DANANG SOFTWARE CORPORATION

SOFTECH APTECH

– ☙🕮❧ –

PROJECT

GYM MANAGEMENT APPLICATION

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Group : **2**

Members : **Trần Xuân Quang**

Nguyễn Khắc Quang Thuận

Mai Sơn Tùng

Phạm Khắc Quang

Danang, December 10th, 2019

Gym Management

Group 2	
Group Member	Trần Xuân Quang Nguyễn Khắc Quang Thuận Mai Sơn Tùng Phạm Khắc Quang
Instructor	Mr. Nguyen Duc Thao

TEACHER'S EVALUATION

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I. ACKNOWLEDGEMENTS

First, we would like to thank the teachers who helped us make a successful project. Especially Mr. Nguyen Duc Thao was very enthusiastic to help us complete software projects. Thanks for the time he has "debug" or fix wrong for us, and teach us things unknown, help us to better understand and develop skills over the code for us to finish software the most successful way. Without the guidance of the teacher, then we think we will not be able to complete this software.

Although we have made many attempts, because of the limited time, the practice could not be able to avoid the mistakes and deficiencies. We hope teachers can consider and ignore our errors or deficiencies. And finally, we would like to offer many thanks to all our friends for their valuable suggestions and constructive feedbacks.

II. RATIONALE

In the world in general and in Vietnam in particular, information technology has to become a leading industry, an indispensable science and technology in life. The application of information technology to the social domains such as management, information, economics ... has created these applications are essentially alternative to manual management, minimizing the use of human resources in management, increasing efficiency, saving costs, time and effort.

When people all over the world have become so much concerned aout their health and diet, it is obvious that they continually seek out for gyms. So the application was created to make management easier and more efficient

III. INTRODUCTION

Gym Management is a system for computerizing the management of user for such tasks as management of customer lists, sell products, gym manager managemen, ...

IV. TARGETS AND OBJECTS OF THE RESEARCH

1. Research Targets

The main objective of the project is to create a gym management system to solve the difficulties in the management activities for the purpose of minimizing the use of human resources in management, increasing efficiency, saving costs, time and effort.

2. Research Objects

Our main objects are gym users and gym manager.

V. PROBLEM DEFINITION

1. Login
2. Account Management
3. Selling Category
4. Statistic
5. Customer Information Management
6. Product Management
7. Device Management
8. Salary Management
9. Finding Function
10. Change Password
11. Recovery Password

VI. THE TECHNOLOGY USED

1. Tools used

Eclipse , SQL Server 2014

2. Language Used

Java,SQL

VII. REQUIREMENT ATTRIBUTES

1.Critical Use Case Specification

USE CASE SPECIFICATION			
Use-case No.	UC01	Use-case Version	1.0
Use-case Name	Login		
Purpose: To manage account allows users to log into the management system Input: User login to the management system by entering the required fields and push button "Login". Output: User who log on to the system successfully, it will show up the Admin Frame if account role is admin,Main Frame if account role is member.			

USE CASE SPECIFICATION			
Use-case No.	UC02	Use-case Version	1.0
Use-case Name	Account Management		

Purpose:

Allow users to add, edit, delete the user of system.

Input:

User will add a customer by entering the required fields, select admin or user and push button “Add”

User will delete a customer by choose user in the list and push button “Delete”

User will edit information of a customer by choosing the user, then entering the required fields and push button “Edit”

Output:

User add a product, it will notify the user that has add successfully or not.

User delete a product, it will notify the user that has deleted successfully or not.

User edit a product, it will notify the user that has edit successfully or not.

USE CASE SPECIFICATION			
Use-case No.	UC03	Use-case Version	1.0
Use-case Name	Selling Category		
Purpose: Input: Output:			

USE CASE SPECIFICATION

Use-case No.	UC04	Use-case Version	1.0
Use-case Name	Statistic		

Purpose:

Allow users to statistic benefit from customer.

Input:

User choose the the time to statistic from when to when.

User choose the pakage (how many months).

User press “Find”.

Output:

User will see information if the data exists in the database corresponding the days and the pakage user choosed.

User will see nothing if the data didn’t exist in the database corresponding the days and the pakage user choosed.

USE CASE SPECIFICATION			
Use-case No.	UC05	Use-case Version	1.0
Use-case Name	Customer Information Management		

Purpose:

Allow users to add, delete, edit information of customer.

Input:

User will add a customer by entering the required fields and push button “Add”

User will delete a customer by choose customer in the list and push button “Delete”

User will edit information of a customer by choosing the customer, then entering the required fields and push button “Edit”

Output:

User add a customer, it will notify the user that has add successfully or not.

User delete a customer, it will notify the user that has deleted successfully or not.

User edit a customer, it will notify the user that has edit successfully or not.

USE CASE SPECIFICATION			
Use-case No.	UC06	Use-case Version	1.0
Use-case Name	Product Management		

Purpose:

Allow users to add, delete, edit information about product which sells to customer

Input:

User will add a product by entering the required fields and push button “Add”

User will delete product by choose product in the list and push button “Delete”

User will edit product by choosing the product, then making changes and push button “Edit”

Output:

User add a product, it will notify the user that has add successfully or not.

User delete a product, it will notify the user that has deleted successfully or not.

User edit a product, it will notify the user that has edit successfully or not.

USE CASE SPECIFICATION			
Use-case No.	UC07	Use-case Version	1.0

Use-case Name	Device Management

Purpose:

Allow users to add, delete, edit information about device for customer using.

Input:

User will add a device by choosing the device, entering the required fields and push button “Add”

User will delete device by choose the device in the list and push button “Delete”

User will edit device by choosing the device, then making changes and push button “Edit”

Output:

User add a product, it will notify the user that has add successfully or not.

User delete a product, it will notify the user that has deleted successfully or not.

User edit a product, it will notify the user that has edit successfully or not.

USE CASE SPECIFICATION			
Use-case No.	UC08	Use-case Version	1.0
Use-case Name	Salary Management		

Purpose:

Allow users to see and find the salary about employees.

Input:

User choose the the time to find information from when to when.

User choose the role (admin/member/all)

User press “Find”.

Output:

User will see information if the data exists in the database corresponding the days and the role user choosed.

User will see nothing if the data didn't exist in the database corresponding the days and the role user choosed.

USE CASE SPECIFICATION			
Use-case No.	UC09	Use-case Version	1.0
Use-case Name	Finding function		

Purpose:

Allow users to add, delete, edit information of subject.

Input:

User will add a subject by entering the required fields and push button "Add"

User will delete a subject by choose subject in subject list and push button "Delete"

User will edit information of a subject by entering the required fields and push button "Edit"

Output:

User add a subject, it will notify the user that has add successfully or not.

User delete a subject, it will notify the user that has deleted successfully or not.

User edit a subject, it will notify the user that has edit successfully or not.

USE CASE SPECIFICATION

Use-case No.	UC10	Use-case Version	1.0
Use-case Name	Change Password		

Purpose:

Allow users change password

Input:

User change password by entering the required fields include: user name, current password,new password and push button “Change”

Output:

System will notify the user that has changed successfully or not.

USE CASE SPECIFICATION			
Use-case No.	UC11	Use-case Version	1.0
Use-case Name	Recovery Password		

Purpose:

Allow users recovery password.

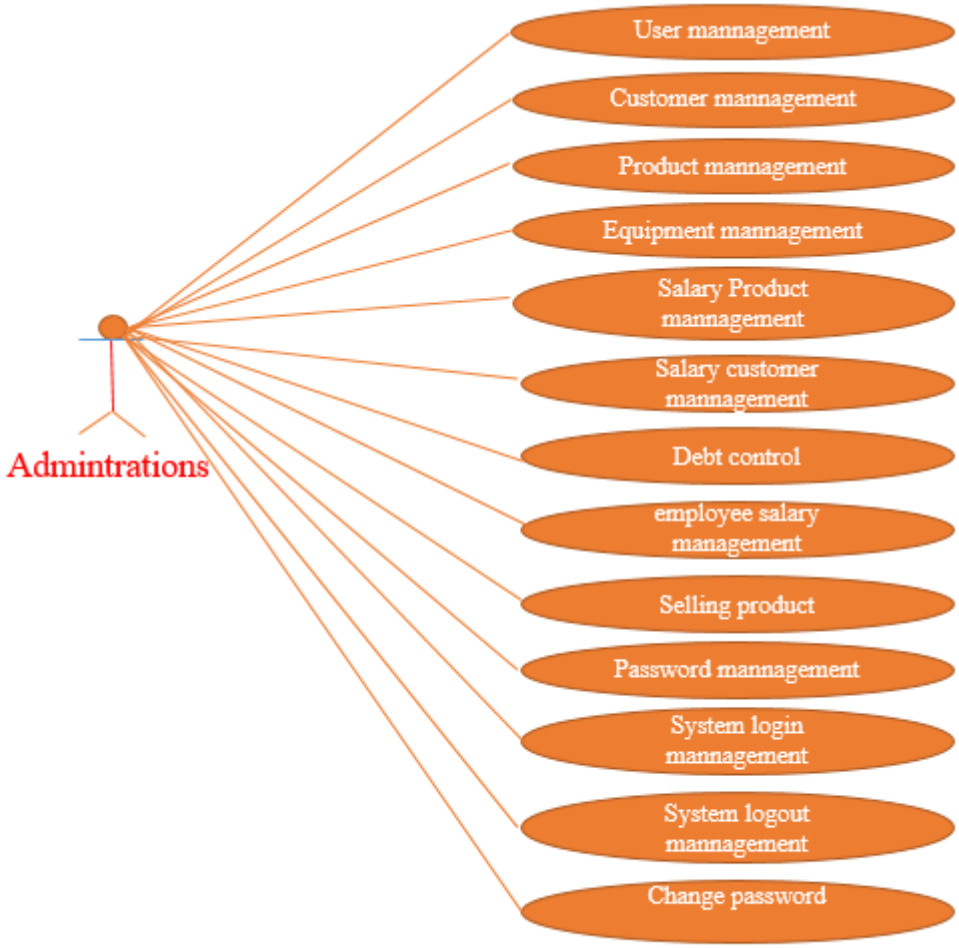
Input:

User recovery password by entering the required fields include: user name, email,secret code and push button “Submit”

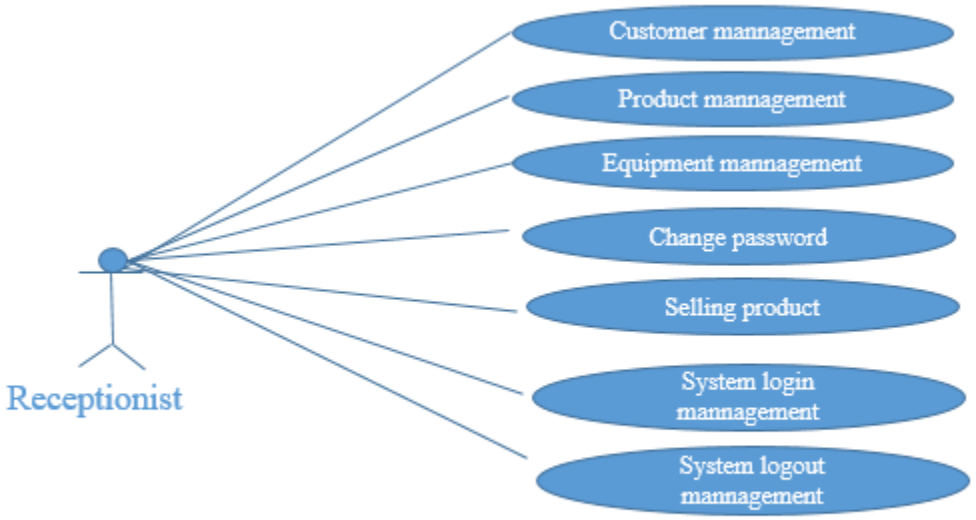
Output:

If these info user has type is right,the system will send password to user’s email

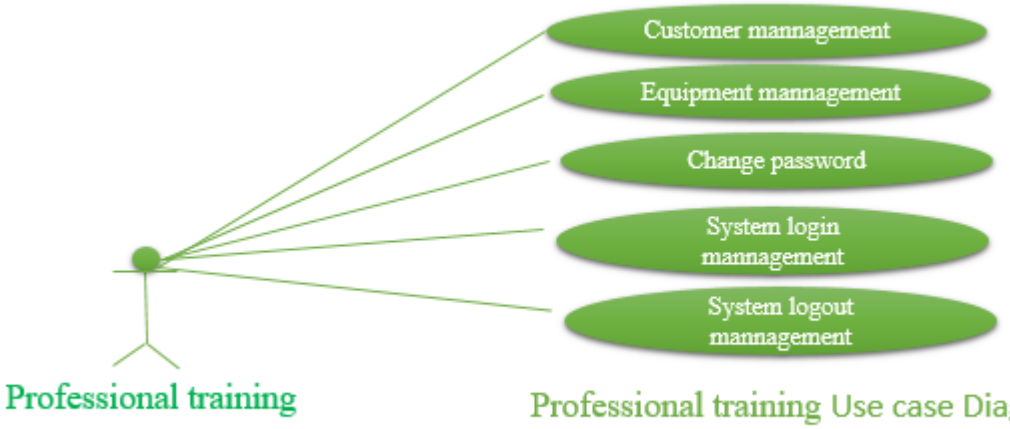
2. Use case Diagram



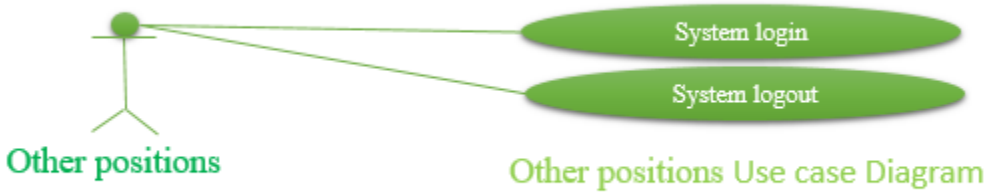
Administrator Use case Diagram



Receptionist Use case Diagram

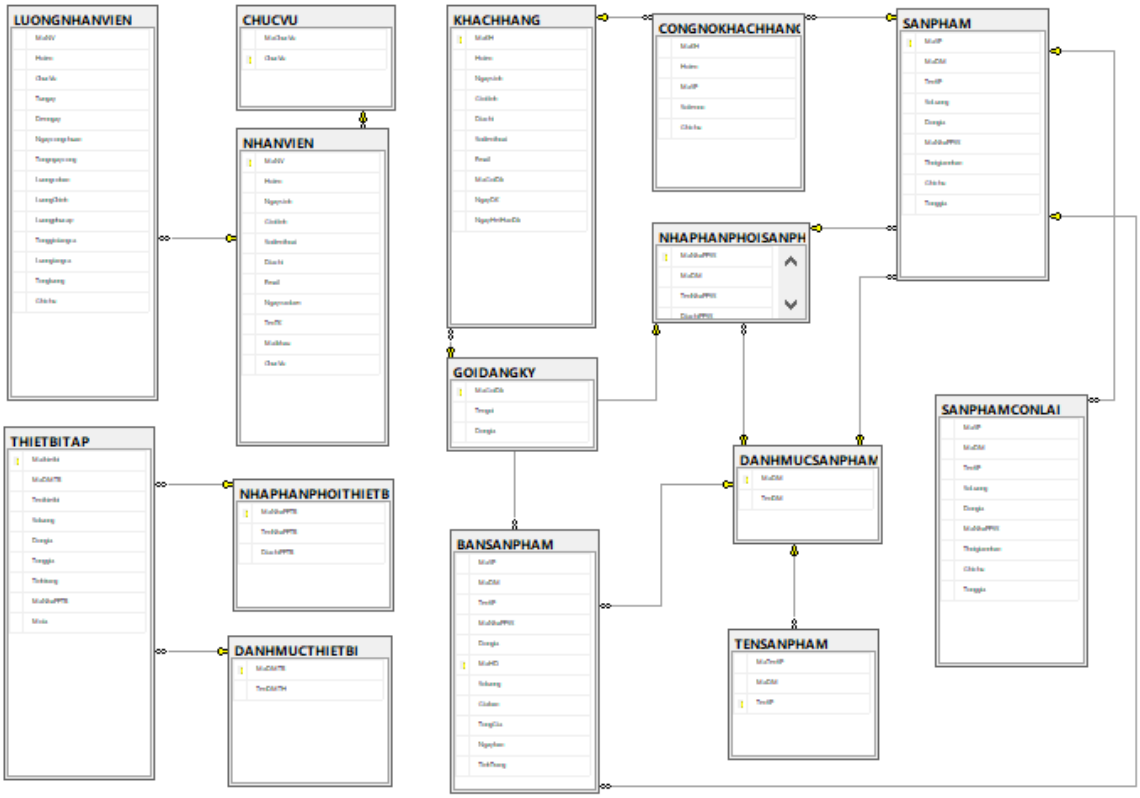


Professional training Use case Diagram



Other positions Use case Diagram

3. Entity Relationship Diagram



4. Table

4.1 Employees Table

NHANVIEN					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaNV	varchar	10		ID of employee
	Hoten	varchar	50		Name
	Ngaysinh	date			Date of birth
	Gioitinh	bit			Sex
	Sodienthoai	int			Phone Number
	Diachi	varchar	50		Address
	Email	varchar	30		Email
	Ngayvaolam	date			Date begin working
	TenTK	varchar	30		Account name
	Matkhau	varchar	30		Password
Foreign	ChucVu	varchar	20		Role

4.2 Role Table

CHUCVU					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	MaChucVu	varchar	20		ID of role
PRIMARY	ChucVu	varchar	20		Role

4.3 Salary Table

LUONGNHANVIEN					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Foreign	MaNV	varchar	10		ID of employee
	Hoten	varchar	50		Name
	ChucVu	varchar	20		Role
	Tungay	date			From date
	Denngay	date			To date
	Ngaycongchuan	int			Date plus
	Tongngaycong	int			Total of date working
	Luongcoban	float			Basic Salary
	LuongChinh	float			Salary
	Luongphucap	float		yes	Difficult Salary
	Tonggiotangca	float		yes	Total bonus
	Luongtangca	float		yes	Salary bonus
	Tongluong	float			Total all
	Ghichu	nvarchar	200	yes	Description

4.4 Register Table

GOIDANGKY					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaGoiDk	varchar	20		ID of Register
	Tengoi	varchar	50		Name of Register
	Dongia	int			Unit price

4.5 Customer Table

KHACHHANG					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaKH	varchar	10		ID of Customer
	Hoten	varchar	50		Name Customer
	Ngaysinh	date			Date of birth
	Gioitinh	bit			Sex
	Diachi	varchar	50	yes	Address
	Sodienthoai	int		yes	Phone Number
	Email	varchar	30	yes	Email
FOREIGN	MaGoiDk	varchar	20		ID of Register
	NgayDK	date			Date Register
	NgayHetHanDk	date			Date expire

4.6 Category Product Table

DANHMUCSANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaDM	varchar	10		ID of Category
	TenDM	varchar	50		Name of Category

4.7 Product Name Table

TENSANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	MaTenSP	varchar	10		ID of Product
Foreign	MaDM	varchar	10		ID of Category
Primary	TenSP	varchar	30		Product Name

4.8 Provider Table

NHANPHANPHOISANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaNhaPPSS	varchar	10		ID of Provider
Foreign	MaDM	varchar	10		ID of Category
	TenNhaPPSS	varchar	50		Date of Birth
	DiachiPPSS	nvarchar	50		Address of Provider

4.9 Product Details Table

SANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaSP	varchar	10		ID of Product
Foreign	MaDM	varchar	10		ID of Category
Foreign	TenSP	varchar	30		Product Name
	SoLuong	int			Quantity
	Dongia	float			Unit price
Foreign	MaNhaPPSS	varchar	10		ID of Provider
	Thoigiannhan	date			Time receive
	Ghichu	varchar	200	yes	Note
	Tonggia	float			Total All

4.10 Leftover Product Table

SANPHAMCONLAI					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Foreign	MaSP	varchar	10		ID of Product
	MaDM	varchar	10		ID of Category
	TenSP	varchar	30		Product Name
	SoLuong	int			Quantity
	Dongia	float			Unit price
	MaNhaPPSS	varchar	10		ID of Provider
	Thoigiannhan	date			Time receive
	Ghichu	varchar	200	yes	Note
	Tonggia	float			Total All

4.11 Selling Product Table

BANSANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Foreign	MaSP	varchar	10		ID of Product
Foreign	MaDM	varchar	10		ID of Category
	TenSP	varchar	30		Product Name
Foreign	MaNhaPPSS	varchar	10		ID of Provider
	Dongia	float			Unit price
Primary	MaHD	varchar	10		ID of selling product
	Thoigiannhan	date			Date Receive
	SoLuong	int			Quantity
	Giaban	float			Price
	Tonggia	float			Total All
	Ngayban	date			Date Sell
	TinhTrang	varchar	20		Status

4.12 Device Name Table

DANHMUCTHIETBI					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaDMTB	varchar	10		ID of Device Name
	TenDMTB	varchar	50		Device Name

4.13 Device Provider Table

NHANPHANPHOITHIETBI					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaNhaPPTB	varchar	10		ID of Provider
	TenNhaPPTB	varchar	50		Name of Provider
	DiachiPPTB	varchar	50		Address of Provider

4.14 Device Table

THIETBITAP					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	Mathietbi	varchar	10		ID of Device
Foreign	MaDMTB	varchar	10		ID of Device Name
	Tenthietbi	varchar	50		Device Name
	SoLuong	int			Quantity
	Dongia	int			Unit Price
	Tonggia	int			Totall all
	Tinhtrang	varchar	20		Status
Foreign	MaNhaPPTB	varchar	20		ID of Provider
	Mota	varchar	200	yes	Description

4.15 Debt Customer Table

CONGNOKHACHHANG					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
Primary	MaKH	varchar	10		ID of Customer
	Hoten	varchar	50		Name
	MaSP	varchar	10		ID of Product
	Sotienno	int			Debt money
	Ghichu	nvarchar	200	yes	Note

5. View

5.1 Customer registration view

VIEW_DANGKIKHACHHANG					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	MaKH	varchar	10		ID of Customer
	Hoten	varchar	50		Name
	Ngaysinh	date			Date and birth
	Gioitinh	bit			Dender
	MaGoiDk	Varchar	10		Note
	Tengoi	Varchar	10		Package
	NgayDK	date			Date Register
	NgayHetHanDk	date			Date expire
	Sodienthoai	int			Number phone
	Diachi	varchar	50	yes	Address
	Email	varchar	30	yes	Email

5.2 View_SanPham

VIEW_SANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	MaSP	varchar	10		ID of Product
	MaDM	varchar	10		ID of Category
	TenDM	varchar	50		Name of Category
	TenSP	varchar	30		Product Name
	MaNhaPPSS	varchar	10		ID of Provider
	TenNhaPPSS	varchar	50		Date of Birth
	SoLuong	int		yes	Quantity
	Dongia	float			Unit price
	Thoigiannhan	date			Time receive
	Ghichu	varchar	200	yes	Note
	Tonggia	float		yes	Total All

5.3 View_ThietBi

VIEW_THIETBI					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	Mathietbi	varchar	10		ID of Device
	MaDMTB	varchar	10		ID of Device Name
	TenDMTB	varchar	50		Device Name
	Tenthietbi	varchar	50		Device Name
	SoLuong	int		yes	Quantity
	Dongia	int		yes	Unit Price
	Tonggia	int		yes	Totall all
	Tinhtrang	varchar	20		Status
	MaNhaPPTB	varchar	10		ID of Provider
	TenNhaPPTB	varchar	50		Name of Provider
	Mota	varchar	200	yes	Description

5.4 View_DoanhThuSanPham

VIEW_DOANHTHUSANPHAM					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	MaHD	varchar	10		ID of selling product
	MaSP	varchar	10		ID of Product
	MaDM	varchar	10		ID of Category
	TenDM	varchar	50		Name of Category
	TenSP	varchar	30		Product Name
	Dongia	float			Unit price
	SoLuong	int		yes	Quantity
	Giaban	float			Price
	Tonggia	float			Total All
	Ngayban	date			Date Sell
	TinhTrang	varchar	20		Status
	MaNhaPPTB	varchar	10		ID of Provider
	TenNhaPPTB	varchar	50		Name of Provider

5.5 View_DoanhThuKhachHang

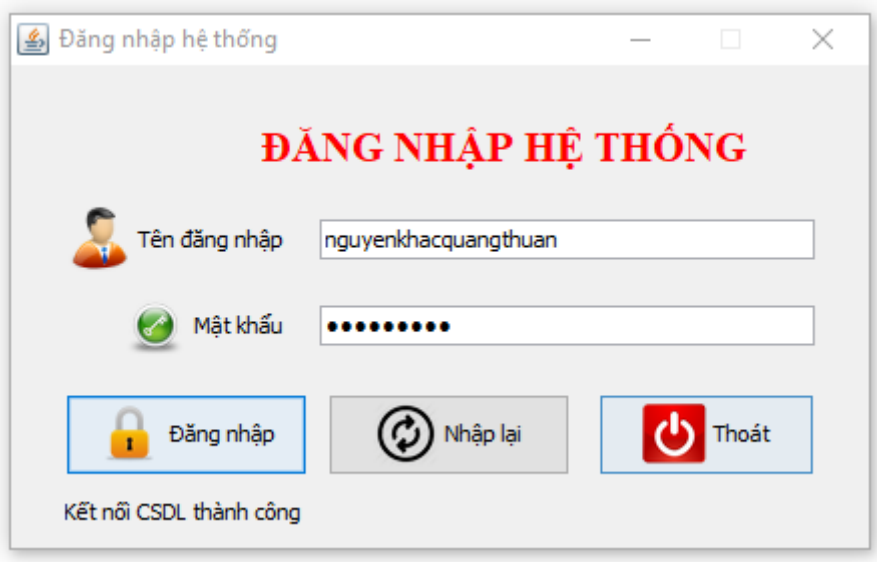
VIEW_DOANHTHUKHACHHANG					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	Hoten	varchar	50		Name
	MaGoiDk	varchar	20		ID of Register
	Tengoi	varchar	50		Name of Register
	Dongia	int		yes	Unit price
	NgayDK	date			Date Register
	NgayHetHanDk	date			Date expire

5.6 View_CongNoKhachHang

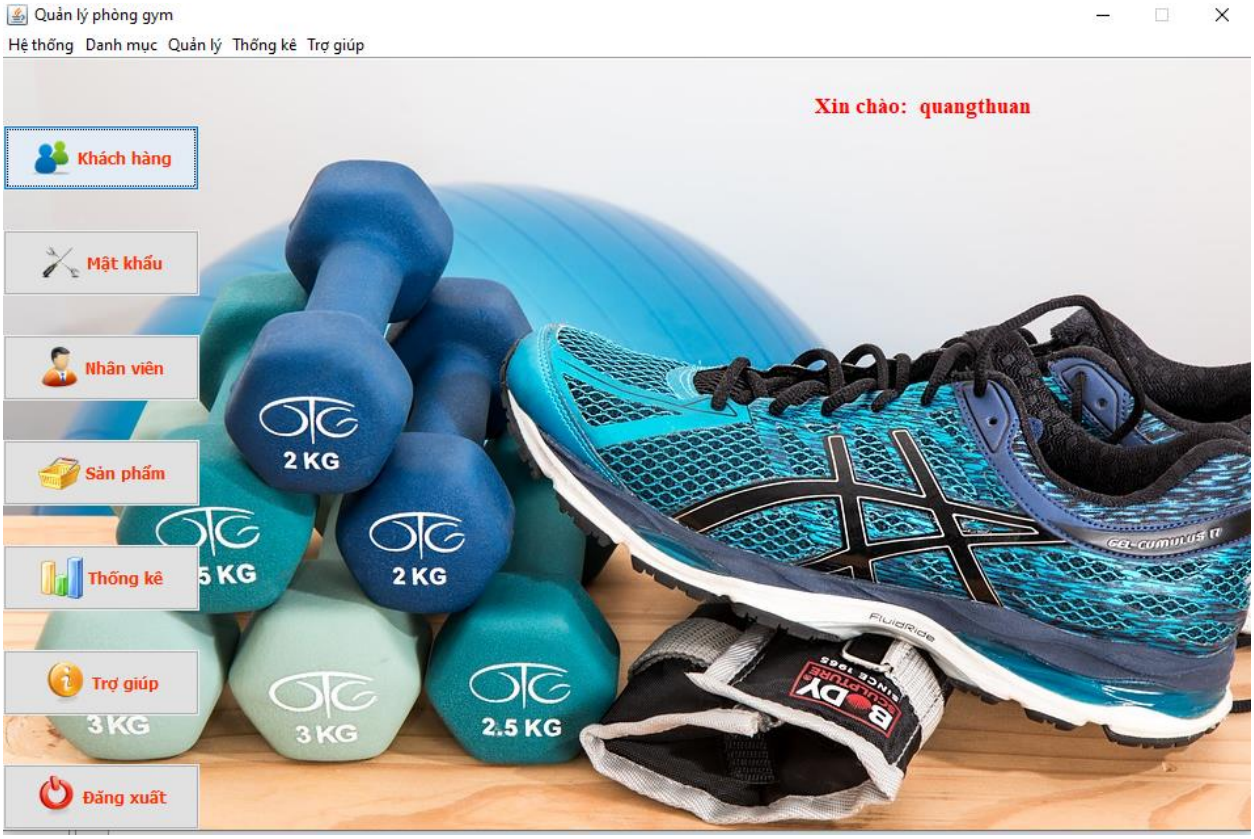
VIEW_CONGNOKHACHHANG					
Key	**Field Name**	**Data Type**	**Length**	**Null**	**Description**
	MaKH	varchar	10		ID of Customer
	Hoten	varchar	50		Name
	MaSP	varchar	10		ID of Product
	TenSP	varchar	30		Name of Product
	Sotienno	int			Debt money
	Ghichu	nvarchar	200	yes	Note

VIII. IMAGE OF THE SOFTWARE

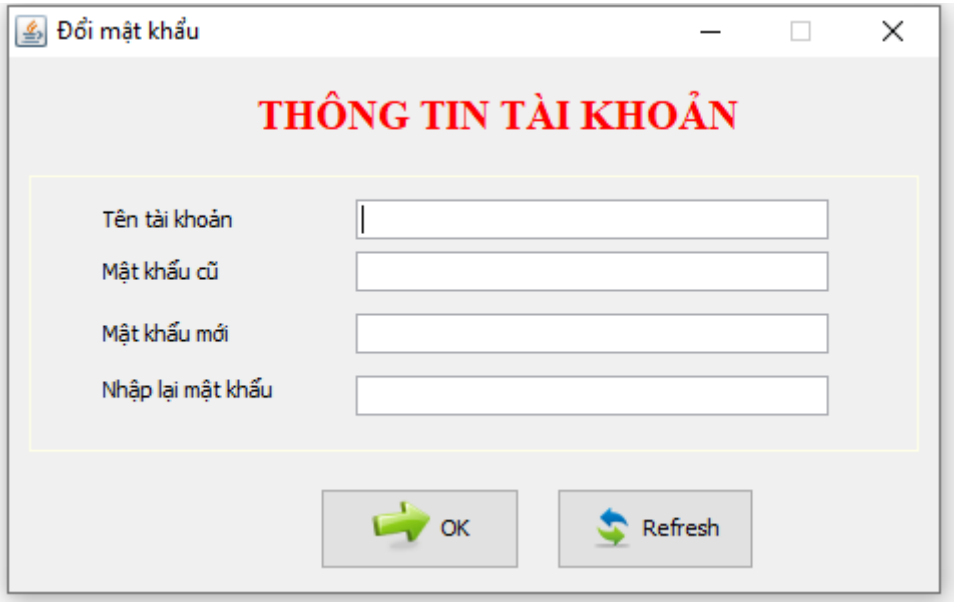
1. Login form



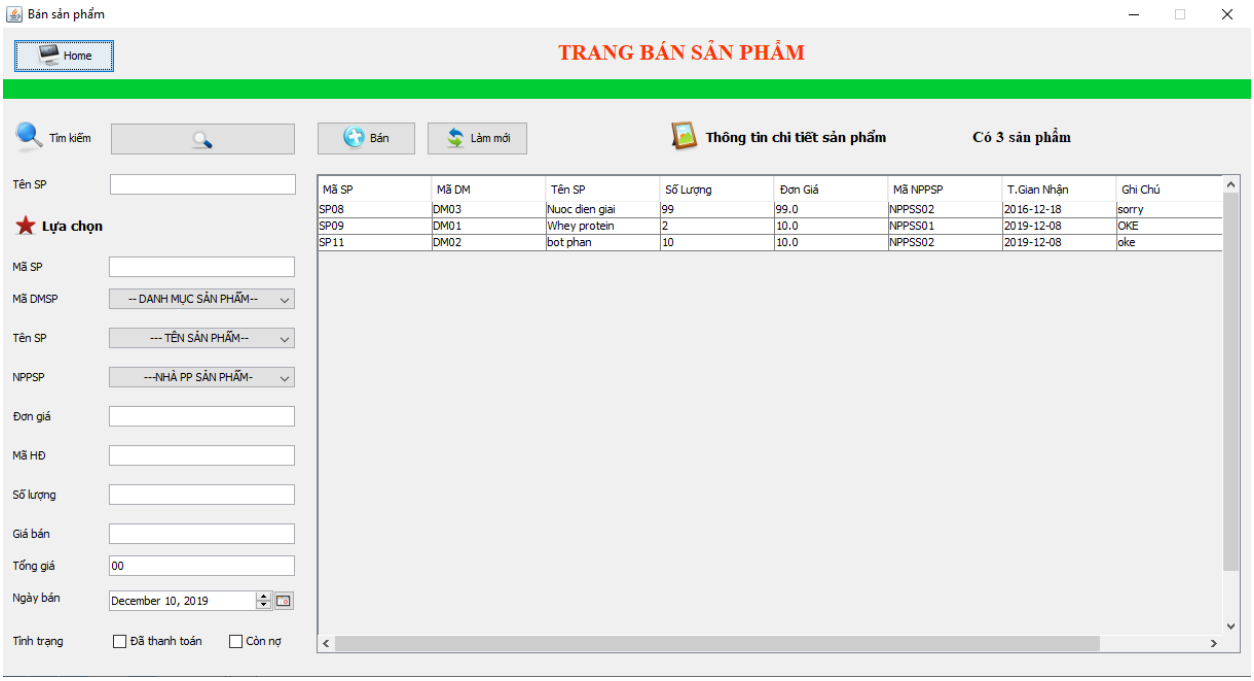
2. The main software interface



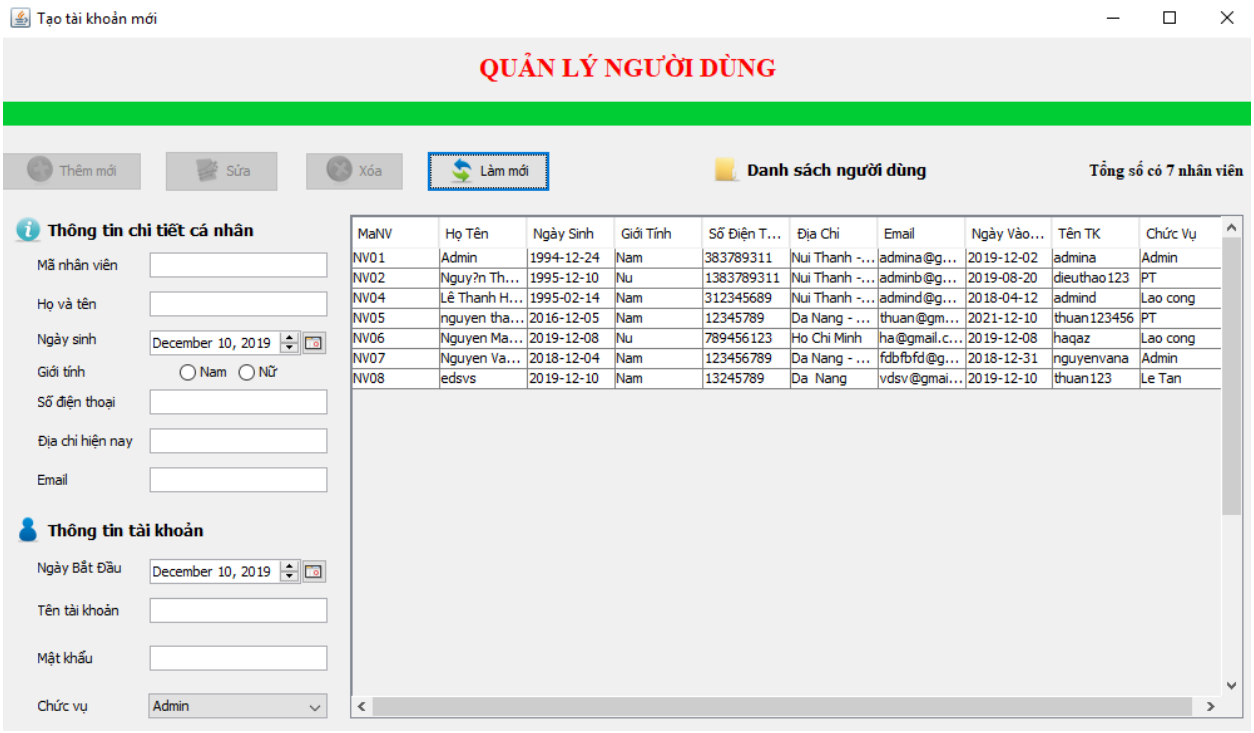
3. Change password form



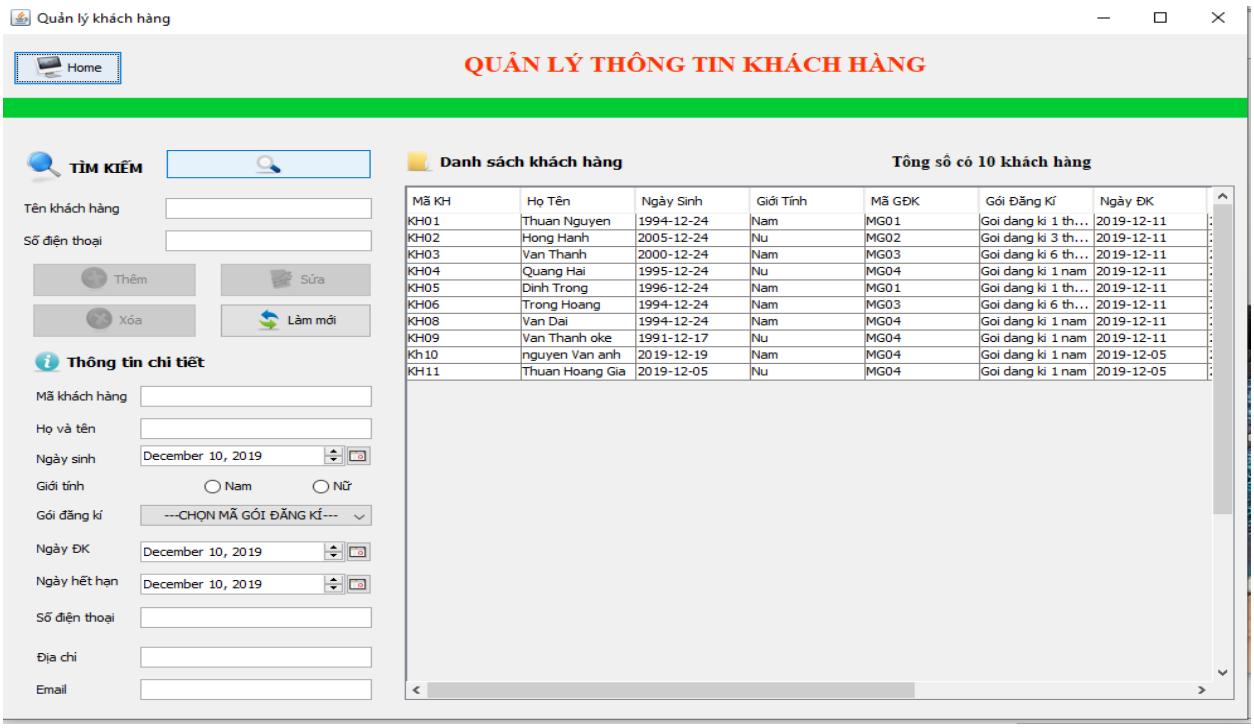
4. sell products



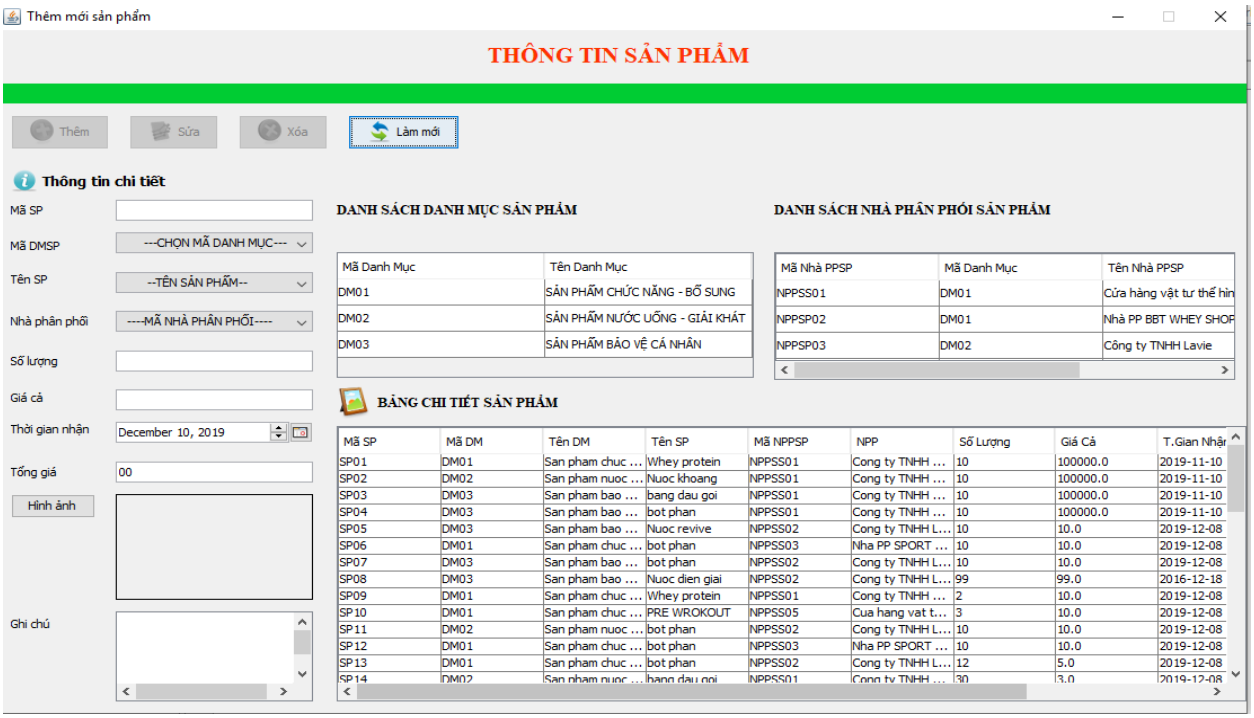
5. User management



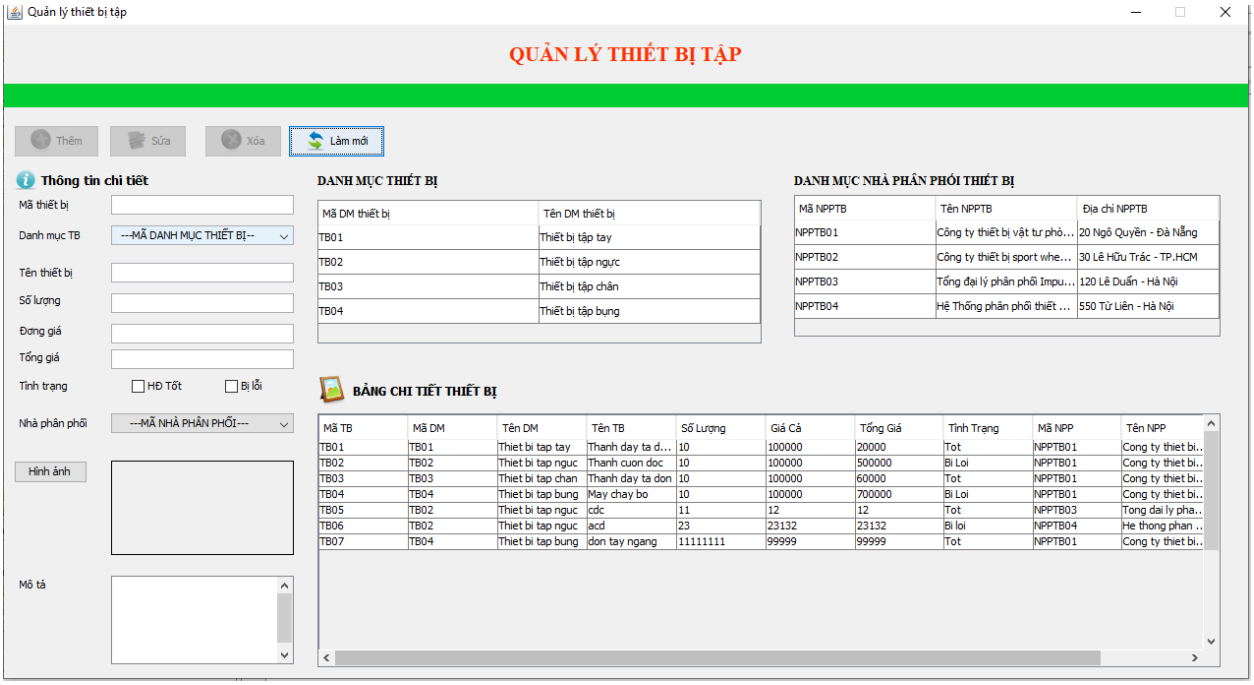
6. Customer management



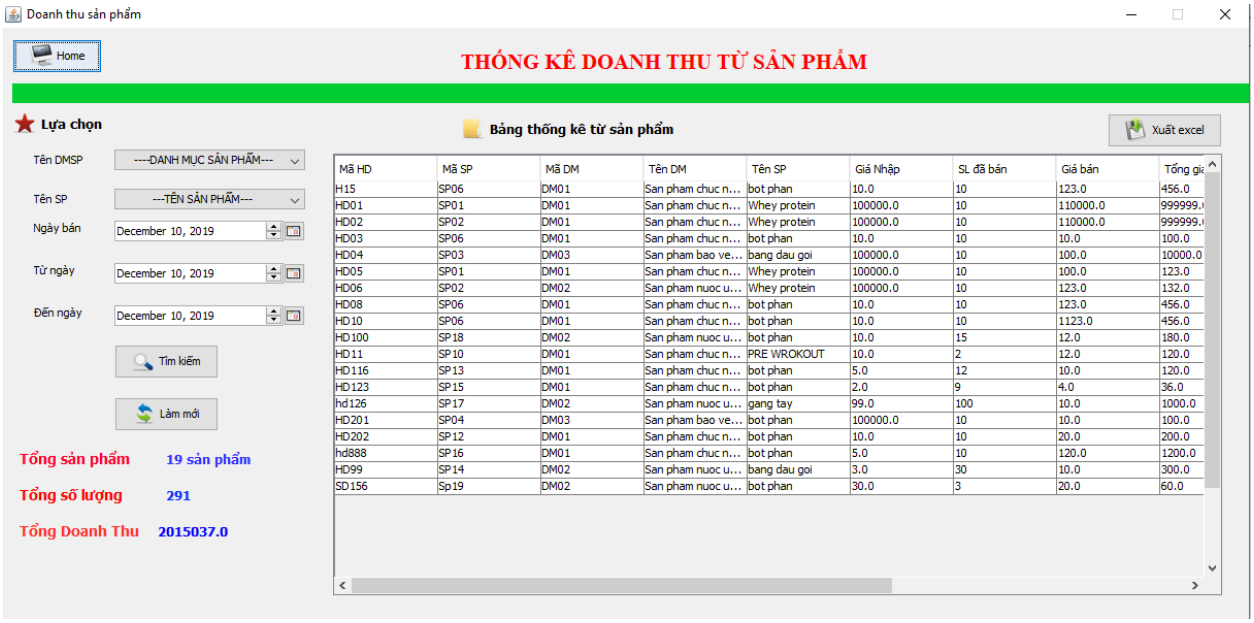
7. Product Management



8. Equipment management

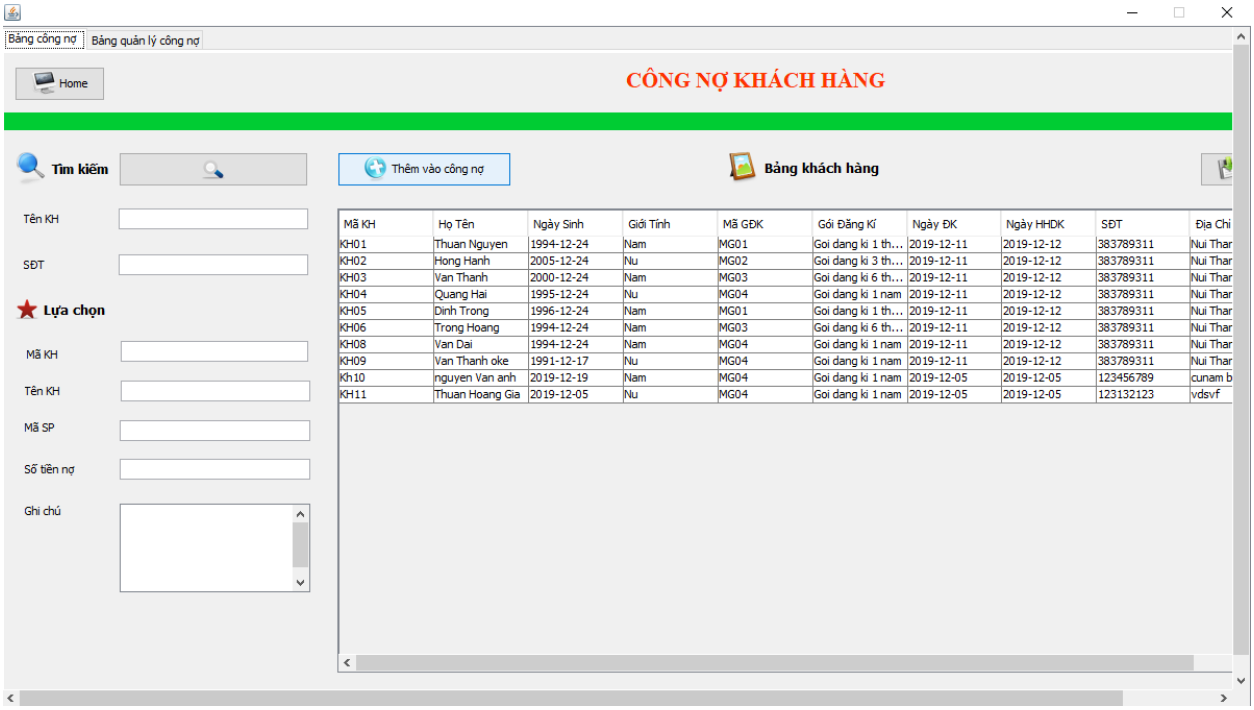


9. Statistics of revenue from products



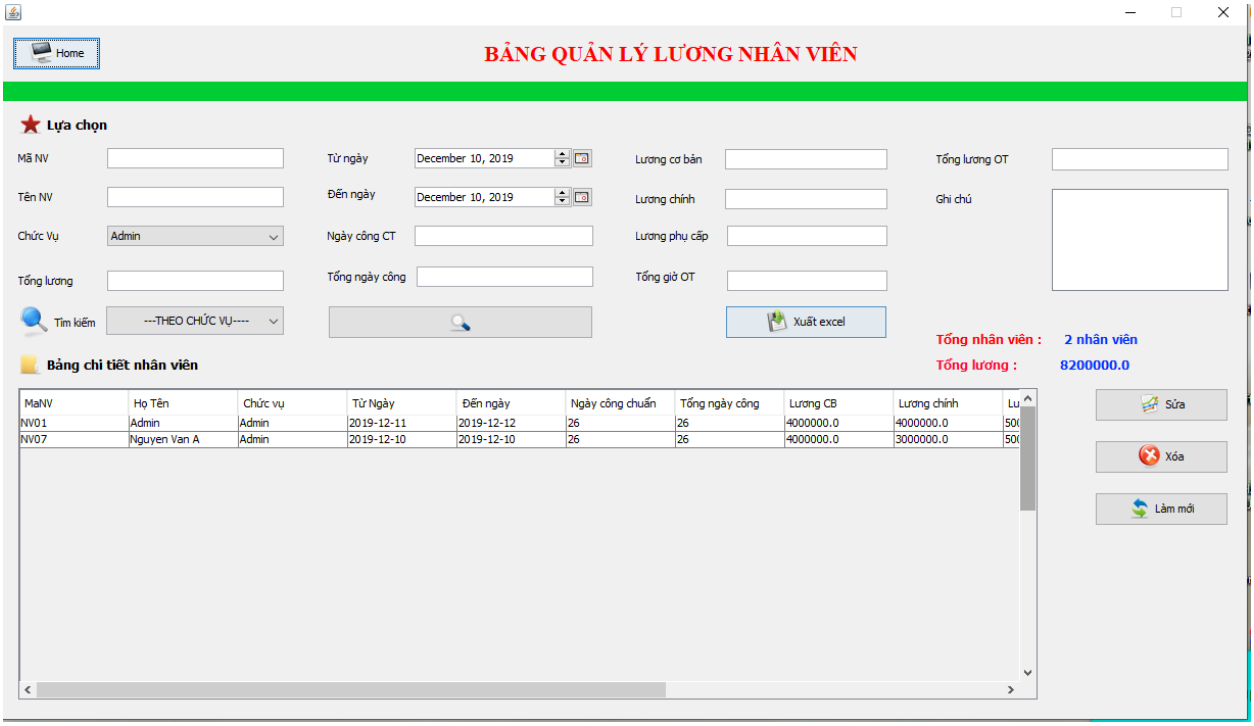
10. Revenue statistics from customers

11. Statistics of liabilities from customers



12. Statistics on employee salaries

13. Detailed statistics employees



14. Help information board

IX. CONCLUSION

1. Conclude

To complete the 1st semester project, deliver the results as well as the products, our team has divided the specific tasks, as well as always trying to work and learn to develop and complete the products. good. However, due to lack of knowledge as well as work and completion, there are still some errors that cannot be completed correctly. The team will continue to complete the product to perfect and improve the components of the gym management software.

PROS:

- Have all basic function as the requirement
- Know how to develop a java application

CONS:

- Need more functions.
- Interface need to improves.

TABLE OF DIVISION WORKING FROM THE MEMBERS OF THE GROUP

Member's name	Mission
Nguyen Khac Quang Thuan	- Up ideas for management - Division of work in groups - Database design for the application - Interface design for the application - Implement the functions of the program - Perform text file presentation
Mai Son Tung	- Up ideas for management - Perform text file presentation - Implement some code in the program
Tran Xuan Quang	- Up ideas for management - Implement some code in the program
Pham Khac Quang	- Up ideas for management - Implement some code in the program

REFERENCES

A. REFERENCES VIETNAMESE

B. REFERENCES ENGLISH

C. REFERENCES WEBSITE

[1] https://www.w3schools.com/

[2] https://viettuts.vn/

[3] https:// v1study.com/