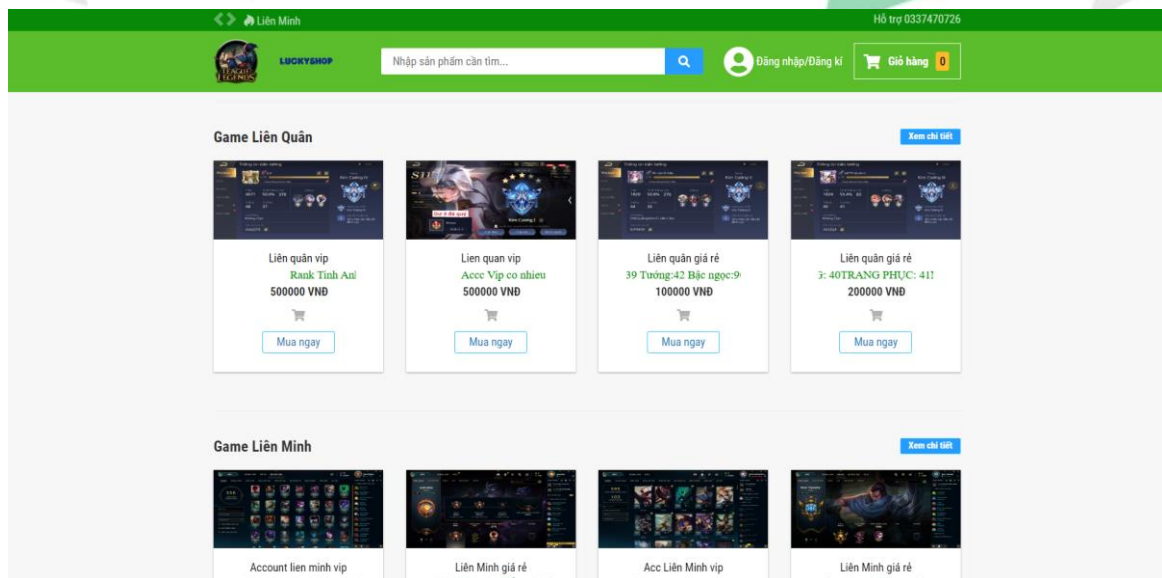


Figure 14: Shop page

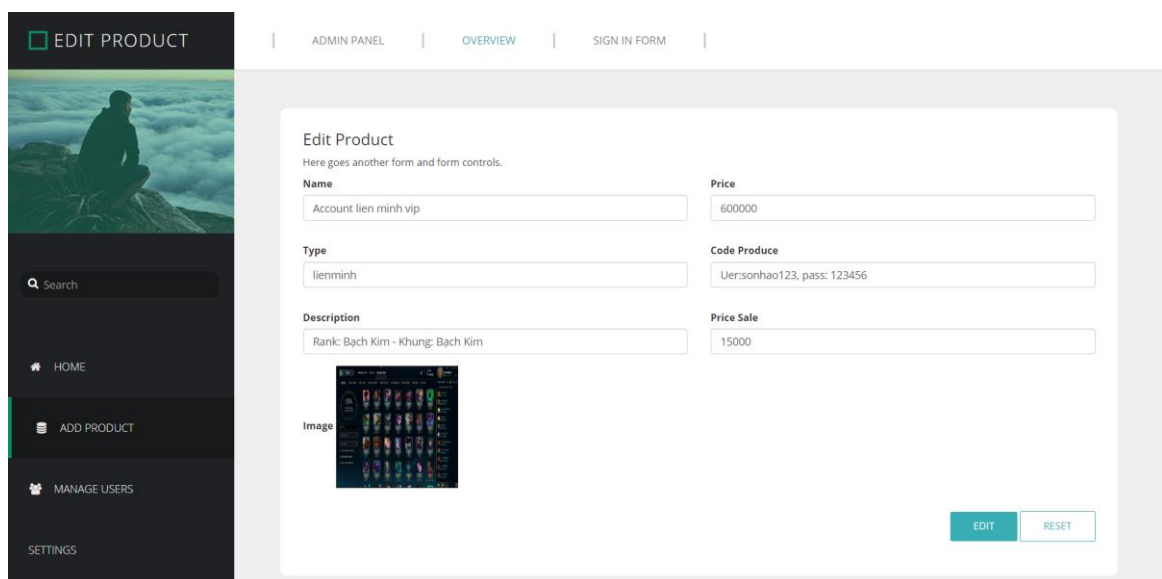


Figure 15: Update info account page

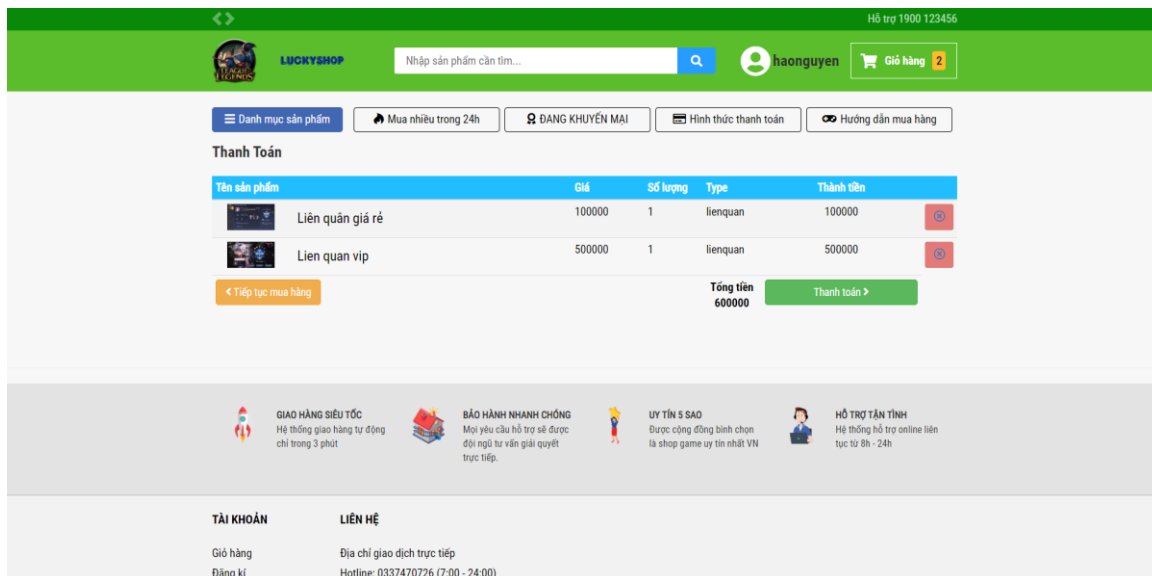
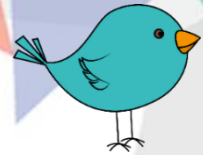


Figure 16: Cart page

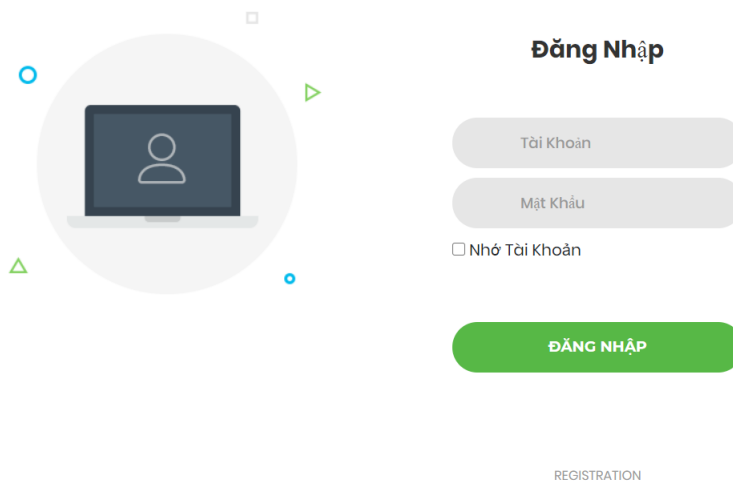


Figure 17: Login



EVENT REGISTRATION FORM

Full Name

Full Name

User Name

PassWord

Confirm
Passowrd

Age

Birthday

mm/dd/yyyy

Phone

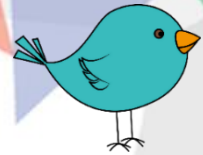
Email

Address

REGISTER

RESET

Figure 17: Registration



ADMIN

HOME

ADD PRODUCT

MANAGE USERS

SETTINGS

PAGES

SIGN OUT

ADMIN PANEL | OVERVIEW | SIGN IN FORM

Item id	Name	Price	Type	Description	Code Produce	Image	Price Sale	Edit
1	Account liên minh vip	600000	liên minh	Rank: Bạch Kim - Khung: Bạch Kim	Uer:sonhao123, pass: 123456		15000	Edit
2	Liên quân vip	500000	liên quân	Rank Tinh Anh 40 tướng 54 trang phục	user: haonguye24 pass: 123456		0	Edit
3	Fifa online 4 vip	1800000	fifa4	Mua Bán Acc Fifa Online 4 123 Tỷ GTDH Với Dân Team Việt Nam +6 Cực Chất Lượng	user: quanghien11 pass: 123456		0	Edit
4	Fifa online 4	350000	fifa4	Mua Bán Acc Fifa Online 4 8 Tỷ GTDH Với Dân Team +5 Với Ibrahimovic Ronaldo TC cùng dân team khủng	user: taolatao123 pass: 1234567		0	Edit
5	Liên	30000	liên minh	Acc 1MHT giá rẻ	user: thachou12345		15000	Edit

Figure 18: Admin home page

USER

HOME

ADD PRODUCT

MANAGE USERS

SETTINGS

PAGES

SIGN OUT

ADMIN PANEL | OVERVIEW | SIGN IN FORM

No	Full Name	User Name	PassWord	BirthDay	Age	Phone Number	Email	Address	Role	Option
1	Nguyen Son Hao	haonguyen	9d8cc04d36560d8bb56054f8f9354138	2000-01-24	19	0337470726	hao@gmail.com	ben tre	User	<div>Edit</div> <div>Delete</div>

Figure 19: Admin manager users



VI. Chapter 5: Conclusion

Thank mentor Luong Hoang Luong for helping us complete this project. The project is still at an early stage of lack of control, in the future we will develop more to make it more and more complete.