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# Software Requirements Specification

For

## PAMUNUWILA HARDWARE

Version <1.1>

Prepared by

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**Course:** PROFESSIONAL DIPLOMA IN SOFTWARE ENGINEERING

**Batch:** Griffins

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## Introduction

*PAMUNUWILA HARDWARE (Pvt) Ltd needs a Desktop Software Application to facilitate all their day-to-day activities. The SRS document for the project is designed in this way and describes the Document Purpose, Product Scope, Definitions Acronyms and Abbreviations, References, and Acknowledgments related to that document here.*

### Document Purpose

*The main purpose of creating this software application is to make the day-to-day activities of PAMUNUWILA HARDWARE (Pvt) Ltd easier and more efficient.*

*Through this Software Application, functions such as Managing Users, Managing Suppliers, Managing Customers, Managing Transporters, Managing Companies, Managing Products, Managing GRN, Managing Sales, Managing Deliveries, Managing Stock, Generate Invoices, Generate History Reports, Obtaining Budget Data, and Backup & Restore Data, etc. It is the client's intention to make it easier and more efficient.*

*Currently, PAMUNUWILA HARDWARE (Pvt) Ltd performs all these functions manually and due to the inefficiency of the manual methodology, all parties are constantly subjected to various inconveniences.*

*Therefore, the main purpose of this document is to accurately identify the client's needs and gather the information needed to create a Desktop Software Application that can meet all of those requirements correctly.*

### Product Scope

*PAMUNUWILA HARDWARE (Pvt) Ltd is a Hardware Shop. The main function of such a business is to buy and sell goods (Construction Materials). Therefore, PAMUNUWILA HARDWARE (Pvt) Ltd needs an Inventory Control System.*

*Owners, Managers, Suppliers, Customers, Transporters, Employees, Cashiers, and Accountants are all involved in this business.*

*Creating this desktop software application makes it easier for these parties to manage, manage transactions between these parties, maintain inventory data, and maintain account data.*

*The work of PAMUNUWILA HARDWARE (Pvt) Ltd is now much easier and more efficient as the work has become easier as mentioned above. This is the main purpose of creating this Software Application.*

*In addition, the Software Application offers a number of benefits such as saving a lot of time on account and warehousing, ease of human resource management and minimizing transaction errors.*

### Definitions, Acronyms and Abbreviations

- GRN – Goods Received Note

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## References and Acknowledgments

<https://inventoryplus.in/>

*Special thanks to our adviser Miss Narmada Harischandra for continuous help in every stage of the project and who continuously gives us her priceless advice to prepare this document.*

## Overall Description

### Software Perspective

*This Desktop Software Application is designed for a Hardware Shop. Construction materials are bought and sold in this business.*

*This software application has a number of interfaces such as Main Interface and Sub-Interfaces. Login Form Interface, Home Page Interface, GRN Manager Interface, Sales Manager Interface, Delivery Manager Interface, Product Manager Interface, Supplier Manager Interface, Customer Manager Interface, Company Manager Interface, About interface, user Manager Interface, Transporter Manager Interface, Setting interface, Backup & Restore interface, Invoice & Reports Generate Interfaces and etc. are some of those interfaces.*

*The first interface that appears to anyone running this application is the Login Form Interface. The username and password must be entered to it. The first thing anyone who accesses this software application with a username and password will see is the Home Page Interface. It provides connectivity to all other interfaces. About interface displays information about this application. Grn is handled by the Grn Manager Interface. Sales are handled by the Sales Manager Interface. Deliveries are handled by the Delivery Manager Interface. Products are handled by the Product Manager Interface. Suppliers are handled by the Supplier Manager Interface. Customers are handled by the Customer Manager Interface. Companies are handled by the Company Manager Interface. Users are handled by the User Manager Interface. Transporters are handled by the Transporter Manager Interface. The Settings Interface provides settings. The Backup & Restore interface allows to backup and restore the database. Invoice & Reports are Generate and Print by the Invoice & Reports Generate Interfaces.*

*These interfaces are always interconnected.*

### Users and Characteristics

- Owner
- Manager
- Cashier
- Accountant
- Employee
- Supplier
- Customer
- Transporter

**Owner:** *Has the privilege of supervising and delegating all functions handled by the system. He has direct access to everything the system does and also have direct access to the Software Application. The Owner has the power to make backups and restore the system. He will be able to get all kinds of records in the system. He also has the power to direct and decide all parties involved in the business.*

**Manager:** *Has the privilege of overseeing and delegating certain functions handled by the system. He has direct access to most of the work done by the system and also have direct access to the Software Application. The Manager has the power to make backups and restore the system. He will be able to*

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get many types of records in the system. He also has the power to direct and decide certain parties involved in the business.

**Cashiers:** The party that trades money in the hardware shop. Have direct access to the Software Application. He can print invoices and reports.

**Accountant:** The party that manages the accounts related to the business. Have direct access to the Software Application. He can get any account records in the system.

**Employees:** are the working party in the hardware shop. Does not have direct access to the Software Application but can be given direct access to an employee according to the owner's authority.

**Supplier:** The supplier of construction materials required for the business. Does not have direct access to the Software Application. Directly guided by the Supplier Manager Interface.

**Customer:** The party that buys the construction materials from the business. Does not have direct access to the Software Application. Directly guided by the Customer Manager Interface.

**Transporter:** The party that transports construction materials to the customers. Does not have direct access to the Software Application. Directly guided by the Transporter Manager Interface.

## Operating Environment <Optional>

Below is the list of operating environments according to the hotel management system.

Operating system: Windows / iOS / Mac OS

Database: database + SQL (MySQL)

Distribute database

Platform: Java

Sever System, client System

Language: Software must be only English

Memory: System will have only 10GB of space of data server

## Design and Implementation Constraints <Optional>

It is suggested that the company contribute to ensuring that the security of the system is always in place, as security is a major barrier, which must be encrypted with XML records and security is essential to ensure personal and corporate information. The company is reliable in maintaining the software and will receive maximum support from the developers for consistent upgrades and constant updates.

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## Specific Requirements

### External Interface Requirements

#### User Interfaces

The User Interface is described by the following points.

Interface Name	Description
Login Form And Login Button	Interface and Button for accessing the Main Interface (Home page) and Sub-Interfaces by entering the username and password.
Home Page	The First Interface that appears to anyone who logs in to this Software Application with a username and password.
GRN Manager Interface	The Interface that deals about GRN.
Sales Manager Interface	The Interface that deals about Sales.
Delivery Manager Interface	The Interface that deals about Deliveries.
Product Manager Interface	The Interface that deals about Products.
Supplier Manager Interface	The Interface that deals about suppliers.
Customer Manager Interface	The Interface that deals about Customers.
Company Manager Interface	The Interface that deals about Companies.
About Interface	The Interface that displays information about this application.
User Manager Interface	The Interface that deals about Users.
Transporter Manager Interface	The Interface that deals about Transporters.
Settings Interface	The Interface that provides settings.
Backup & Restore Interface	The Interface that allows to backup and restore the Database.
Invoice & Report Generate Interfaces	The Interface that displays Various Invoices & Reports.
Message Dialog Boxes	To display Error Messages and Notifications.
Register Buttons	Buttons for inserting various data involved in the business.
Save Buttons	Buttons for inserting various data involved in the business.
Update Buttons	Buttons for updating various data involved in the business.
Remove Buttons	Buttons for deleting various data involved in the business.
New Buttons	Buttons for clearing Text Fields.
Search Buttons	Buttons for searching for something in the Software Application.
Add Row Buttons	Buttons for adding rows in a Table.
Delete Row Buttons	Buttons for deleting rows in a Table.
Invoice & History Buttons	Buttons for generating Invoices and various Reports.
Print Buttons	Buttons for printing Various Invoices & Reports.

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## Hardware Interfaces

*This software application designed for PAMUNUWILA HARDWARE (Pvt) Ltd runs on a desktop computer environment. The functionality of this software application is based on the hardware in the desktop computer environment such as RAM. Accordingly, this company basically needs a desktop-type computer with a level of performance that can run this software application. In addition, you will need a Pinter to print the Invoice and Reports.*

## Software Interfaces

*This software application designed for PAMUNUWILA HARDWARE (Pvt) Ltd runs on a Windows operating system. This software application also requires java 1.8.0 and Jaspersoft 6.17.0 to run.*

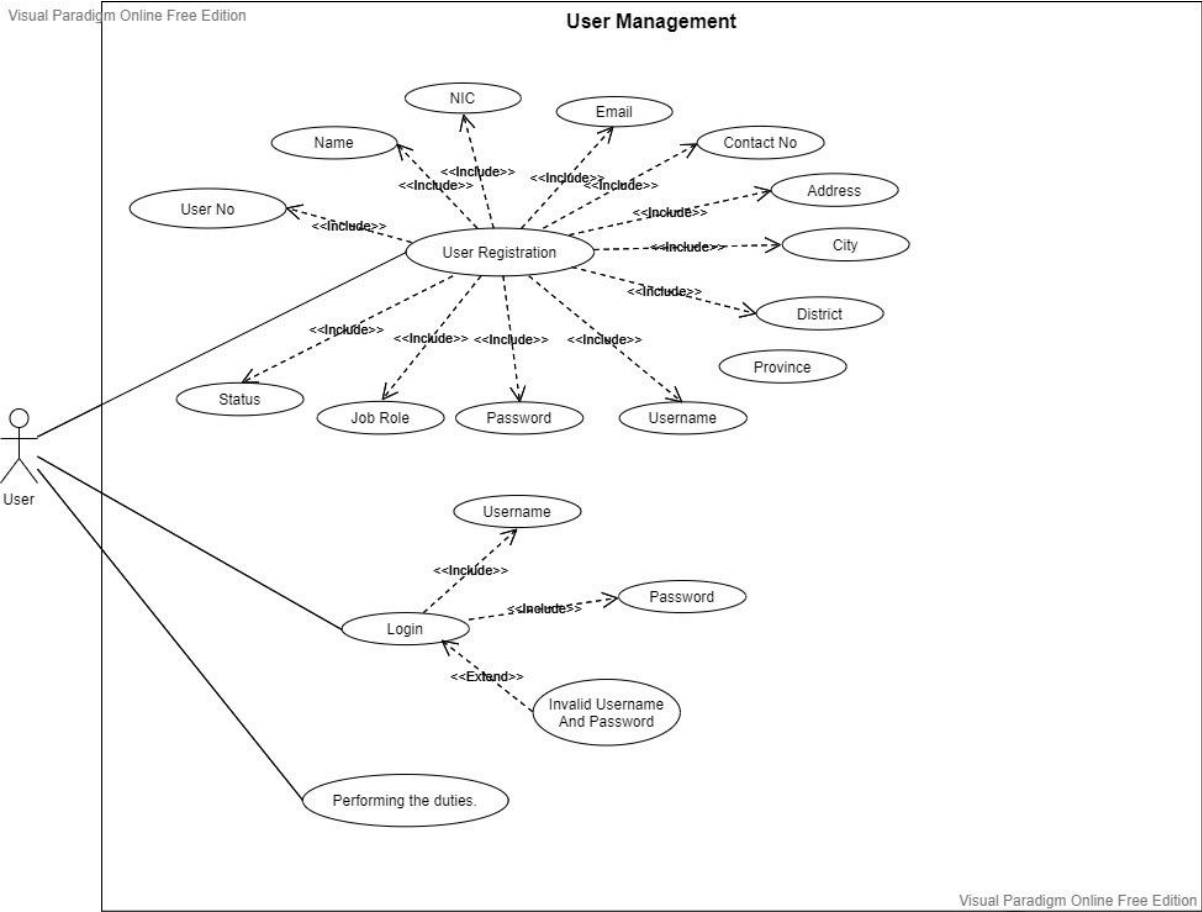
## Functional Requirements

- *User Details Insert, Update, Delete, Search.*
- *Supplier Details Insert, Update, Delete, Search.*
- *Customer Details Insert, Update, Delete, Search.*
- *Transporter Details Insert, Update, Delete, Search.*
- *Company Details Insert, Update, Delete, Search.*
- *Product Details Insert, Update, Delete, Search.*
- *Grn Details Insert*
- *Sales Details Insert*
- *Delivery Details Insert, Update, Delete, Search.*
- *User Login and Exit*
- *Stock Handling*
- *Generate and Print Reports*
- *Generate and Print Invoices*
- *Backup and Restore Data*

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Behaviour Requirements

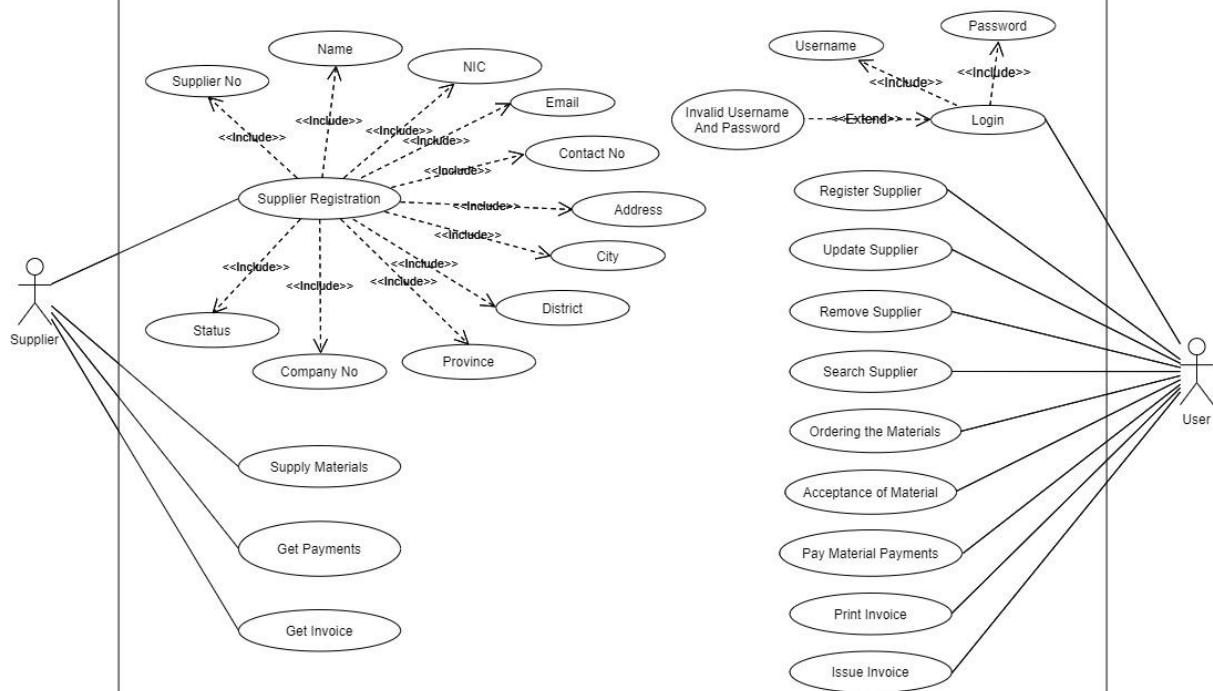
Use Case View



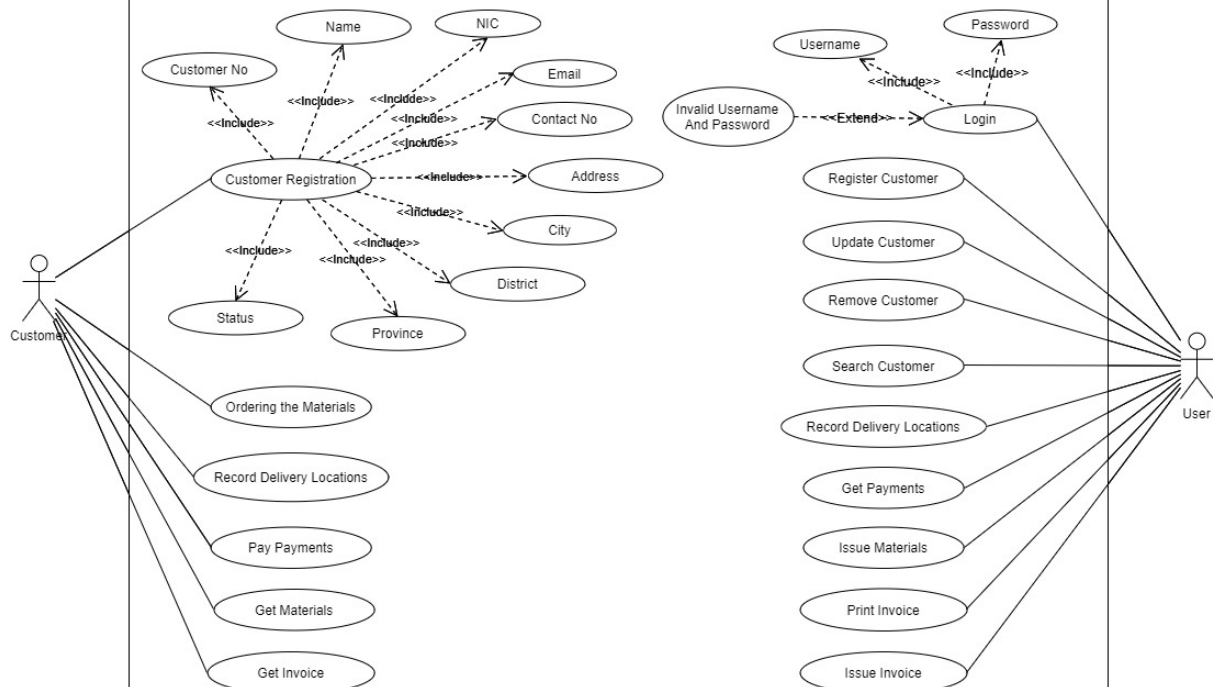
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## Supplier Management

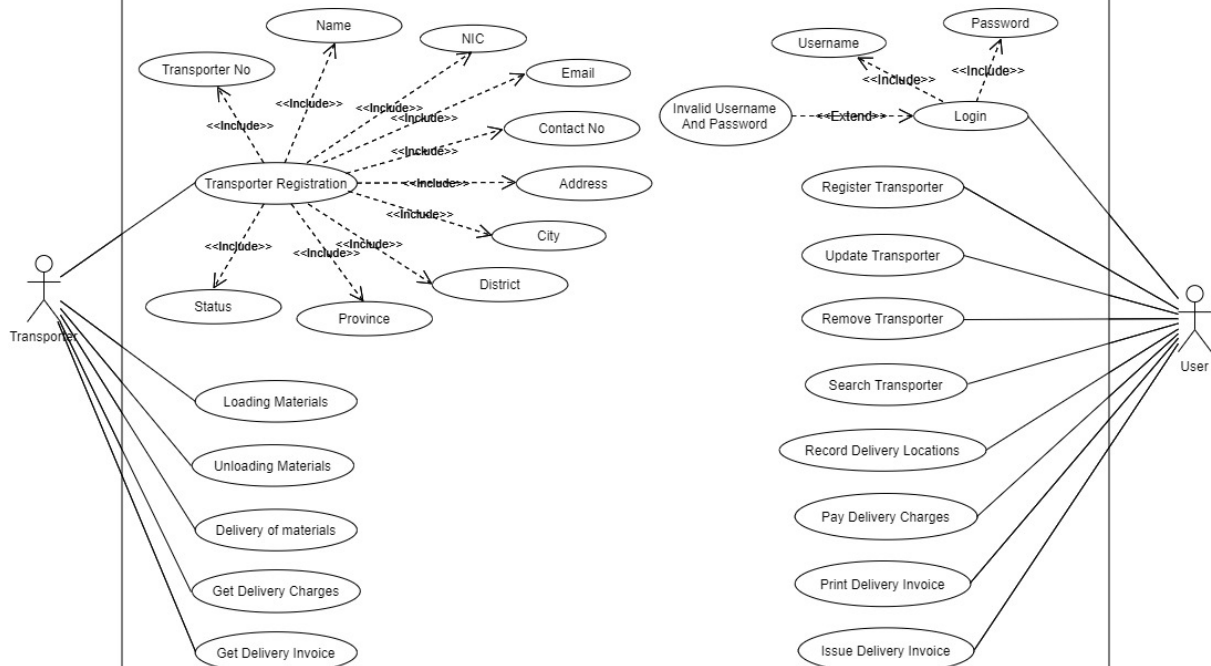


## Customer Management

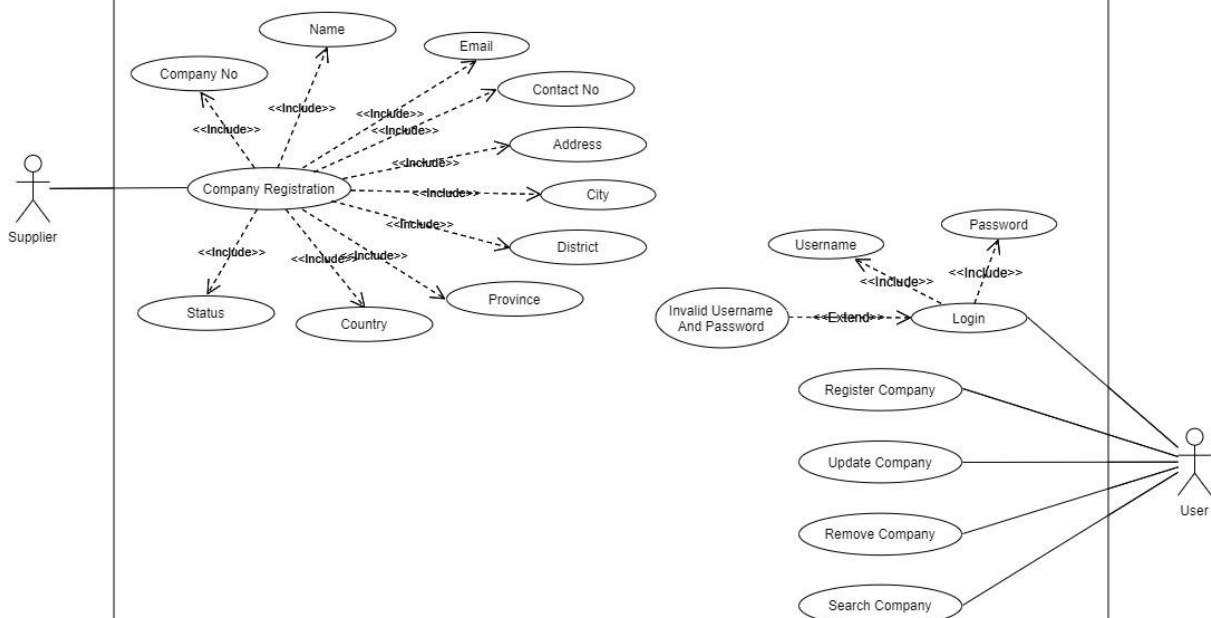


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### Transporter Management



### Company Management



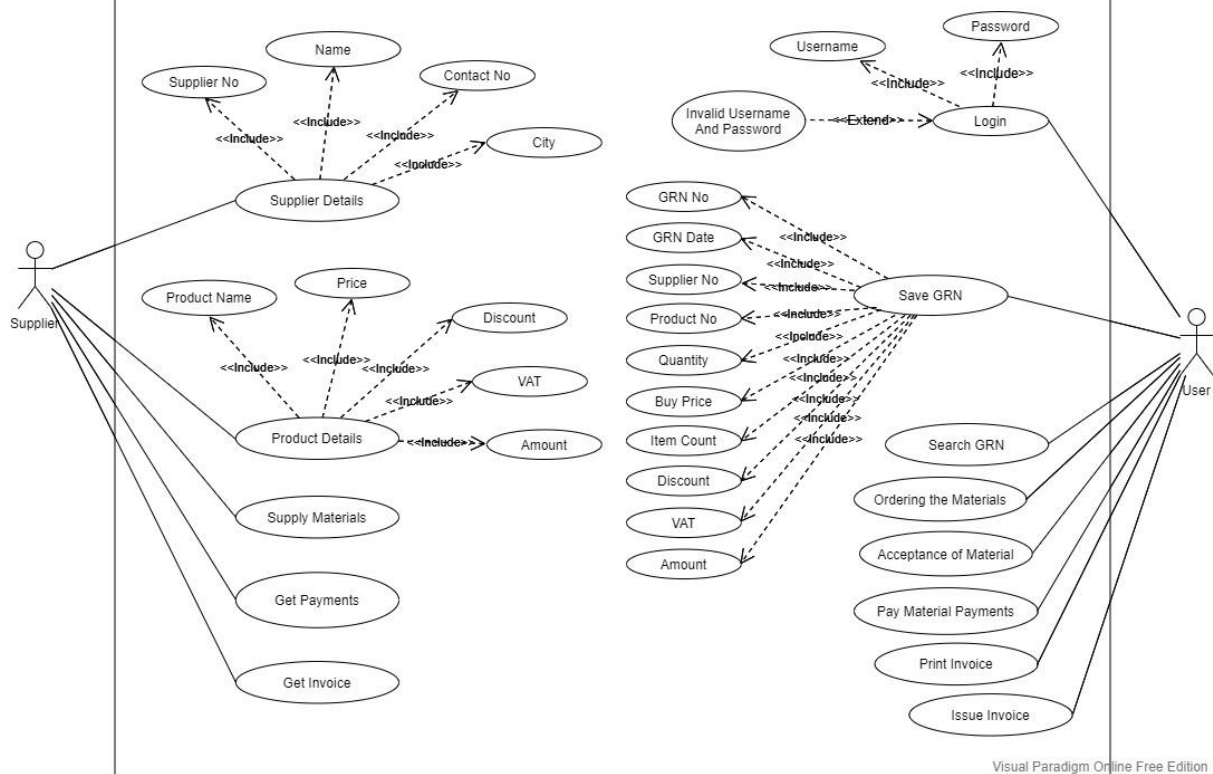
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## Product Management

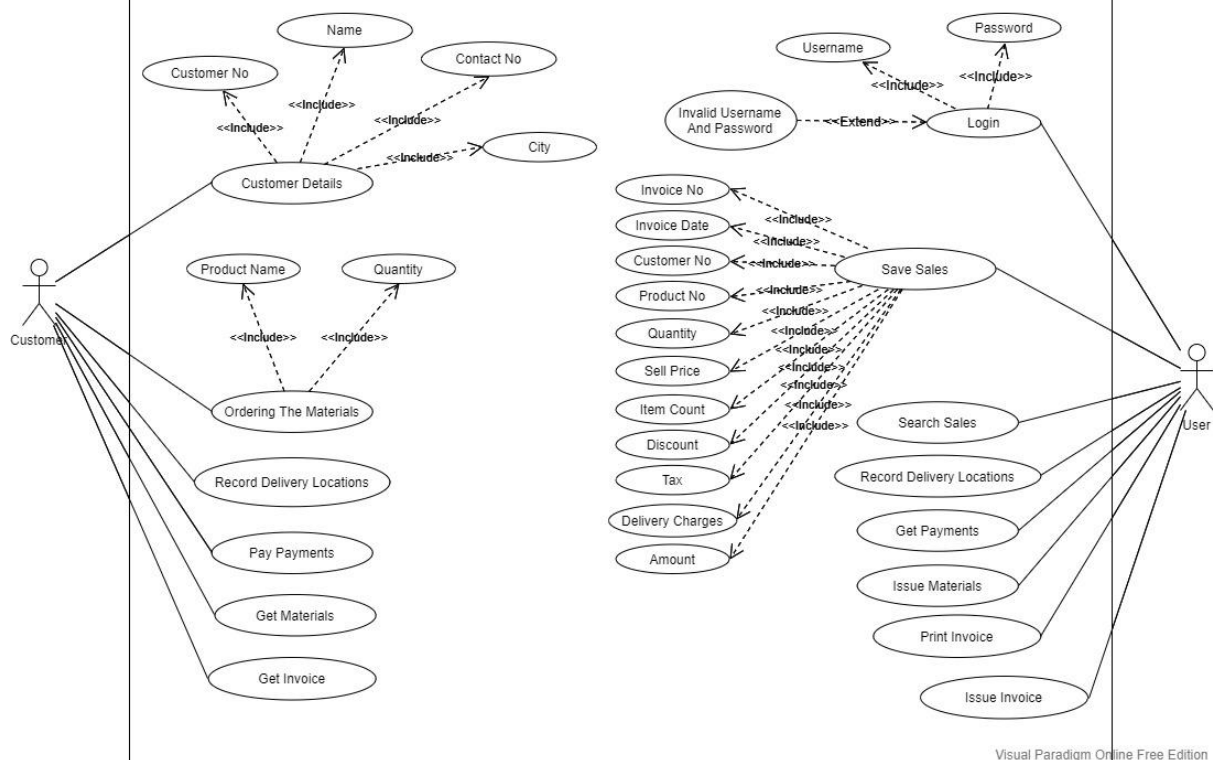


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## GRN Management

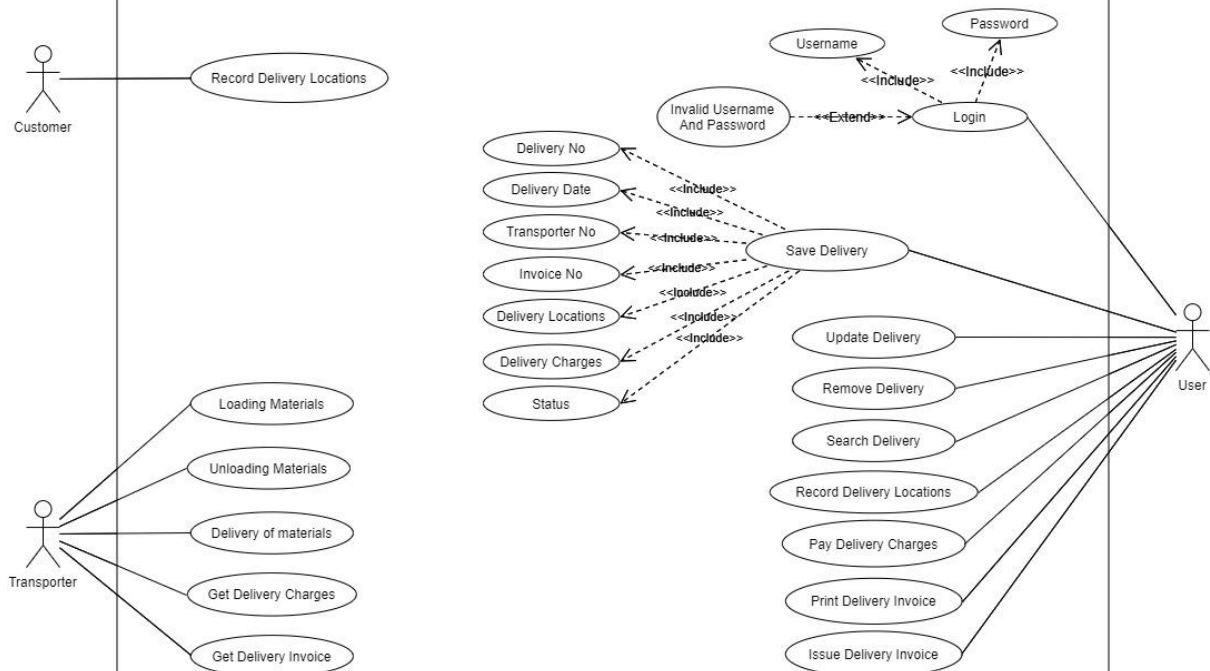


## Sales Management

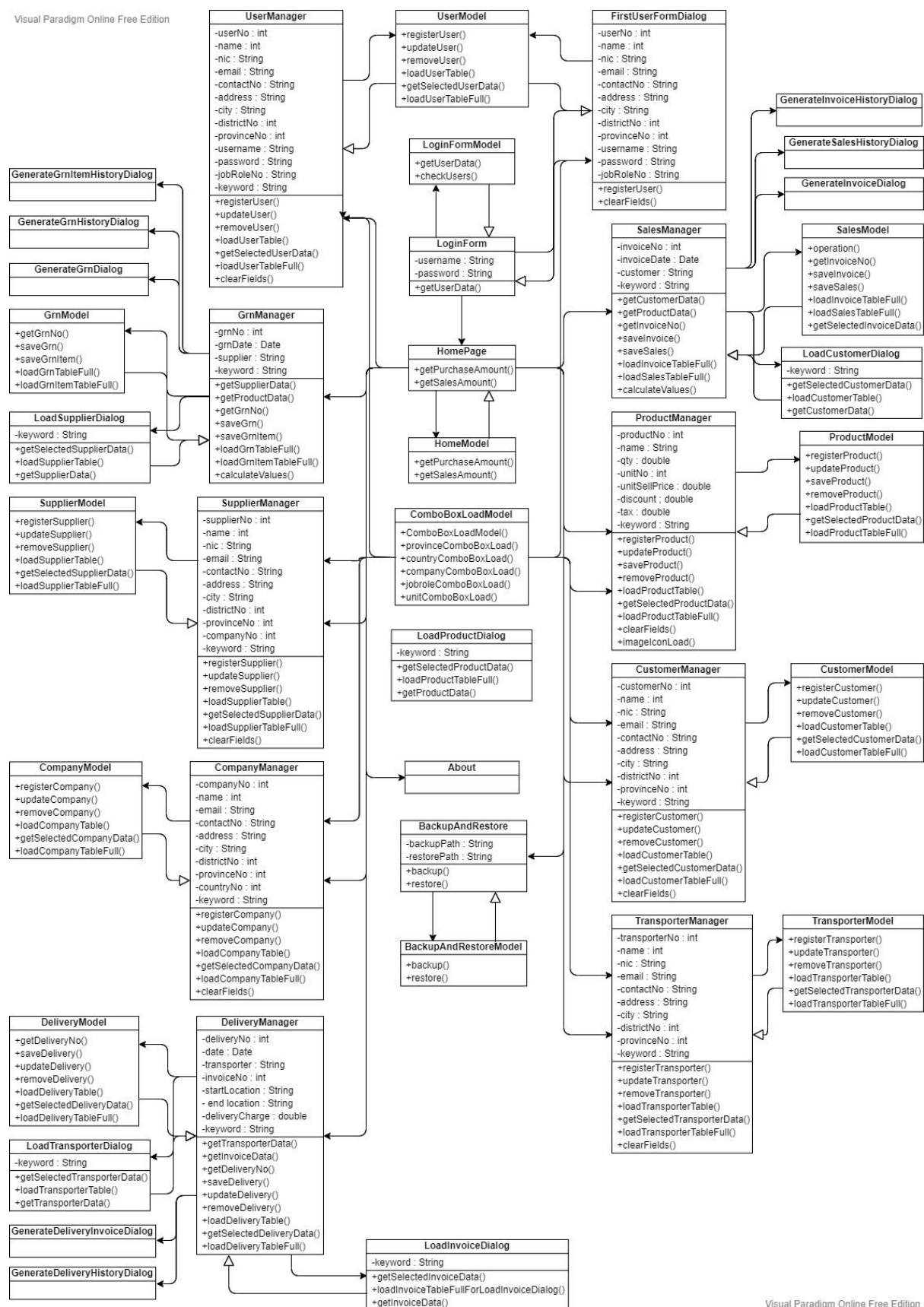


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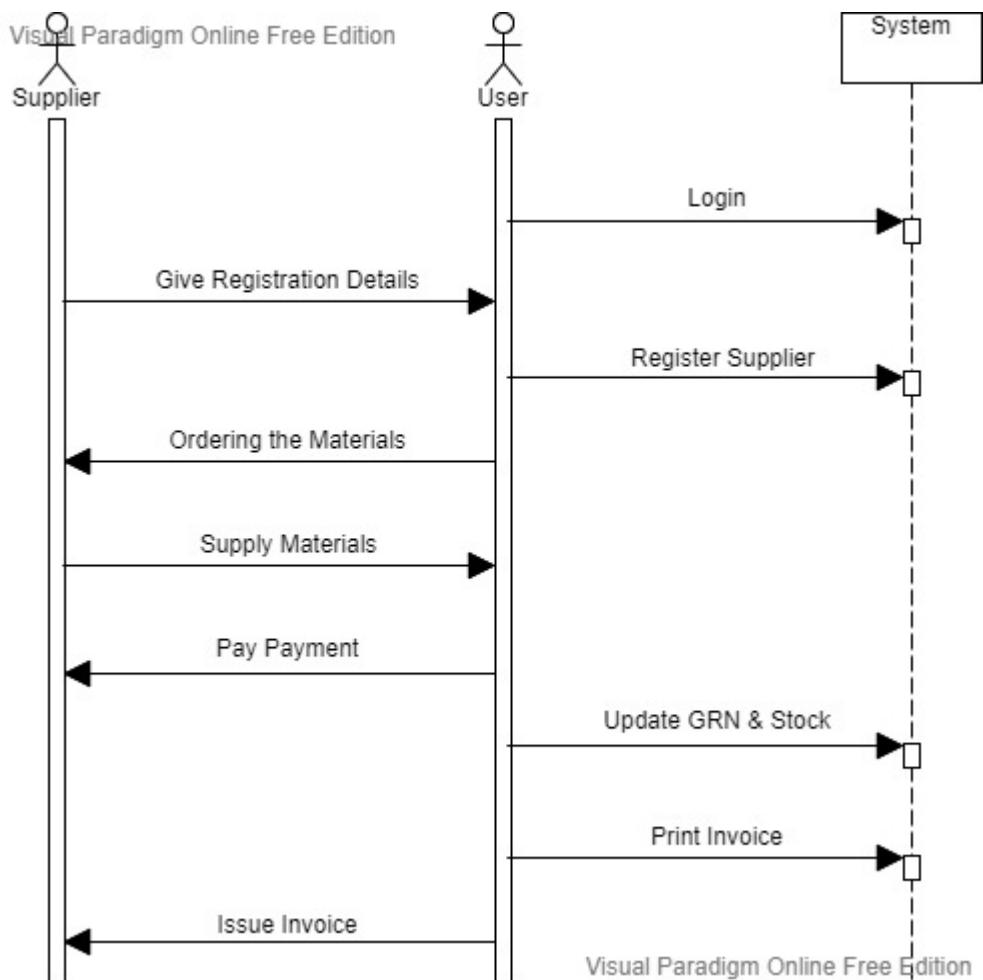
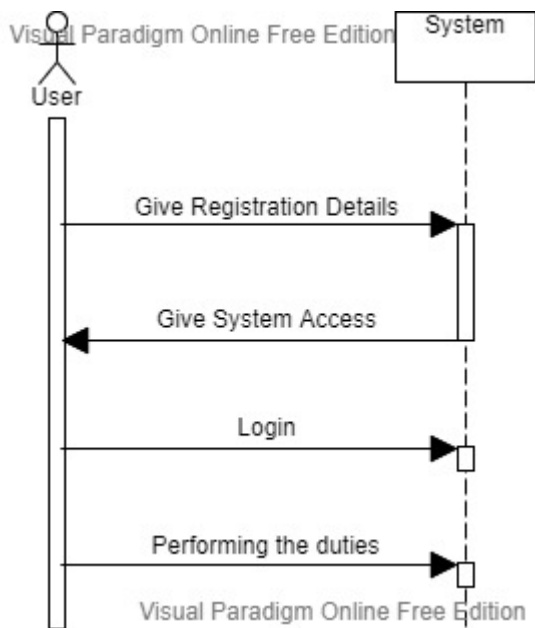
## Delivery Management



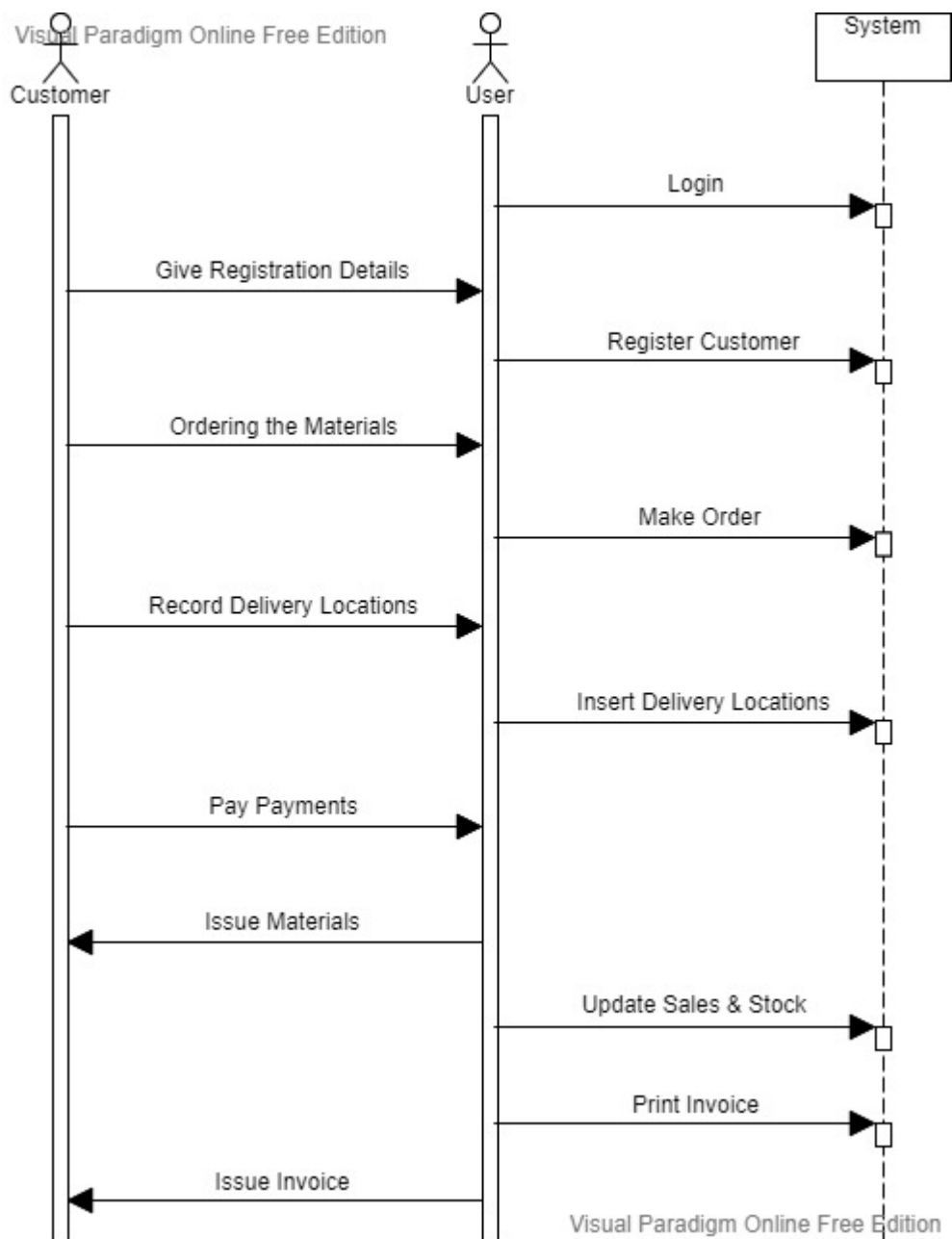
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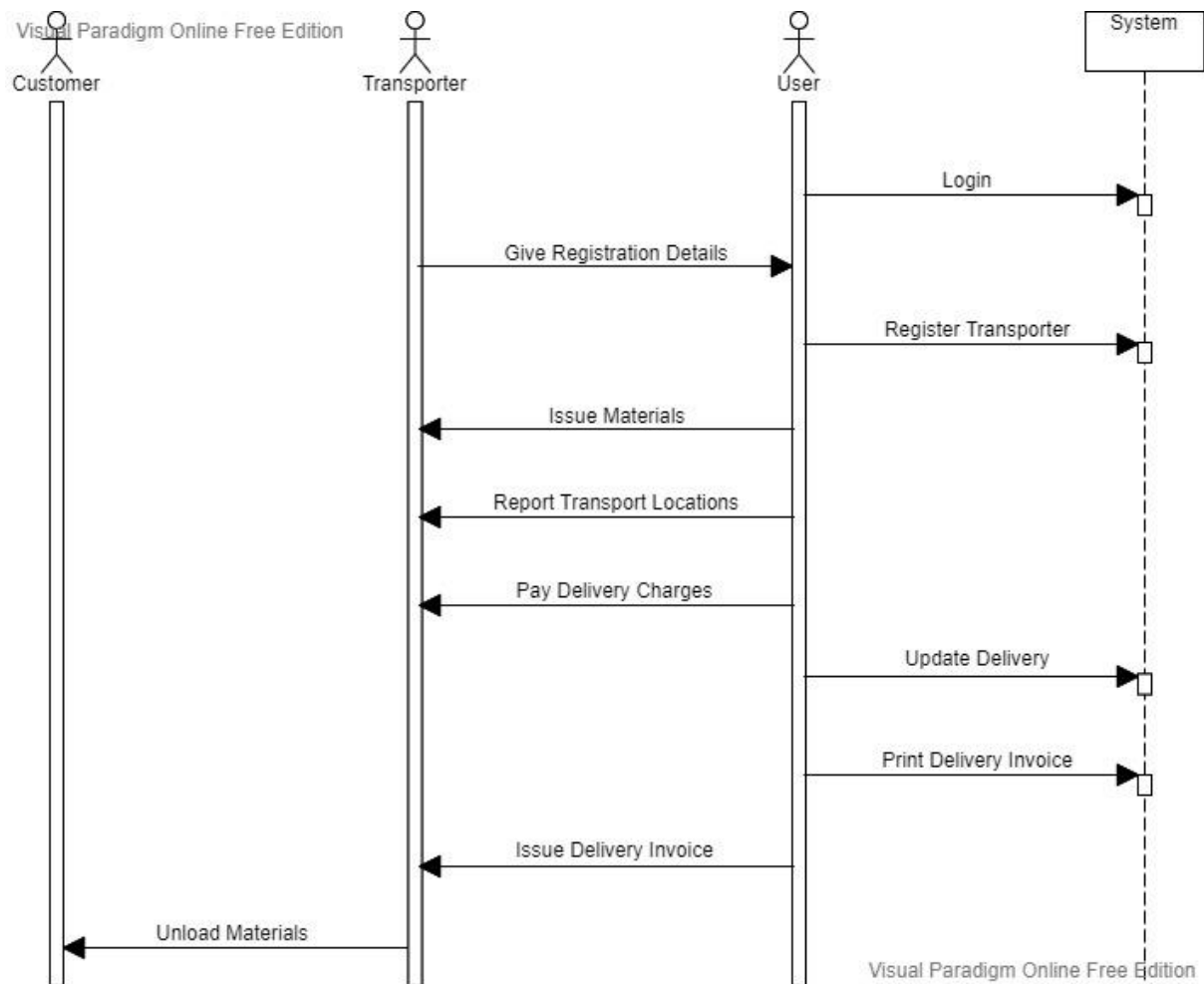


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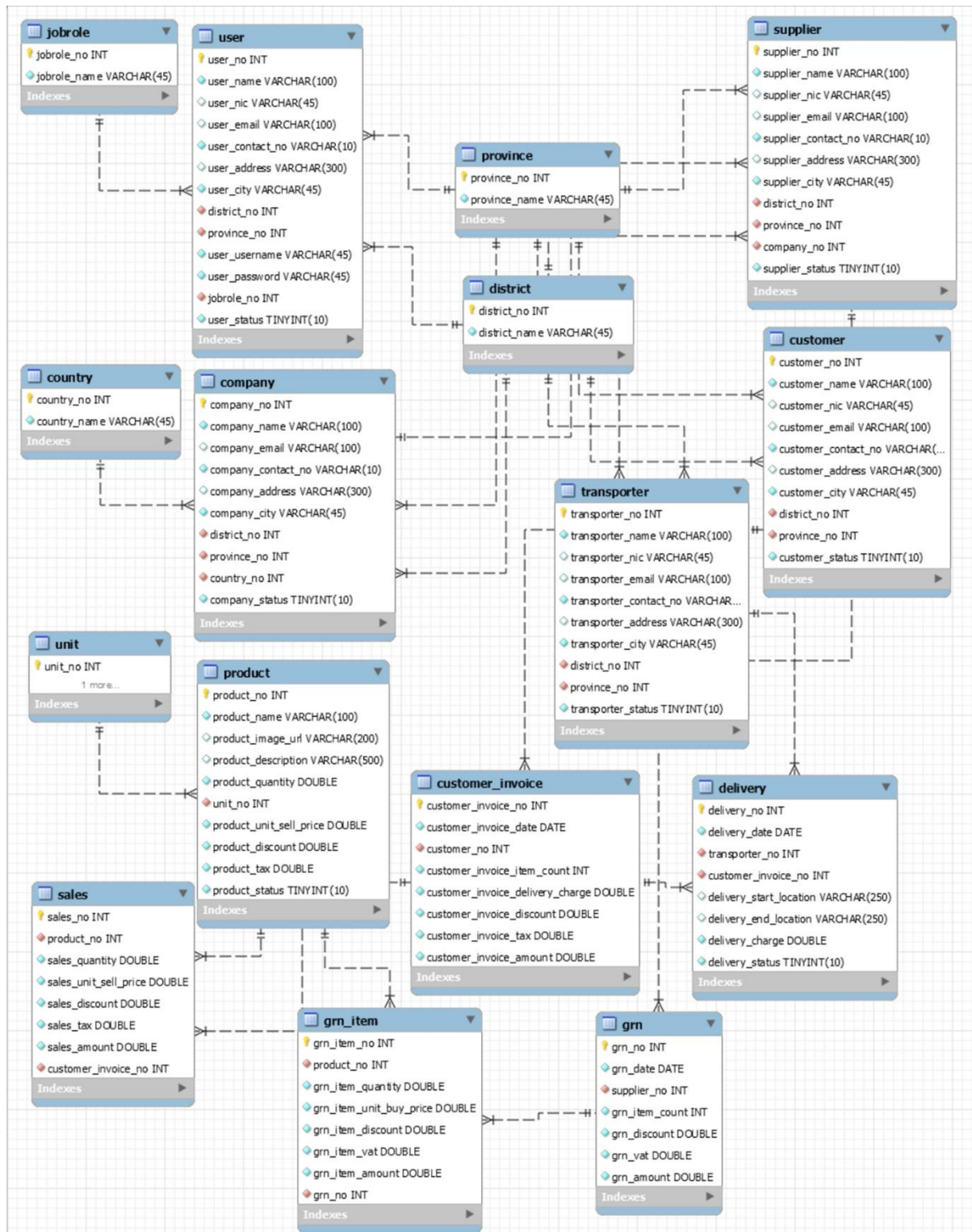


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Login




Username

Password

Login

New User


Create Admin

Details

User No

Name

NIC

Email

Contact No

Address

City

District

Not Selected

Province

Not Selected

Username

Password

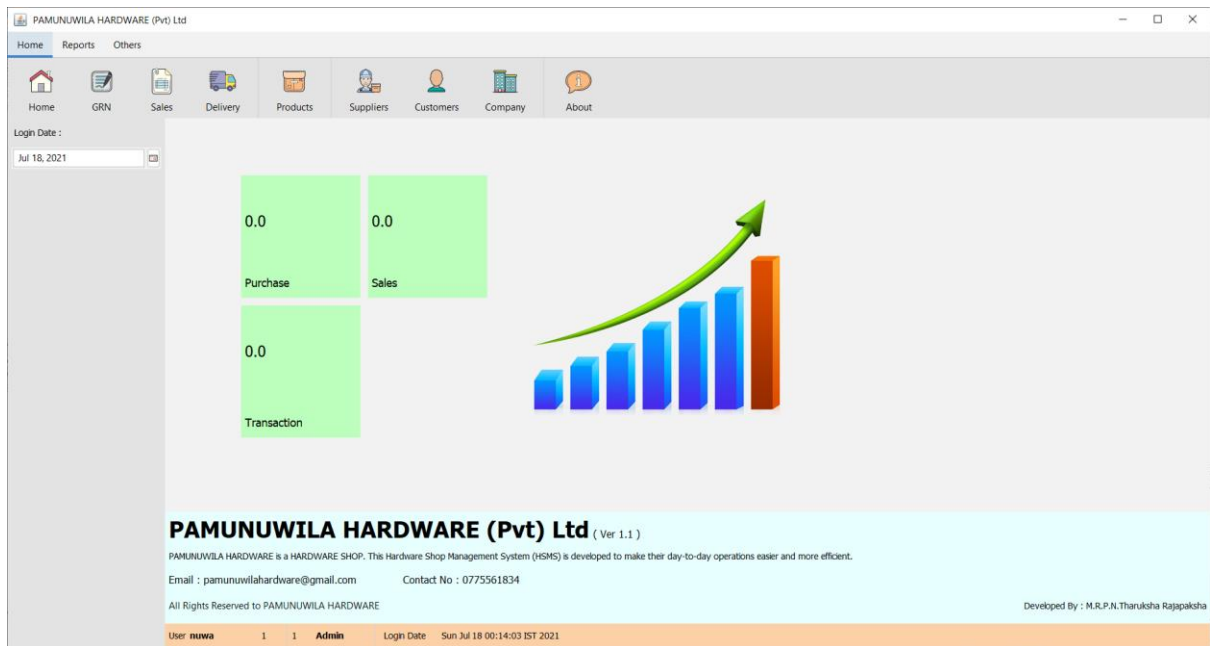
Job Role

Admin

Register

New

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User Manager

User Details

Users

Details

User No

Name

NIC

Email

Contact No

Address

City

District

Province

Username

Password

Job Role

Register

Update

Remove

New

Users

Search

User No	Name	Email	Contact No	City	Username	Job Role
1	Nuwanga	nuwangeraj...	0713848592	Kelaniya	nuwa	Admin

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## Backup And Restore

## Backup

**Browse**

## Backup

**Restore**

Browse

## Restore



## GRN History














50%

Print

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## Other Non-functional Requirements

### Performance Requirements

*Performance requirements explain allowable reaction times for system functionality. Although the system is developed matching for the least system performances, the performance of the system will heavily rely on the performance of the software and hardware components of the installing computer. When considering the timing of the system the load time for user interface screens shall take no longer than two seconds. It makes fast access to system functions. The log-in data shall be verified within three seconds causes' productivity of the system. Going back to query results within three seconds makes the search function more accurate.*

### Safety and Security Requirements

#### Safety Requirements

*Designed for PAMUNUWILA HARDWARE (Pvt) Ltd, Hardware Shop Management System has several user stages, and a username login screen that requires a username and password secures access to the main access and subsystems. It presents different ideas and accessible functions at user stages across the system. Backup maintenance ensures the security of the system database. The system can be reinstalled in any emergency. Also, everything that happens when using the system is recorded in a log file with the date and time. Therefore, everything that happens while using the system can be known by studying the log file.*

#### Security Requirements

*The owners, managers, cashiers, and accountants can access the Hardware Shop management system. The owners, managers, cashiers, and accountants also have access to the subsystems. The owner has the greatest privilege for all subsystems. A username login screen that requires a username and password secures access to the main access and subsystems.*

## Appendix A - Group Log

- Zoom Meetings
- Research in the Internet
- Search in the Internet

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