# **Review 1**

#### 1.Problem Defintion.

Camp connection is general stores selling various fast moving consumer goods (FMCG). The store is in existence from almost 5 years and now they are growing very fast. They have more product and the large amount of transactions but they still maintain the registers of the various records in paper. The problems with paper are difficult to manage the large amount of transactions and product which are causing discrepancies in the data. They get misplaced and records gets lost most of the time, to find one particular record they have to go through piles of documentation, more costly, difficult to save old document and many other disagreeable. We thought computer technology will help them to overcome this problem which they are facing with paper records.

In order to solve the above problems, Out team provider of Sales and Inventory Management System (SIMS). Sales and Inventory Management System is an application that can be accessed by all the employees of the company. Users can have an easy way to manage the details of product .

#### General function:

#### Sale man:

- see the status of the inventory, ie, whether a particular item is available or not etc
- Product search function by product name or product code or product category
- enter the items purchased by a customer and produce a bill forthe same
- cancel the produced bill, in case of error in entering the details, and produce a new one
- inform the sales manager about any exceptions

- get help about the system on how to use the different features of the system

#### Sale management:

- -check how many bills have been generated in the day so far, how much money is transacted in the day so far, how many bills have been cancelled so far in the day
- check how many items have been returned so far in the day
- check for any exception reports from the sales persons and correct it by contacting the inventory manager

#### **Inventory management**

- Check the inventory status, minimum and maximum stock point.
- -see the reports from sales Management about items that are not available and need to be kept in the inventory
- Manage export / import the product.
- generate inventory reports.

#### Admin (director)

- -add/remove new items/categories/user to the inventory
- change price of product

## 2. Customer Requirement Specification (CRS)

#### 2.1-Client.

The application is intended for uses in Camp connection store. This software is made for all of employee in store. Every person have different function. We divided into 4 groups function:

- -Function of sale man.
- -Function of sale management.
- -Function of inventory management.
- -Function of admin (System Administrator).

#### 2.2- Business/Project objective

Assist organization in Sale And Inventory System. This includes:

- -Allows sale man to allow log on the system, view, apply, close, save, cancel, resend their request and change their password.
- -Allows sale management to log on the system, view, approve or reject submitted request and change their password.
- -Allows Inventory management to log on the system, view, pay or reject approved request and change their password.
- -Allows admin to manage department, employee, manager, accountant and policy.

## 2.3- Inputs provided by the application

The data that shall be fed into the system will be inserted by the user of the system.

The data each user feeds to the system is different. The following are the types of data

that will be fed to the system:

- Username, password and new changed password
- New user details
- Product details and category
- Incoming product details
- Order details
- Cancelled bills
- Return products details
- Search parameter (product name, product category, product ID )
- Request and feedback of user.

#### 2.4- Process involved in the application.

After the data is fed to the system, the system will process data to generate output. The

processes that should be processed by the system are as follows:

- Authentication of existing username and password
- Save any changes to database (add, delete, update products/categories) .
- Carry the search within database
- Generate bill for the sales item
- Cancel the bills generated in case of error
- Produce invoice for the purchase order
- Produce bills or reports for return purchase
- Validate the inventory stocks
- Generate reports on minimum stock point maximum stock point and order point

#### 2.5- Outputs provided by the application

The system processes the data that is fed into the system. The system shall produce different kinds of reports as the outputs. The following are the outputs the system shall produce:

- Product lists
- Maximum stock point, minimum stock point, order point
- Detailed reports on purchase and sales
- Reports on dispatched orders
- Reports on due payment from clients over certain period of time
- Inventory trends and graphs
- User information and clients information
- Product details on execution of search query

## 2.6- Hardware Requirements

- Processor 1.5Ghz Celeron or higher.
- 256MB RAM or higher.

#### 2.7- Software Requirements

- Java Virtual Machine
- Java editor(NetBeans IDE 7.4)
- j2sdk1.4.1\_02 (or later).
- SQL Server 2012.

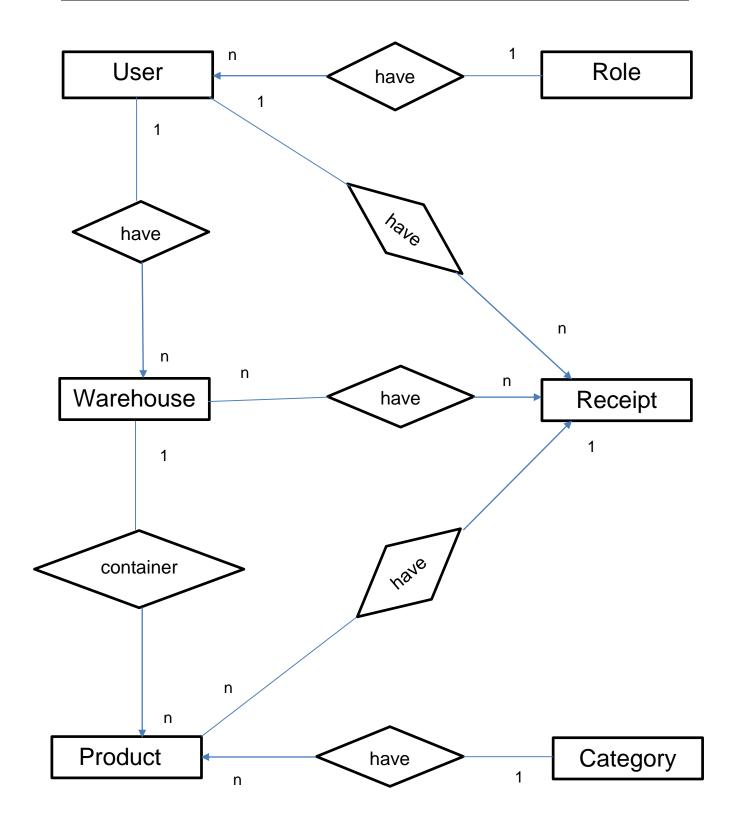
#### 2.8- Scope Of The Work

The scope of this system is to provide user efficient working environment and more output can be generated through this. This system provides user friendly interface resulting in knowing each and every usability features of the system. This system helps in tracking records so that past records can be verified through them and one can make decisions based on the past records. This system completes the work in a very less time resulting in less time consumption and high level of efficiency. This system is developed in such a way that even a native user can also operate thesystem easily. The calculations are made very quickly and the records are directly saved into databases and the databases can be maintained for a longer period of time. Each record can be retrieved and can be verified for the future transactions. Also this system provides high level of security for data leaking as only admin people can access the database no changes can be made in it until it verifies the user login id and password. We also have operator login through which operator can take orders but can't make changes in the database. Limited access is available to the operator.

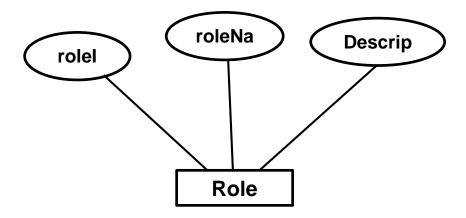
**End review 1** 

# Review 2

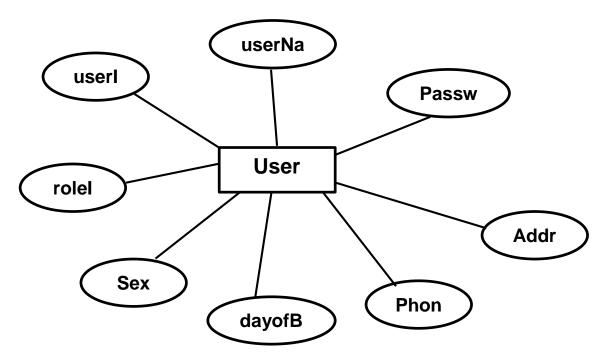
# 3 - Entity Relationship (ER) Diagrams



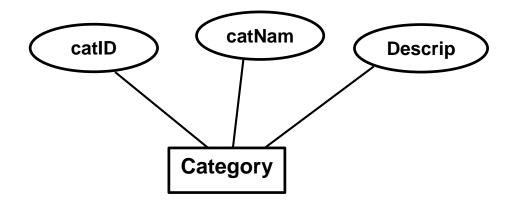
## Role entity:



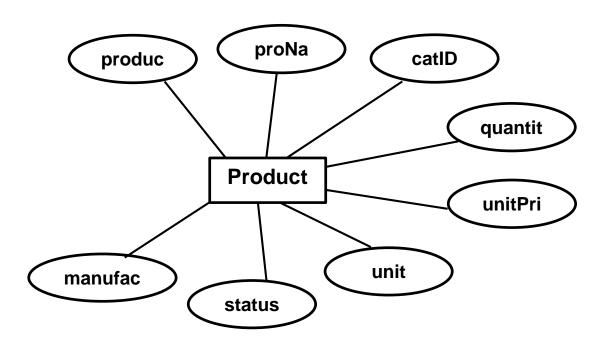
# User entity:



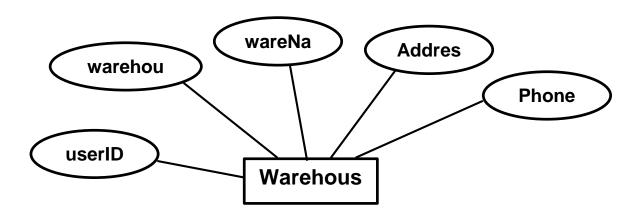
#### **Category entity:**



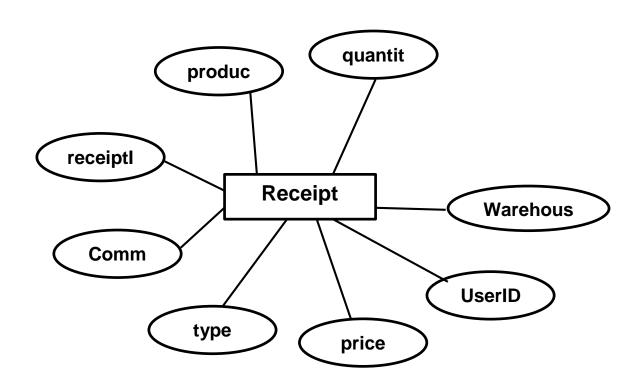
#### **Product entity:**



#### Warehouse entity:



### Receipt entity:



# 4- Database Design / Structure

## Table Role

Column Name	Data Type	Constraints	Description
RoleID	Integer	Identity(1,1), Primary key	Code employee position
Role	Varchar(20)	Not null	Employee position
Description	Varchar(100)	Allow null	Description about position
Level	Integer	not null	Level administrator

### Table User.

Column Name	Data Type	Constraints	Description
<u>userID</u>	Varchar(10)	Identity(1,1),Prim ary key	Employee Code
UseName	Varchar(40)	Not null	Employee name
Password	Varchar(20)	Not null	Password for login

		Foreign key	
RoleID	Integer	(Role)	Role code
		Not null	
Sex	Byte	Not null	Sex of Employee
DOB	Datetime	etime Not null	Date of birth of
	2 4.0		user
Phone	Varchar(20)	Not null	Phone number of
1 110110	varonar(20)	Not Hall	Employee
Adress	Varchar(50)	Allow null	Address of
7101000	1 31 31 131 (30)		Employee

# Table category.

Column Name	Data Type	Constraints	Description
catID	Integer	Identity(1,1),Primary key	Code of category
catName	Varchar(40)	Not null	Category name

Description	Varchar(100)	Allow null	Description
Description	vaichai(100)	Allow Hull	about category

# **Table Product**

Column Name	Data Type	Constraints	Description
productID	Varchar(20)	Identity(1,1), Primary key	Code of product
name	Varchar(40)	Not null	Name of product
catID	Integer	Not null, Foreign key(Category)	Category code of product
Quantity	Integer	Not null	number of products
unitPrice	Integer	Not null	Price per product unit
Unit	Varchar(20);	Not null	product unit
status	Varchar(50)	Allow null	Status of product
manufacturer	Varchar(40)	Not null	name of manufacturer

## Table warehouse

Column Name	Data Type	Constraints	Description
warehouseID	Varchar(10)	Identity(1,1),Primary key	Code warehouse
name	Varchar(50)	Not null	Name of warehouse
adress	Varchar(100)	Not null	Address of warehouse
phone	Varchar(20)	Not null	Phone number
UserID	Integer	Not null,Foreign key(User)	Code user

# Table Export

Column Name	Data Type	Constraints	Description
billNo	Varchar(20)	/archar(20) Primary key	
date	Datetime	Not null	Time made receipts
UserID	Integer   Not null,Forei		Code user
type	Varchar(20)	Not null	Type of export receipt
warehouseID	Integer	Not null	The place of export product

# Table ExportDetail

Column Name	Data Type	Constraints	Description
detaillD	Varchar(20)	Primary key	Code export detail receipts

billNo	Integer	Foreign	Code export
DIIIINO	billNo Integer		receipts
		Not null,	
productID	Varchar(20)	Foreign	Product code
		key(Product)	
quantity	Integer	Not null	Number of
quantity	miegei	Not Hall	product
exportTo	Varchar(40)	Not null	The place which
СХРОТТО	export to varchar(40)		import product.
status	Integer	Allow null	Status of product
price	Integer	allow null	Price of product
type	Varchar(50).	Not null	Type of export
comment	Varchar(100)	Allow null	comment of
33	1 3.1 3.1 3.1 (1 3 3)		person who export

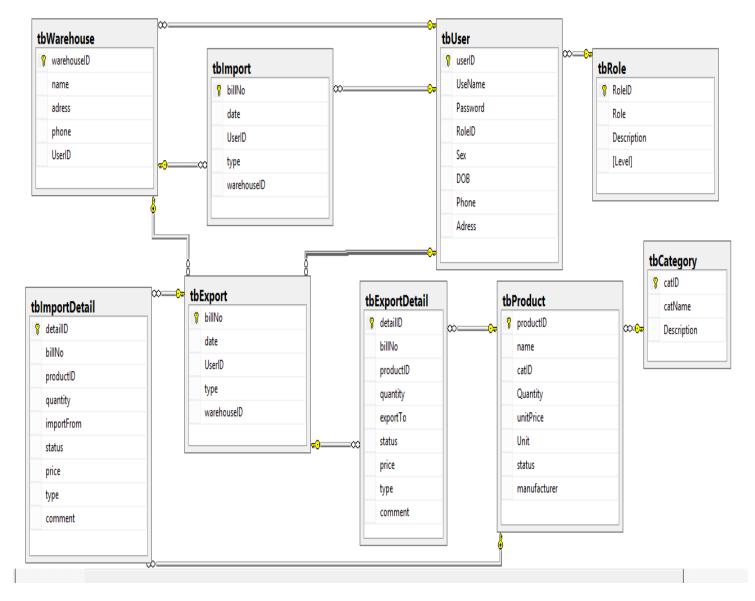
# Table Import

Column Name	Data Type Constraints		Description
billNo	Varchar(20) Primary key		Code import receipts
date	Datetime	Datetime Not null	
UserID	Integer	Not null,Foreign key(User)	Code user
type	Varchar(20) Not null		Type of import receipt
warehouseID	Integer	Not null	The warehouse which product import to

# Table ImportDetail

Column Name	Data Type	Constraints	Description
detailID	Varchar(20)	Primary key	Code import detail receipts

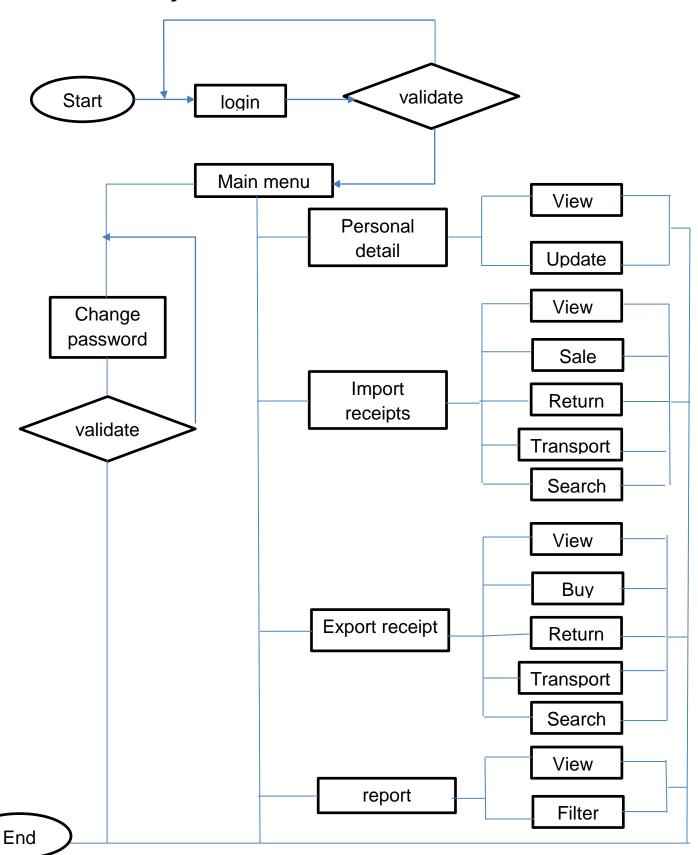
billNo	Integer	Foreign key(Export)	Code import receipts
productID	Varchar(20)	Not null, Foreign key(Product)	Product code
quantity	Integer	Not null	Number of product
importFrom	Varchar(40)	Not null	The place which import product.
status	Integer	Not null	Status of product
price	Integer	allow null	Price of product
type	Varchar(50).	Not null	Type of import
comment	Varchar(100)	Allow null	comment of person who import



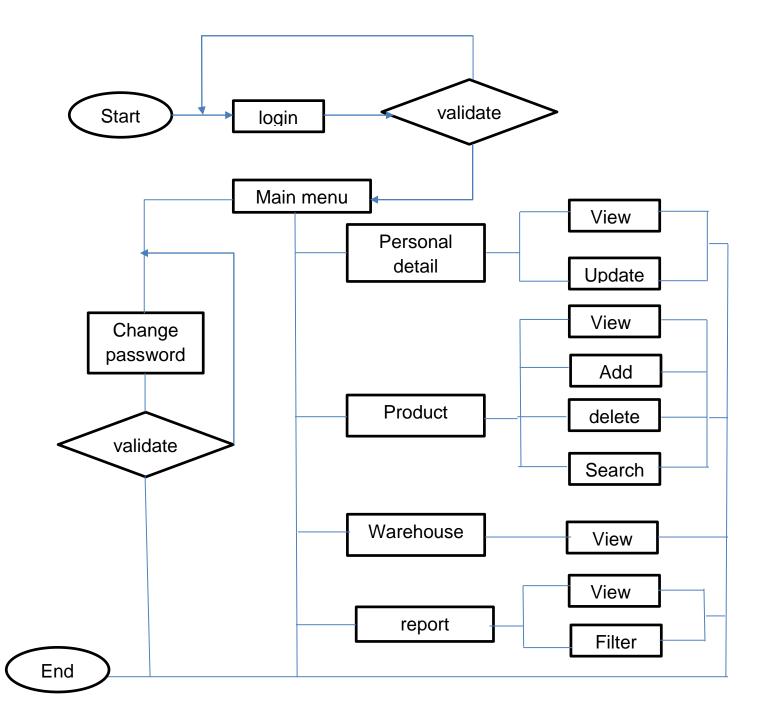
Database diaram

# **5.Function Diagrams**

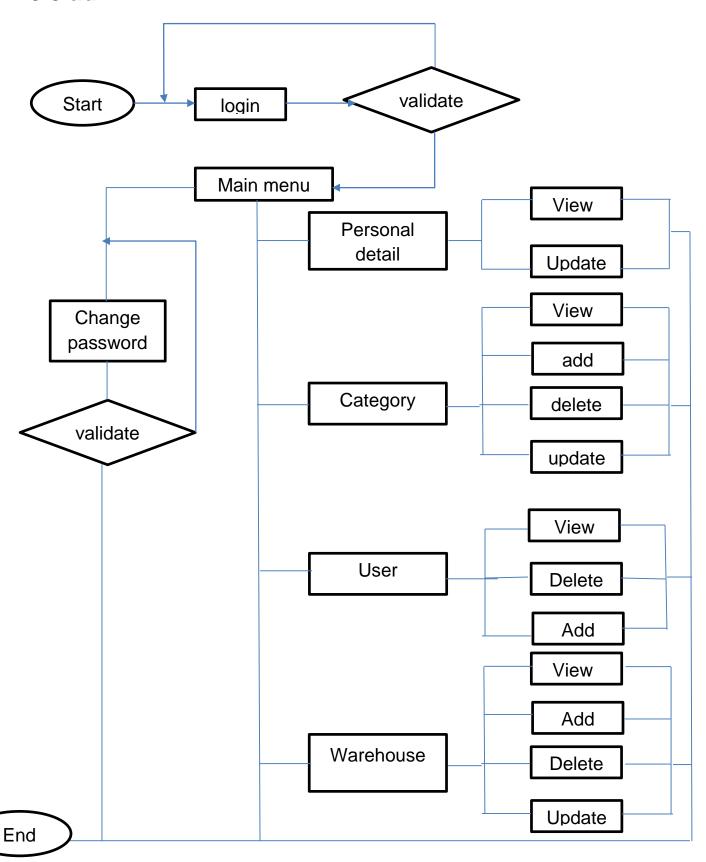
## 5.1. Inventory man



# 5.2.inventory management



## 5.3.admin



# Review 3

## 6- GUI Standards & Interface Design

#### 6.1- GUI Standards

Friendly user interface allow user to:

- Login.
- Change password and update profile.
- View all receipt in warehouse and detail of every one.
- Product receipt every time inport or export new product.
- View all information of product in warehouse.

#### For administrators:

- Change administrator password and profile.
- Manage user details: register a new employee into the system, delete an employee from the system.
- Manage category details: add a new category, update an existing category details or delete an existing category (with heavy restricting conditions).
- Manage warehouse details: add a new warehouse, update an existing warehouse details or delete an existing position (with heavy restricting conditions).

#### 6.2- Interface Designs

#### 6.2.1 Configuration:

The first time the application runs, it may ask for database configurations, user can enter the required details for the application to connect to the database. Save button will save the configurations to the configuration file.

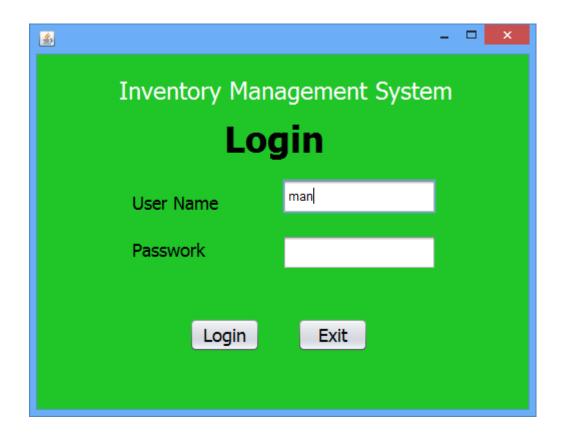
Database Configuration X					
BAS Database Configuration					
Server:	Database Name: eF	Project_Group2			
Login ID:	Password:				
Port:	1433 <b>☑ Use default port</b>				
Save Exit					

When application can not connect to database. Error message will be show



#### 6.2.2 Login.

If the configurations are made correctly, from the second time onward when the application is executed, the login dialog will show up allow user to login to the system.



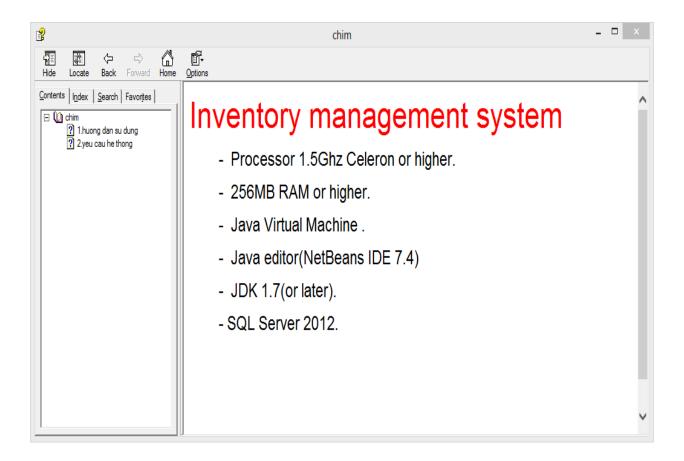
When user enter with invalid username or invalid password. Error message will be show. User has 3 times to try



#### 6.2.3. Help Dialog

Users can show the Help dialog by choosing menu Help – Help Contents or by pressing Ctrl+F1.

In this Help, users can get help about the program, using various functions of the program or resolved their problems through Troubleshooting.



#### 6.2.4. Inventory man

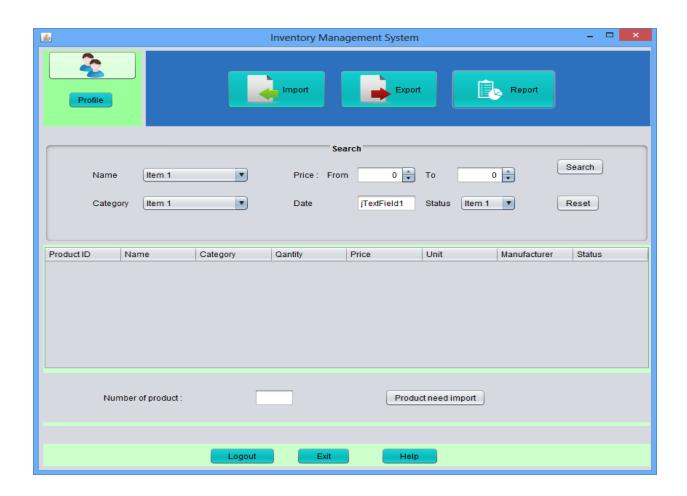
If the user is a Inventory man, the application will show the Inventory man interface. In report tab.

#### In "Report" tab

User can view all information of product in your warehouse.

Table contain all the information about the product. Label number of product count number of product in warehouse.

- Button "Search": search according condition you choose and return result in the table below.
- Button "Reset": return back all product information in warehouse like the first time you click on the report botton.
- Button "Product need inport": wanrnings to inventory man which product have quantity less than 50.

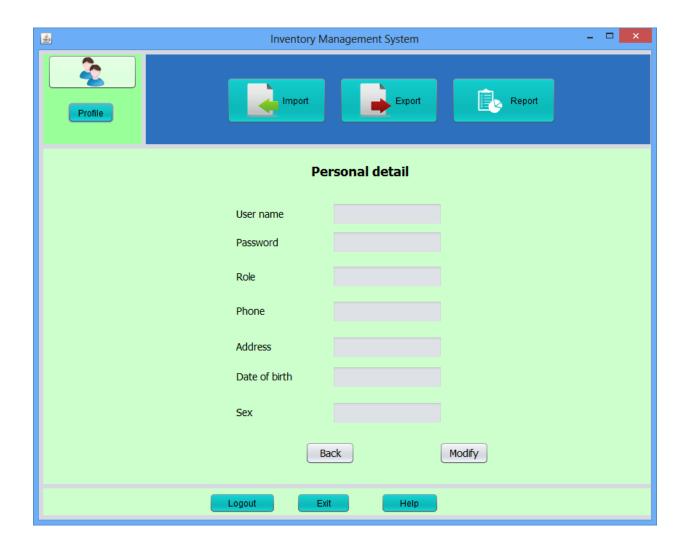


#### **Profile**

This tab contain all information of user. User can view and modify their information(except user name).

Button "Back": move to the report tab.

Button "modify": move to the modify tab.



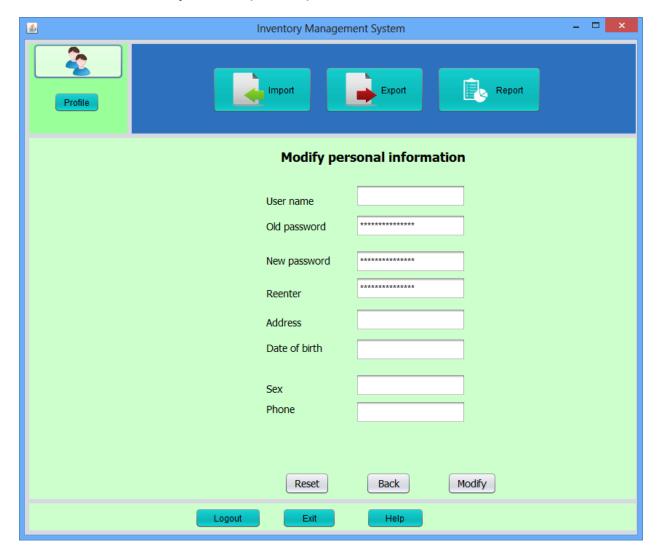
#### modify profile.

This tab modify information of user(except user name).

Button "Reset": clear all the filed on tab for user enter.

Button "Back": move to the report tab.

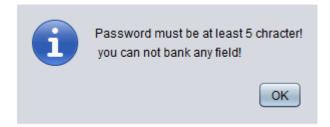
Button "Modify": complete update user in formation.



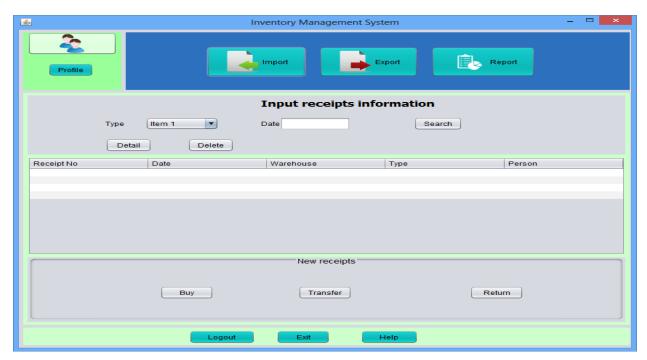
If there are not problem occurs, this Message Dialog will show.



If there are error occurs, Message Dialog will show.



#### **Inport**



This form show information of receipt in warehouse. User can search according type or date view detail of each receipt and make a new receipt.

Button "detail": move to the form detail of each receipt.

Button "delete": delete a receipt

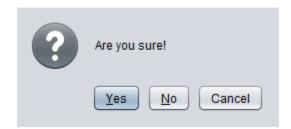
Button "search": search with condition type and date.

Button "buy": make a new receipt for buy a new product from manufacture.

Button "Transfer": make a new receipt for Transfer product from this warehouse to another.

Button "Return": make a new receipt for Return product from customer

When user click delete button the confirm message will show.



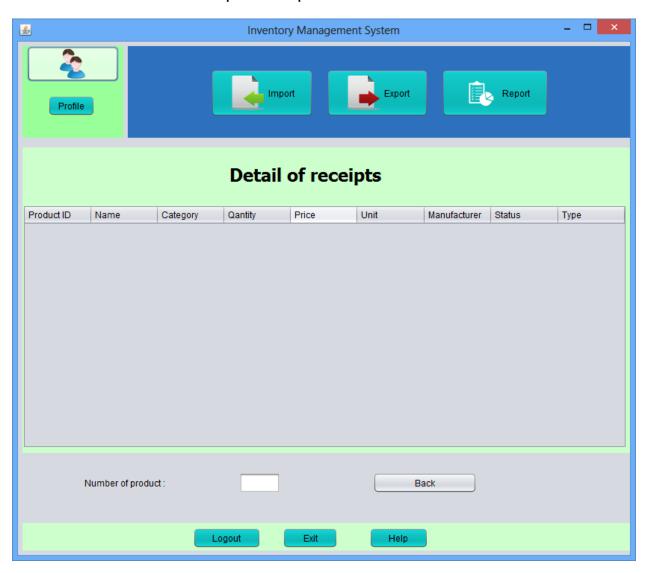
When user click yes.



#### **Detail of receipt**

Show detail information of each receipt.

Buttom "back": move to Input receipt informaton tab.



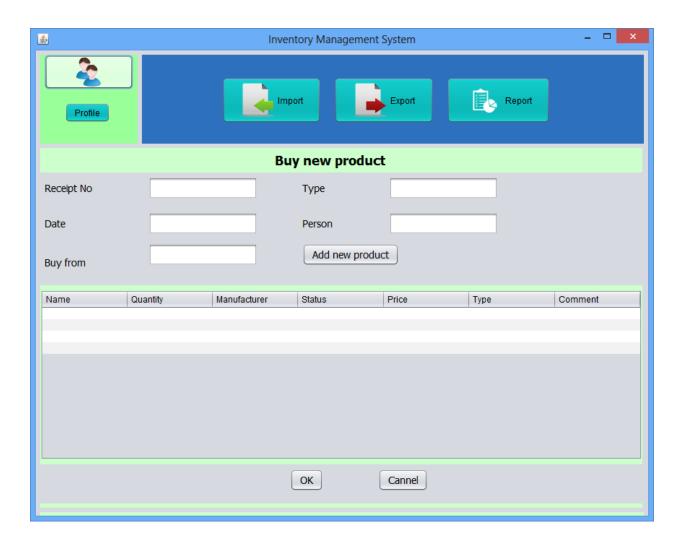
#### **Buy new product**

Allow user enter receipt information when buy new product.

Button "add new product": add product information to the receipt.

Button "ok": complete and make new receipt information and bank all field.

Button "cannel": move to Input receipt informaton tab.



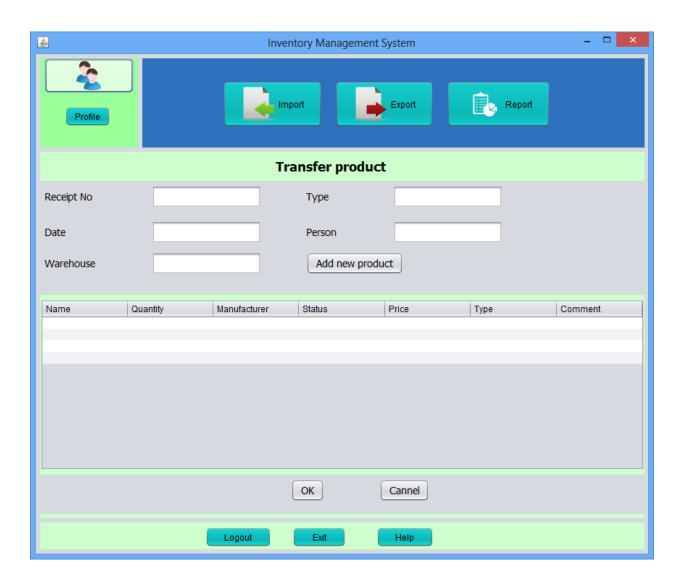
### **Transfer**

Allow user enter receipt information when transfer product from warehouse to another.

Button "add new product": add product information to the receipt.

Button "ok": complete and make new receipt information and bank all field.

Button "cannel": move to Input receipt informaton tab.



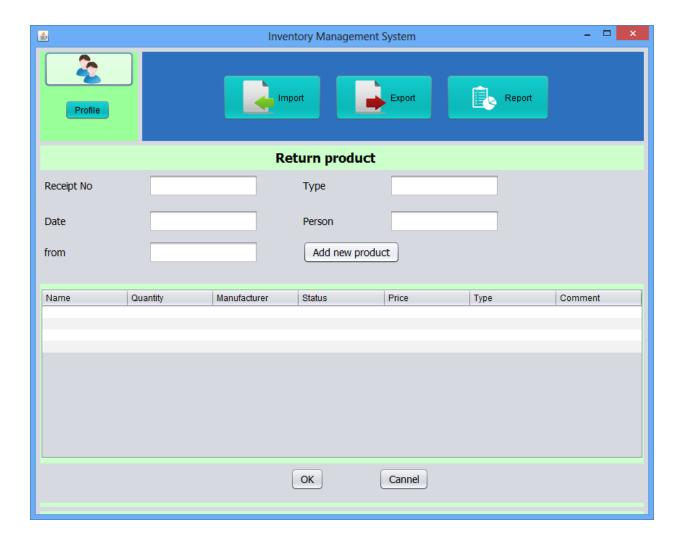
### **Return product**

Allow user enter receipt information when customer return product.

Button "add new product": add product information to the receipt.

Button "ok": complete and make new receipt information and bank all field.

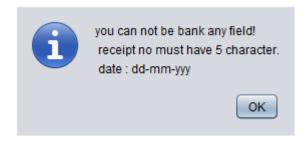
Button "cannel": move to Input receipt informaton tab.



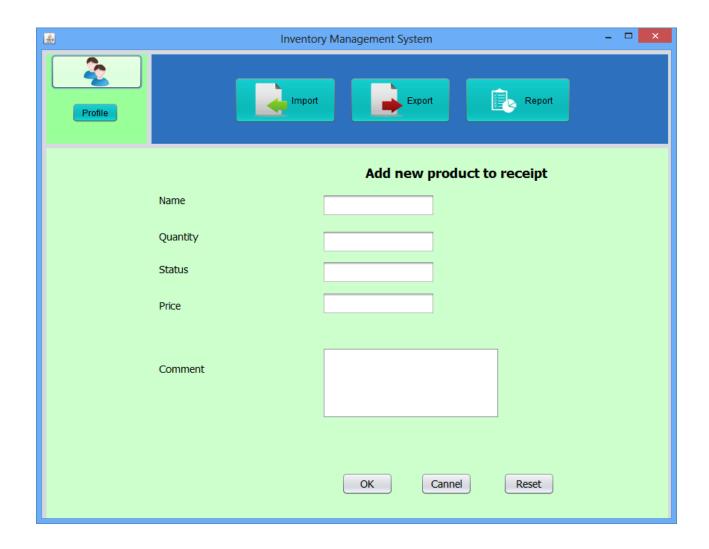
When user click "ok" button to complete make new receipt. If there isn't problem message will show.



If there are an error the message will show.



Add new product to receipt:



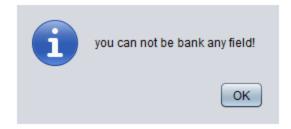
This form allow a new product to receipt.

Button "ok": complete add new product to receipt.

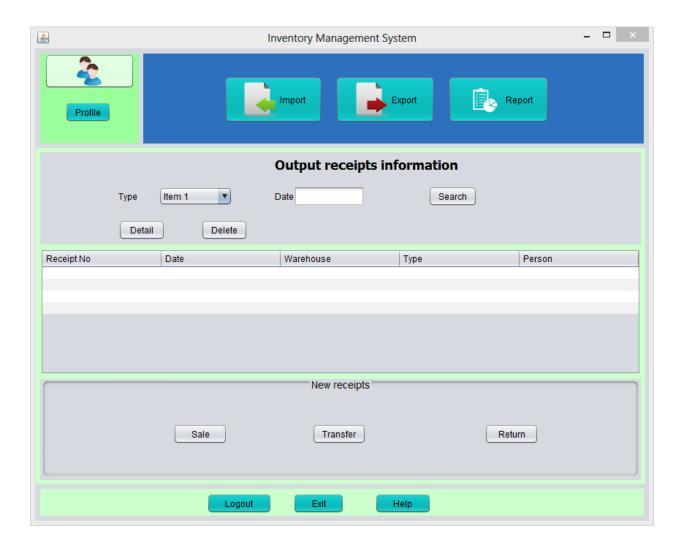
Button "reset": clear all the field for new product.

Button "cannel": move to the add new receipt form.

If there is problem message will show.



# **Export product**



This form show information of receipt in warehouse. User can search according type or date view detail of each receipt and make a new receipt when export product from warehouse.

Button "detail": move to the form detail of each receipt.

Button "delete": delete a receipt

Button "search": search with condition type and date.

Button "sale": make a new receipt for sale product from manufacture.

Button "Transfer": make a new receipt for Transfer product from warehouse to another .

Button "Return": make a new receipt for Return product to manufacture

When user click delete button the confirm message will show.



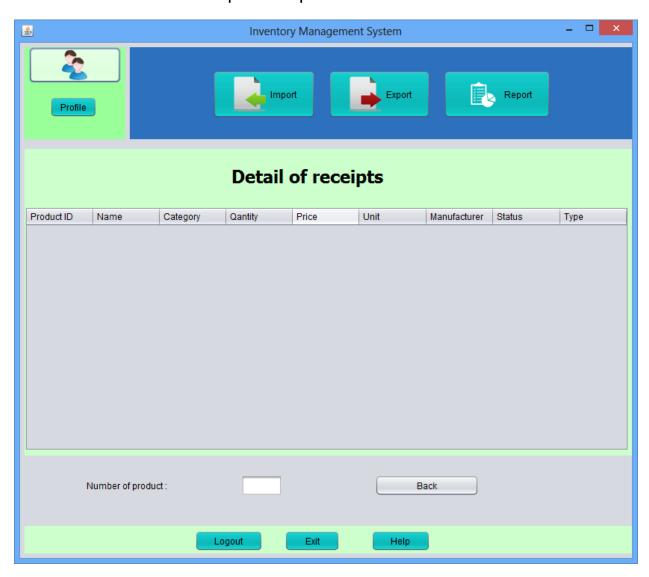
When user click yes.



## **Detail of receipt**

Show detail information of each receipt.

Buttom "back": move to Input receipt informaton tab.



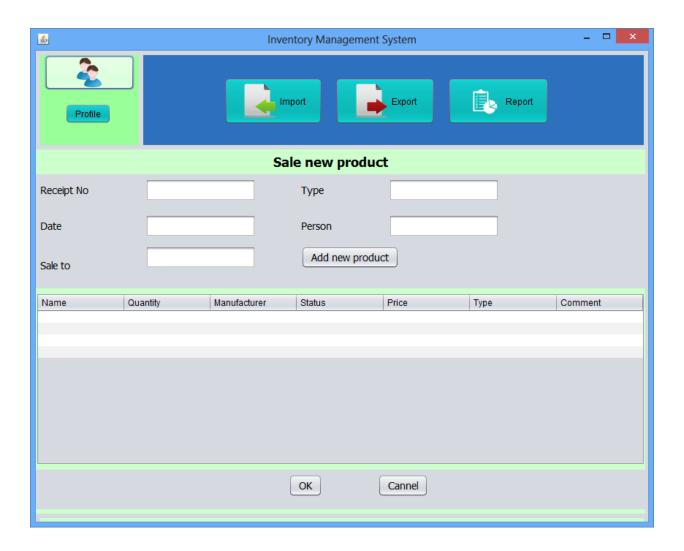
## Sale product

Allow user enter receipt information when sale product.

Button "add new product": add product information to the receipt.

Button "ok": complete and make new receipt information and bank all field.

Button "cannel": move to output receipt informaton tab.



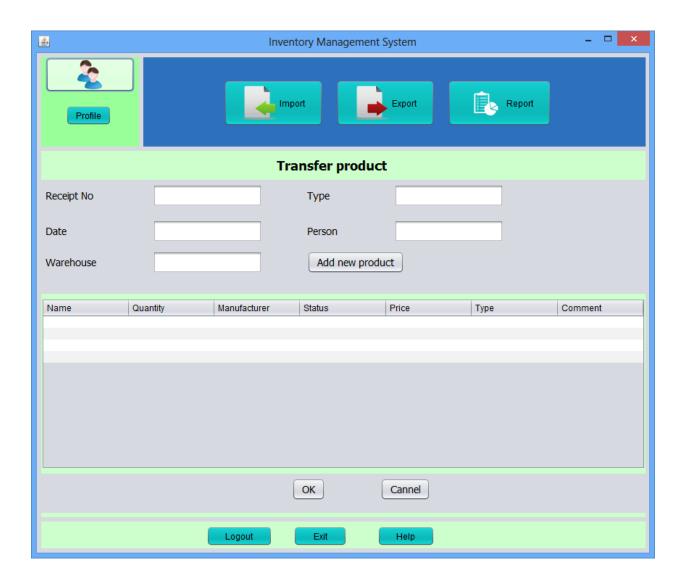
#### **Transfer**

Allow user enter receipt information when transfer product from warehouse to another.

Button "add new product": add product information to the receipt.

Button "ok": complete and make new receipt information and bank all field.

Button "cannel": move to output receipt informaton tab.



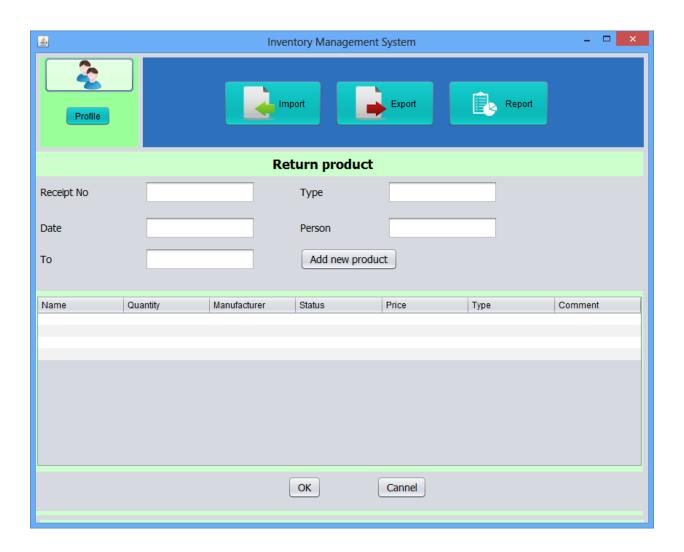
## **Return product**

Allow user enter receipt information when product have problem and they decide return manufacture.

Button "add new product": add product information to the receipt.

Button "ok": complete and make new receipt information and bank all field.

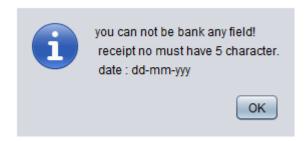
Button "cannel": move to output receipt informaton tab.



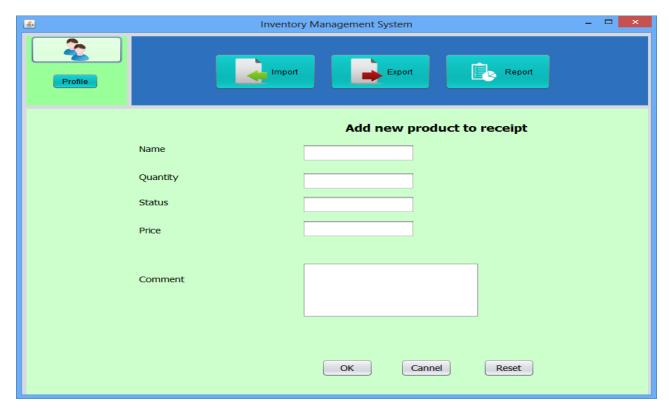
When user click "ok" button to complete make new receipt. If there isn't problem, message will show.



If there are an error the message will show.



## Add new product to receipt:



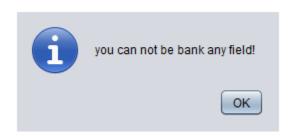
This form allow a new product to receipt.

Button "ok": complete add new product to receipt.

Button "reset": clear all the field for new product.

Button "cannel": move to the add new receipt form.

If there is problem message will show.



## **6.2.4 Inventory management.**

If the user is a Inventory management, the application will show the

#### **Profile**

This tab contain all information of user. User can view and modify their information(except user name).

Button "Back": move to the warehouse tab.

Button "modify": move to the modify tab.



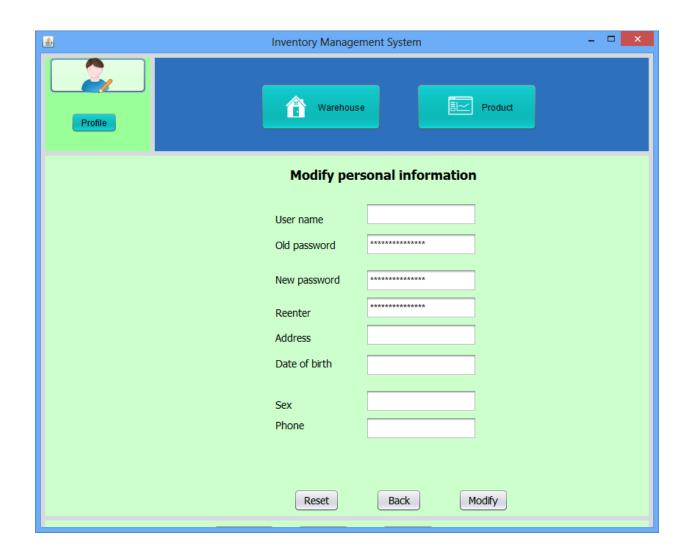
## modify profile.

This tab modify information of user(except user name).

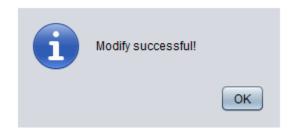
Button "Reset": clear all the filed on tab for user enter.

Button "Back": move to the report tab.

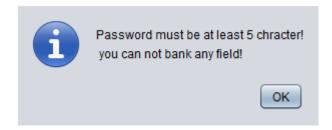
Button "Modify": complete update user in formation.



If there are not problem occurs, this Message Dialog will show.



If there are error occurs, Message Dialog will show.



## Warehouse



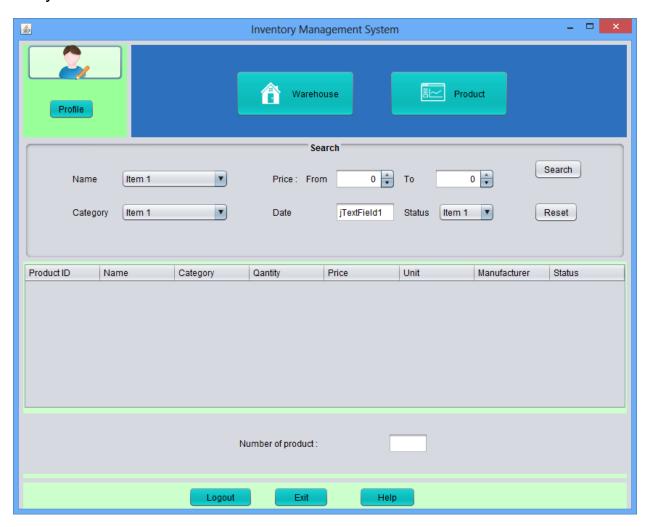
This form show information about all warehouse of company amd allow management view report of every warehouse.

Button "view report": allow management view tab report of each warehouse.

### View report interface:

Management can view detail product of every warehouse.

They also can search width difference condition.

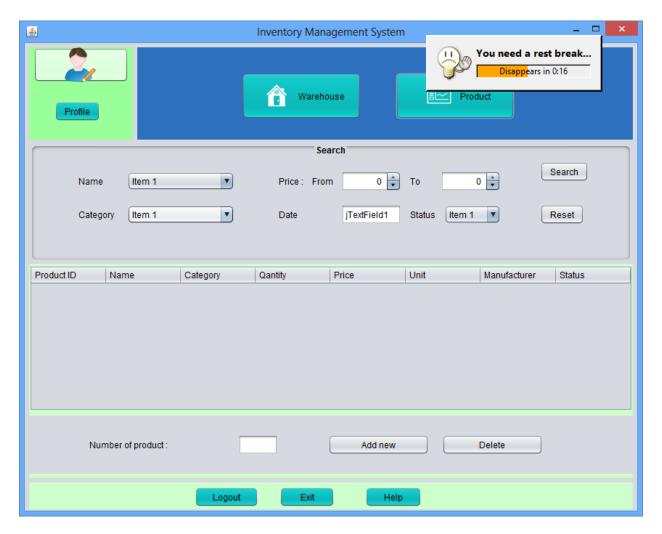


#### **Product**

User can view information of all product in this tab.

Button "add new": allow management add new product which don't have in list of product.

Button: "delete": allow delete a product in list. They can choose a product then click delete.



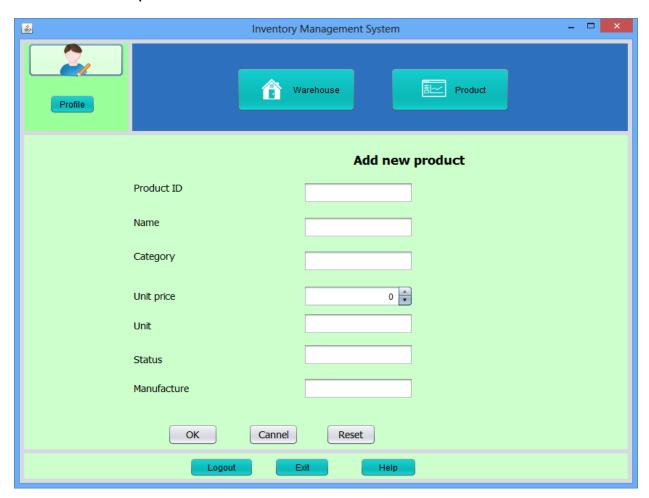
When you click delete button, there are a message dialog will be show.



## If management click yes:



## Form add new product:



Allow user add new product to list of product. This product must be not have in list.

Button "ok": confirm complete add new product.

Button "cannel": move to the product detail tab.

Button "reset": bank all field.

#### 6.2.6-Admin interface.

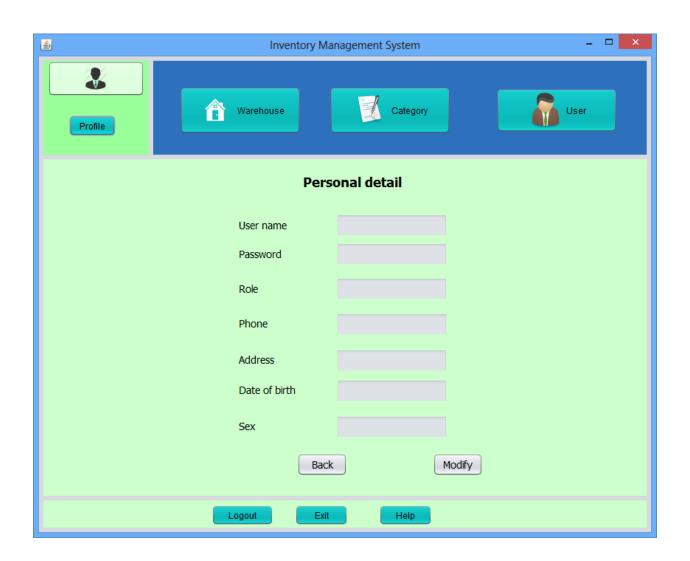
If the user is a Admin , the application will show the admin interface. In warehouse tab.

#### **Profile**

This tab contain all information of user. User can view and modify their information(except user name).

Button "Back": move to the warehouse tab.

Button "modify": move to the modify tab.



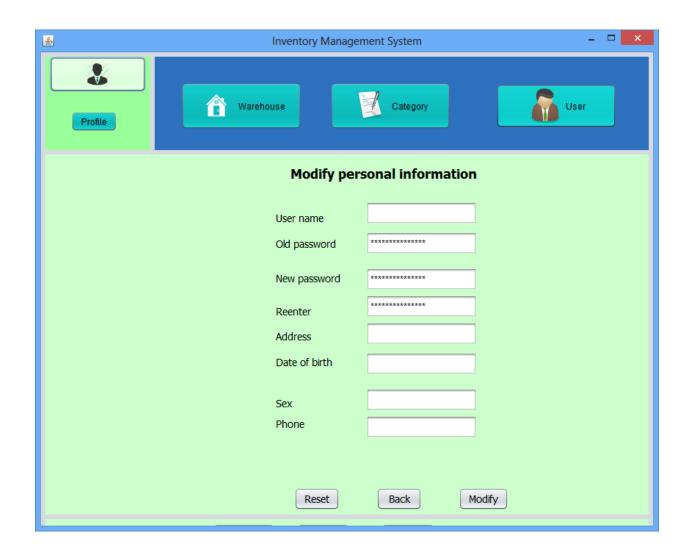
## modify profile.

This tab modify information of user(except user name).

Button "Reset": clear all the filed on tab for user enter.

Button "Back": move to the report tab.

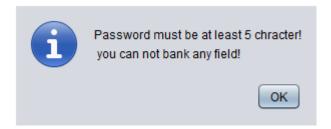
Button "Modify": complete update user in formation.



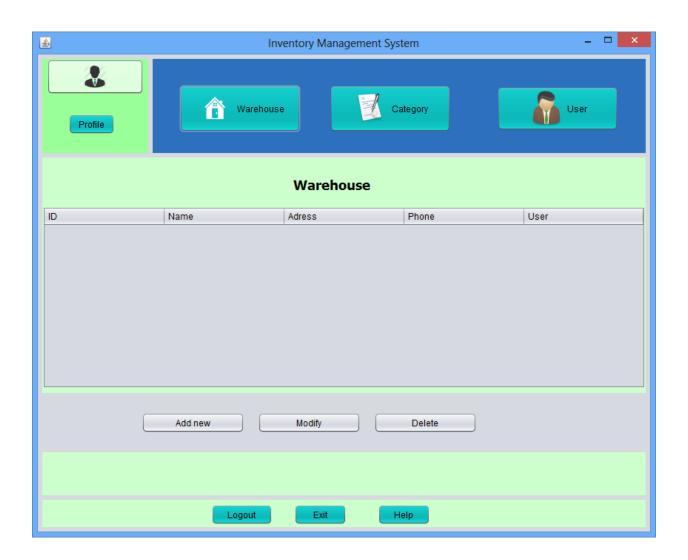
If there are not problem occurs, this Message Dialog will show.



If there are error occurs, Message Dialog will show.



### Warehouse.

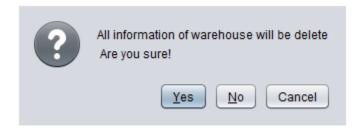


This form show information of all warehouse of company, admin can go to form add new, modify from this form.

Button "Add new": go to form add a new warehouse to the list of warehouse.

Button "Modify": go to form modify a warehouse information if admin want to.

Button "delete": admin can delete a warehouse in list by click to this button When admin click on "delete" button this message will be show.



When user click yes:



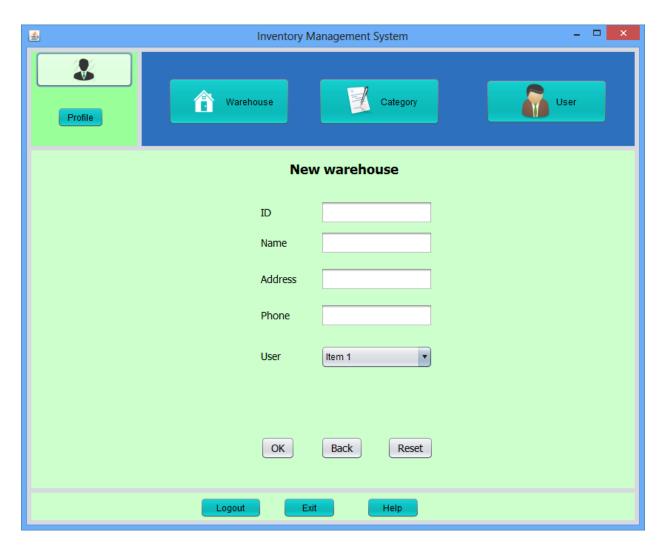
#### Add new warehouse:

This form uses for add new warehouse to list.

Button "back": move to warehouse information.

Button "reset": clear all field in this form.

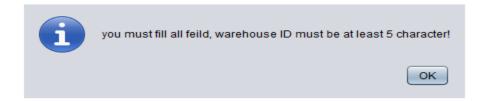
Button "ok": confirm add new warehouse.



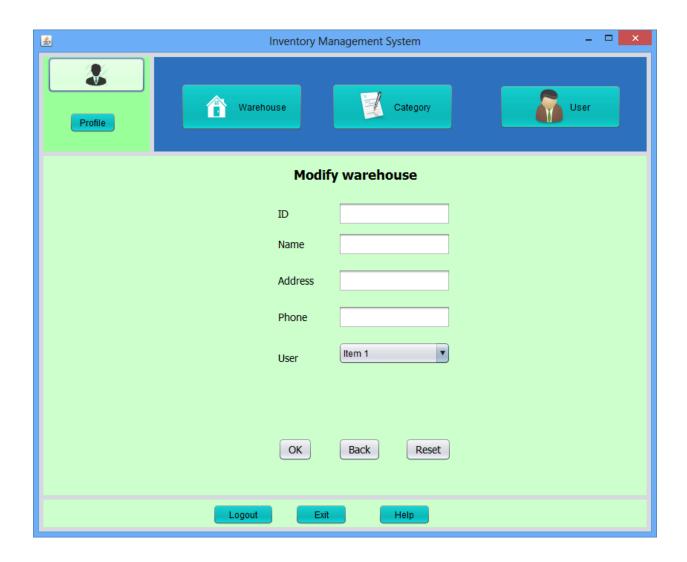
If warehouse add successful, message will be show:



If there is any error, this message will be show:



# -Modify warehouse



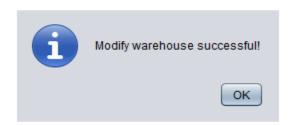
This form uses for modify warehouse in list.

Button "back": move to warehouse information.

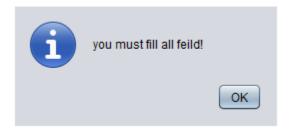
Button "reset": clear all field in this form.

Button "ok": confirm modify warehouse.

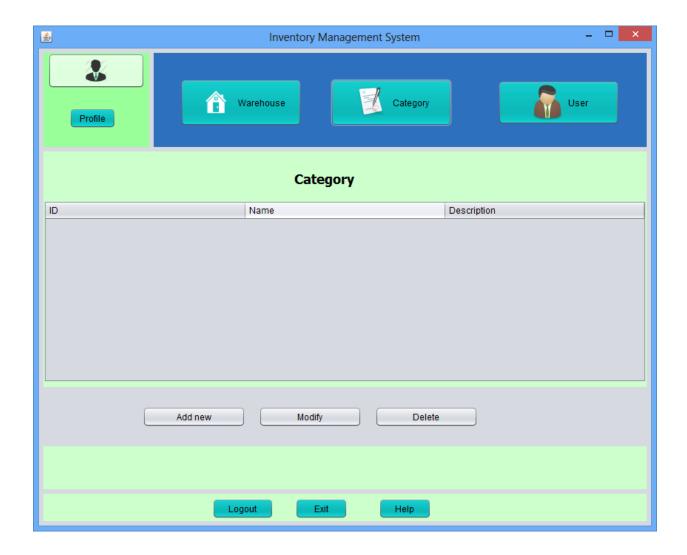
If warehouse modify successful, message will be show:



If there is any error, this message will be show:



## Category



This form show all category of product, admin can add new or modify category in list.

Button "Add new": go to form add a new category to the list of warehouse.

Button "Modify": go to form modify a category information if admin want to.

Button "delete": admin can delete a category in list by click to this button When admin click on "delete" button this message will be show.



## When user click yes:



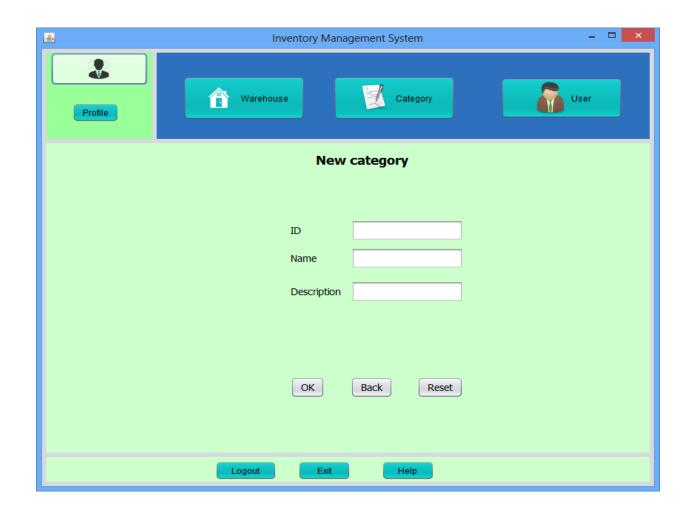
## Add new category:

This form uses for add new category to list.

Button "back": move to category information.

Button "reset": clear all field in this form.

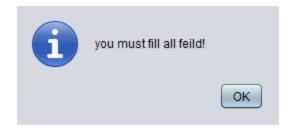
Button "ok": confirm add new category.



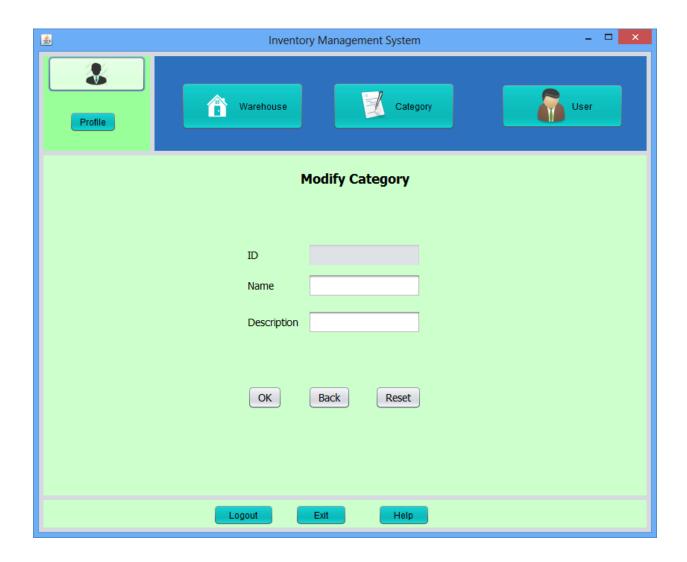
If category add successful, message will be show:



If there is any error, this message will be show:



# -Modify category



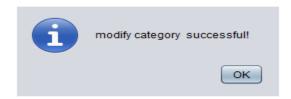
This form uses for modify category in list.

Button "back": move to category information.

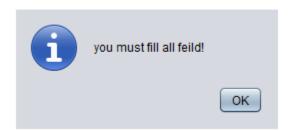
Button "reset": clear all field in this form.

Button "ok": confirm modify category.

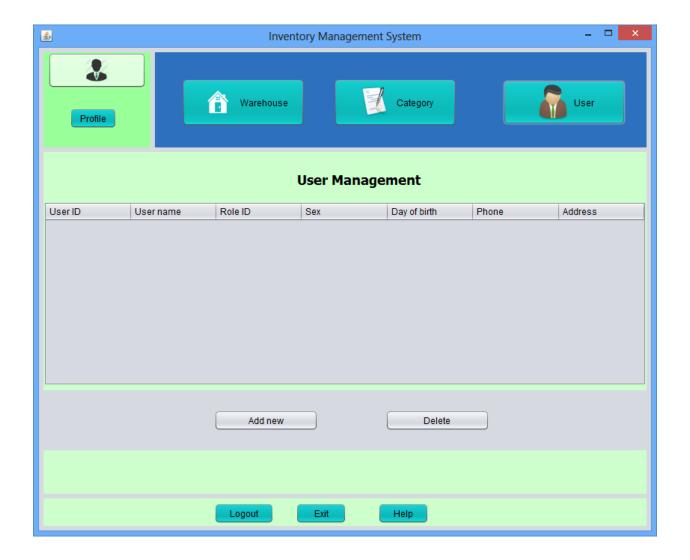
If category modify successful, message will be show:



If there is any error, this message will be show:



## User management.

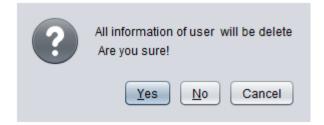


This from show information of all user in sysrem. Admin can add new user of delete user from this form.

Button "Add new": move to the form add new user.

Button "dlete": delete user in list by choose one user and click this button.

When user click on delete button, this message will be show:



# If admin choose yes:

