Software Requirements Specification

for

NShop

Version 1.1

Prepared by

Nidula Gunawardana	**200131302718**	**Nidulam2001@gmail.com**	**0778482017**

Course: BSc(Hons) in Software Engineering

Batch: *Mammoth*

Date: 2022-07-28

Contents

Contents 2

Introduction 3

Document Purpose 3

Product Scope 3

Definitions, Acronyms, and Abbreviations 3

Overall Description 4

Software Perspective 4

Users and Characteristics 4

Specific Requirements 6

External Interface Requirements 6

Functional Requirements 11

Behaviour Requirements 13

Other Non-functional Requirements 14

Performance Requirements 14

Safety and Security Requirements 14

Introduction

This project is for a POS (Point Of Sale) system for Nidula Shop

Document Purpose

This software requirement specification (SRS) document's purpose is to provide a foundation for the project. This gives a good idea of how should the system work and the expectations of the users. The client's expectations and requirements are gathered and analysed to create the best outcome that the client expects.

And also, this document can be used in the future to get a better understanding of how the system was developed. This provides the developers and the maintenance team to modify or modify the system in the future.

Product Scope

Through this POS System, the owner will be able to manage the business very effectively and efficiently. In this way, it will be easy to automate some operations of the business. This system will have four end-users: Admin A, Admin B, Admin C, and the Cashier. This system will contain a user management system, product management system, DBMS server, and report generator. Admins can manage products, users, suppliers, and stocks. And admins can monitor all stock changes and money changes through the application. And the owner can view a detailed report of the system.

The main goal is to introduce a POS system to simplify the day-to-day processes of the shop to increase the efficiency of the business. This automatic system will be able to replace the large customer information physical files which were difficult to handle. Secure transactions, quick access to the information, and ease of use are some of the advantages of this system.

Definitions, Acronyms, and Abbreviations

SRS	Software Requirement Specifications
DBMS	Database Management System
POS	Point Of Sales

Overall Description

Software Perspective

This POS System will increase the accuracy and the efficiency of the shop more than keeping records on books. This system will give easy access to the system and it will contain user-friendly functions with an attractive interface. . This system will give better options for the problem of handling a large-scale physical file system, for the errors occurring in calculations, and all the other required tasks that have been specified by the client. The outcome of this project will increase efficiency by a considerable amount.

Product Functions,

- Add/cashiers Admins
- Add/update cashiers
- Register/update customers
- Add/update products
- Add/update companies
- Add/update company branches
- Add GRN
- View GRN history
- View stocks
- Update stocks
- View stock changes
- Get stock changes report
- Supplier registration
- View/edit suppliers
- Generate invoice
- Generate budjet reports

Users and Characteristics

There are four user types in this system,

1. Admin A
2. Admin B
3. Admin C
4. Cashier

Admin A:-

Admin A can act as the owner of the business and can access to monitor and authorization all the tasks handled by the system. He can access every function in the system. The owner of the company, as well as the system, has the access to the administration panel which is considered the heart of the system. As the main authorized person owner can manage the others including their user levels and privileges. Taking backups of the system and

restoring them is also done by the owner. Also, the owner can take detailed reports available in the system.

Admin B:-

Admin B has access to all the GRN management, product management, and supplier management. Admin B doesn't have access to user management which only have access for admin A

Admin C:-

Admin C can only access the GRN section and product management system. Admin C is the lowest of the admins.

Cashier:-

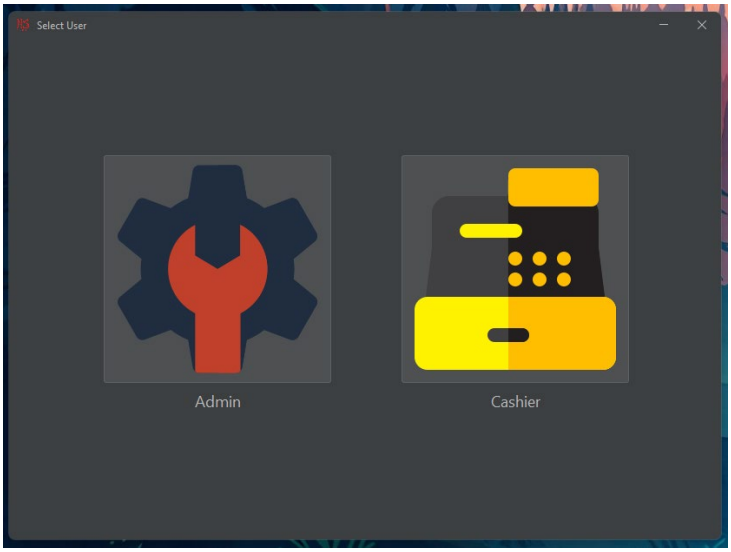
The cashier's role is important because the cashier is the person who interacts with the customers. Cashiers can generate the invoice and register new customers through the cashiers section.

Specific Requirements

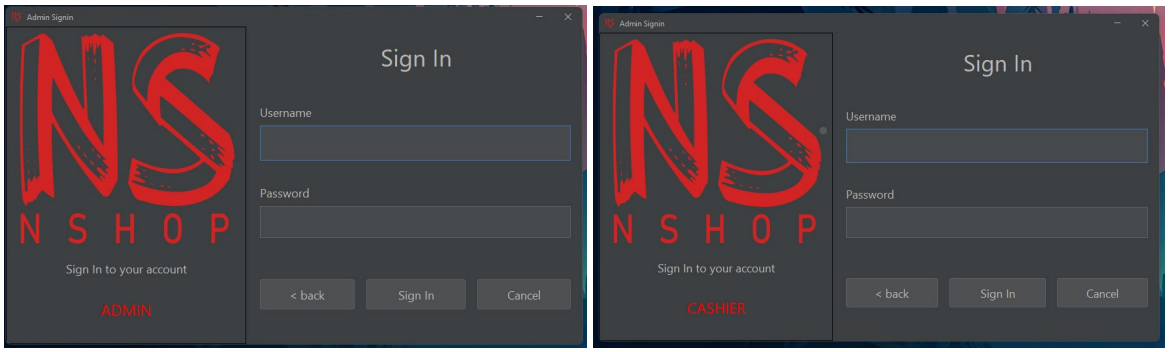
External Interface Requirements

User Interfaces

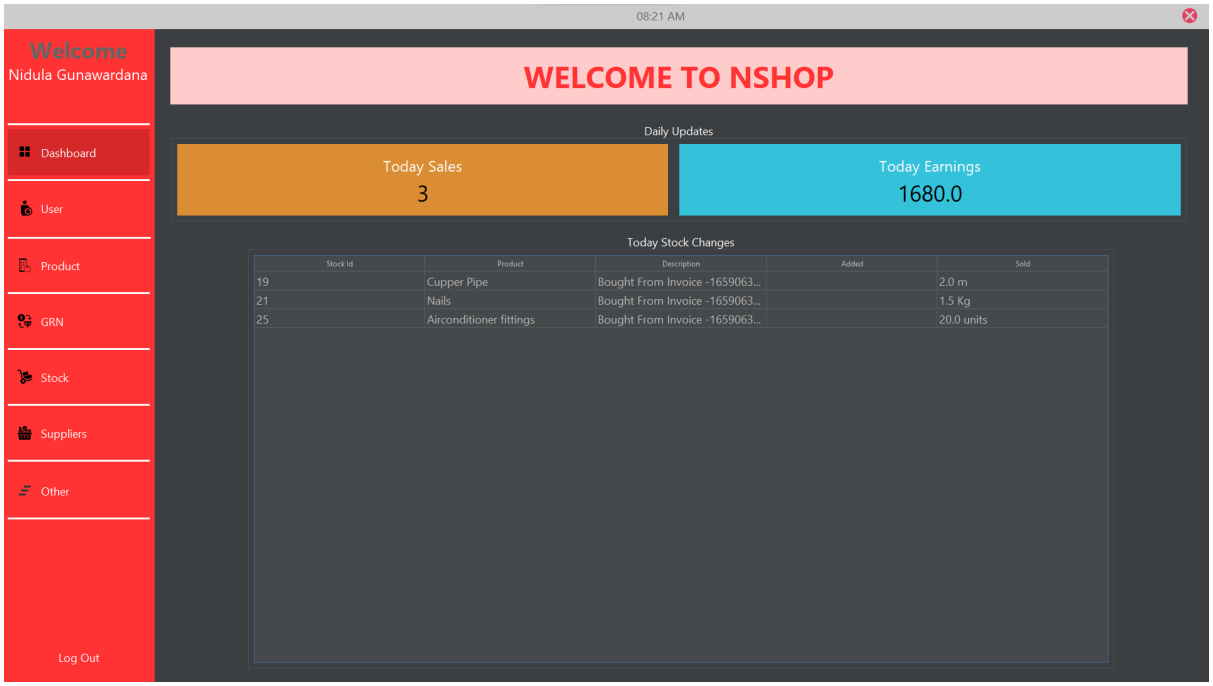
Splash screen



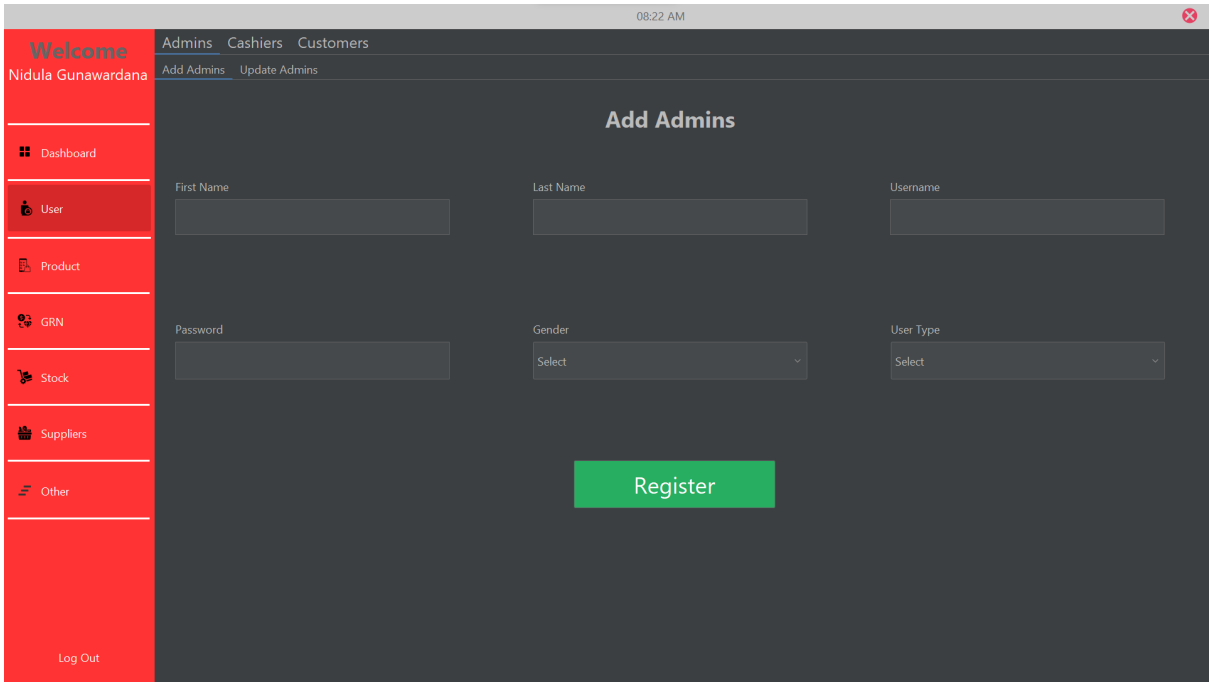
Login Selection



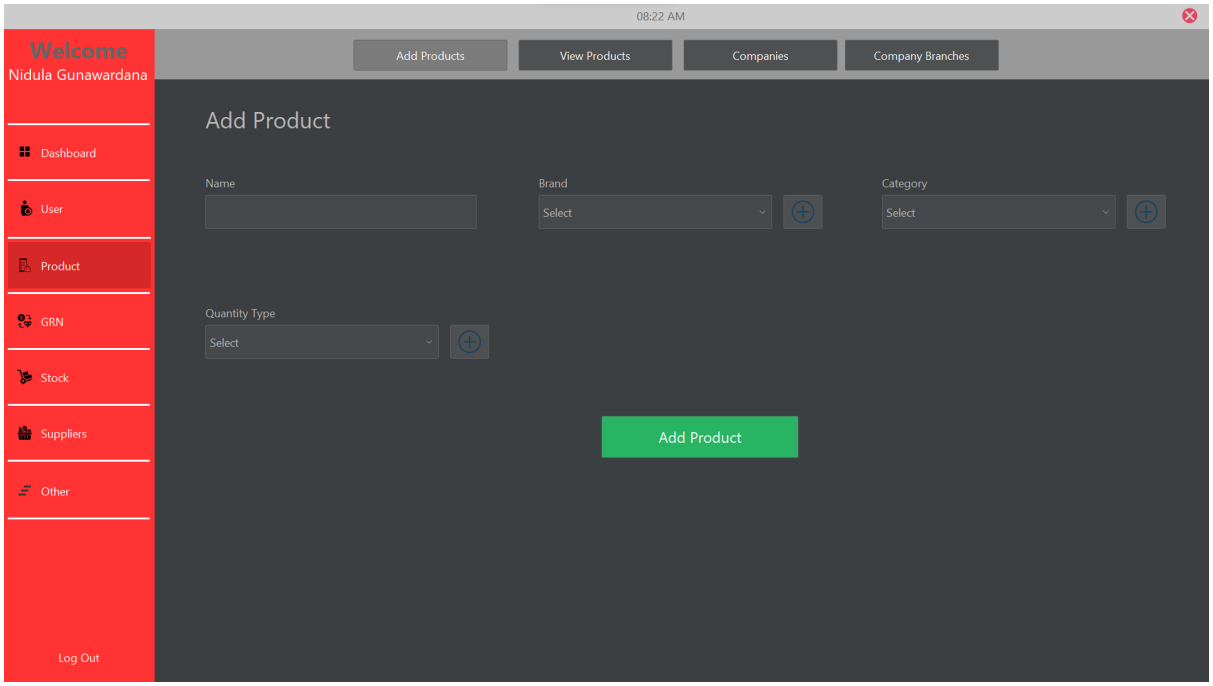
Login



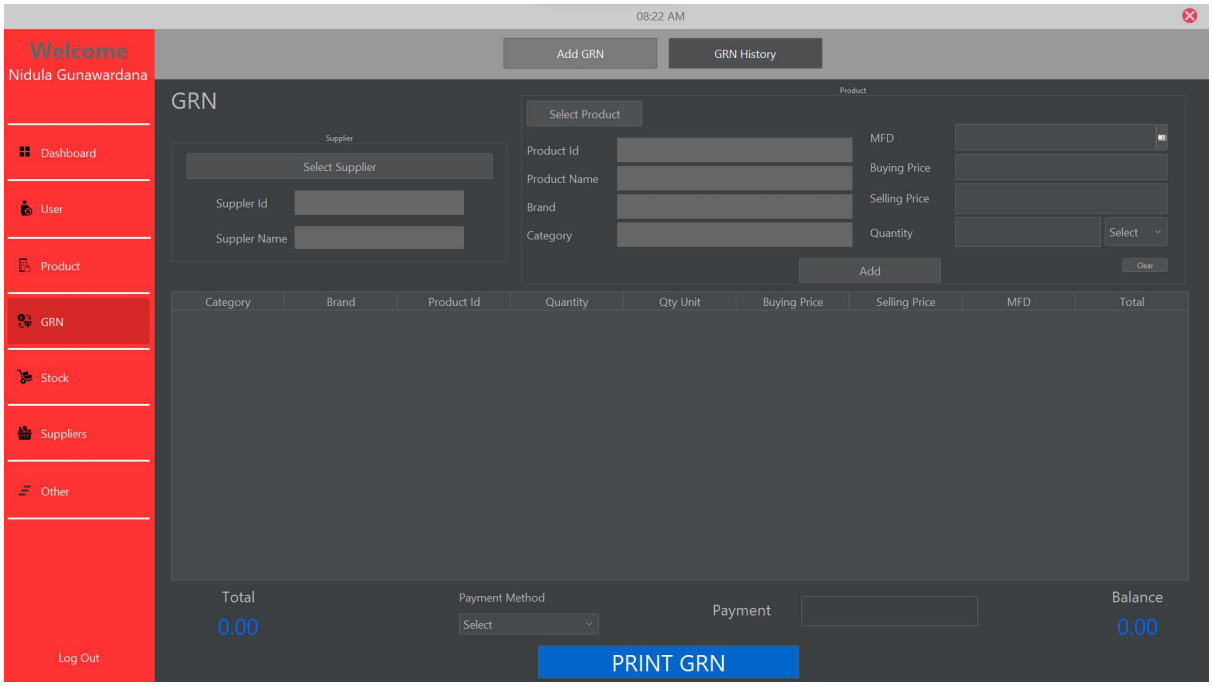
Admin Home/dashboard



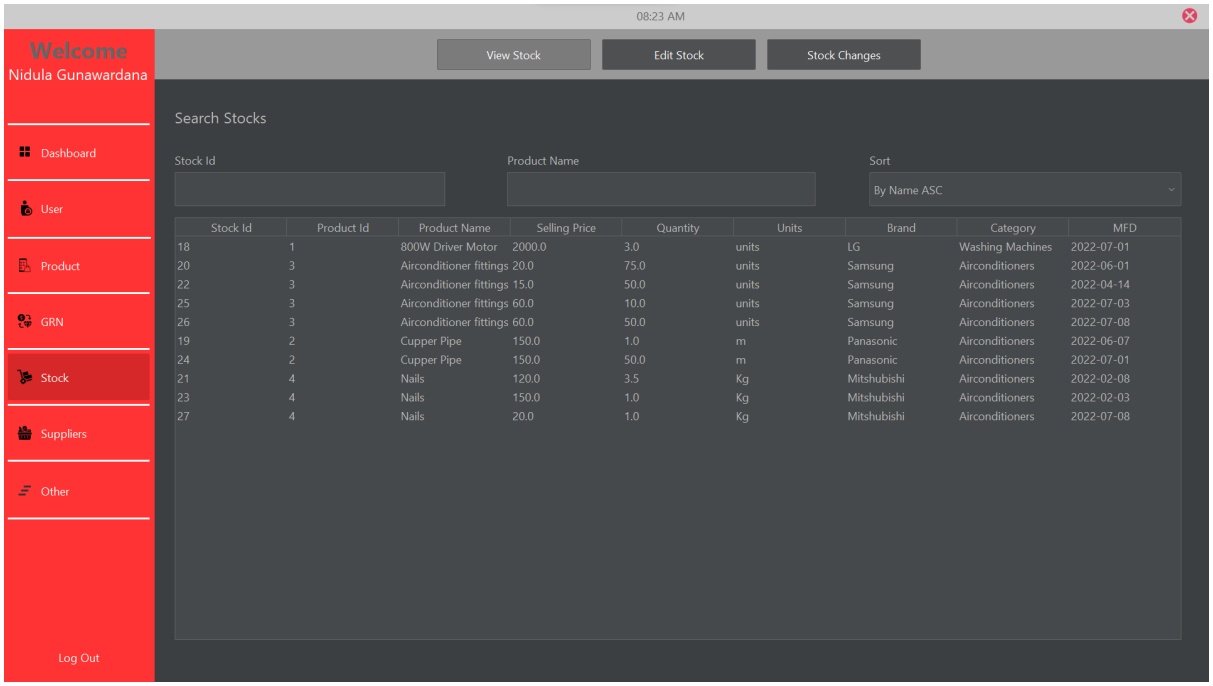
User manage



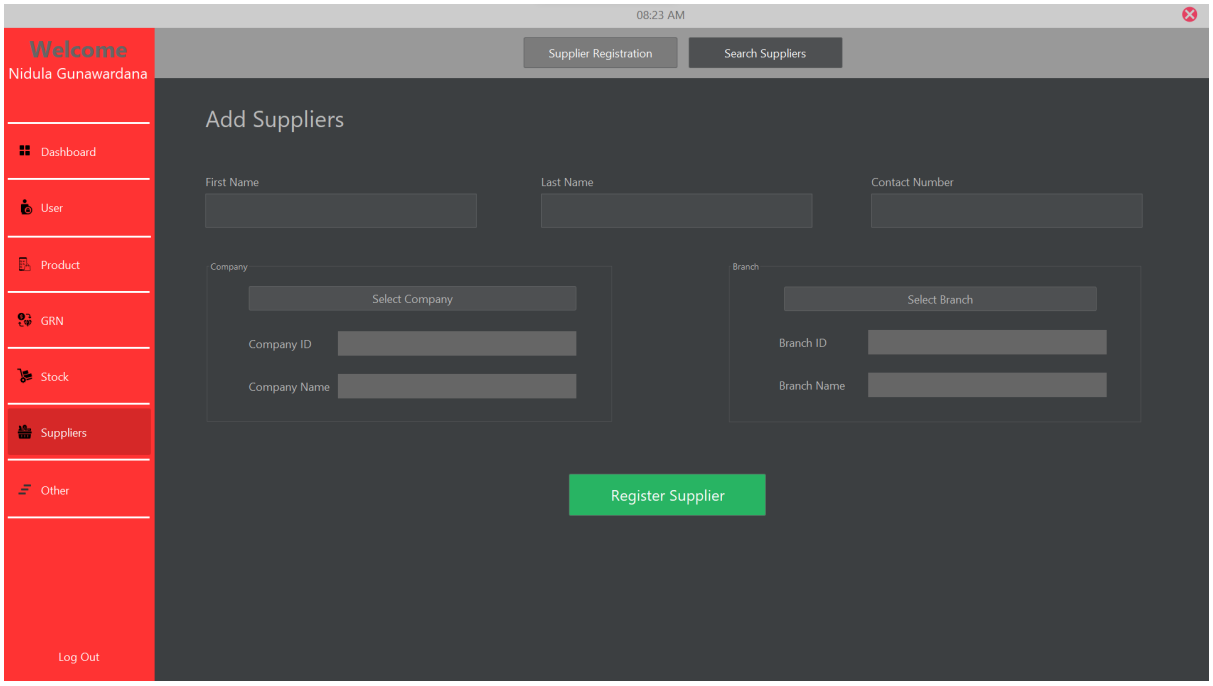
Product mange



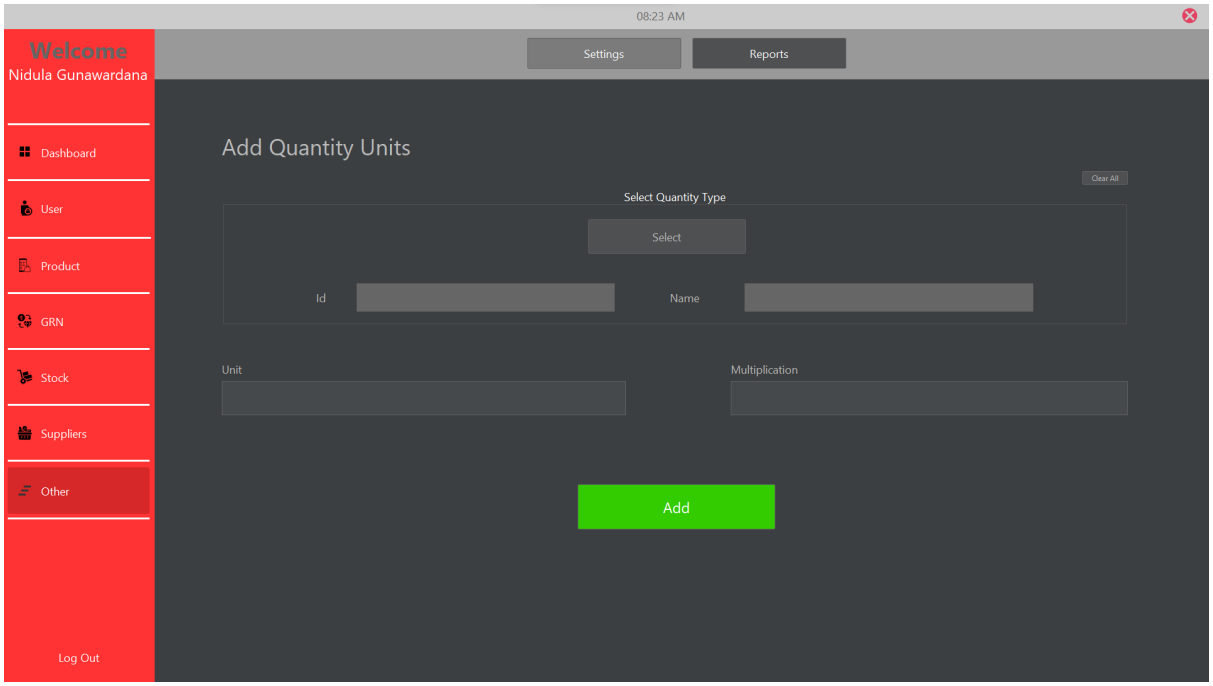
GRN



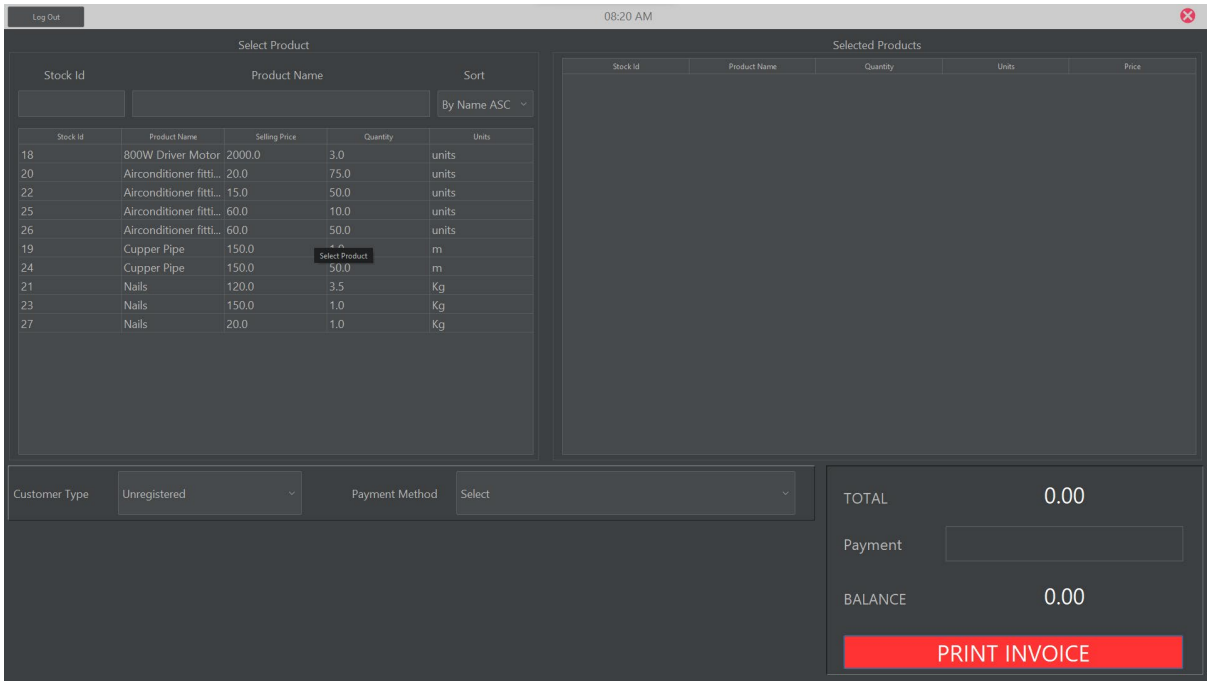
Stock manage



Supplier manage



Other functions



Cashier home

Hardware Interfaces

Client Computer			
Monitor	Processor	RAM	Disk Space
Resolution: 1920x1080	Intel or AMD 2GHZ	2GB	1GB

Apart from this, a printer will be needed when printing invoices and bills.

Software Interfaces

The computer that this software is going to install needs to have a windows operating system equal to or above Windows 7 or above. The database server will be the MySQL server. And need JRE version above 1.0.

Functional Requirements

User Registration

- Users can be registered only by the owner or the admin A
- The system will record the following details into the database,
  First name
  Last name
  Username
  Password
  Gender

Login

- User should enter their username and password to login into the system.

Product management

- Admins can add products to the system
- They can view and update products
- And add companies and company branches with the required details

GRN

- Admins can add new stocks through GRN while generating a report.
- And also view previous GRNs as well.

Stock management

- Admin A can view stocks
- Edit stocks

- And view stock changes also can get reports of stock changes

Supplier management

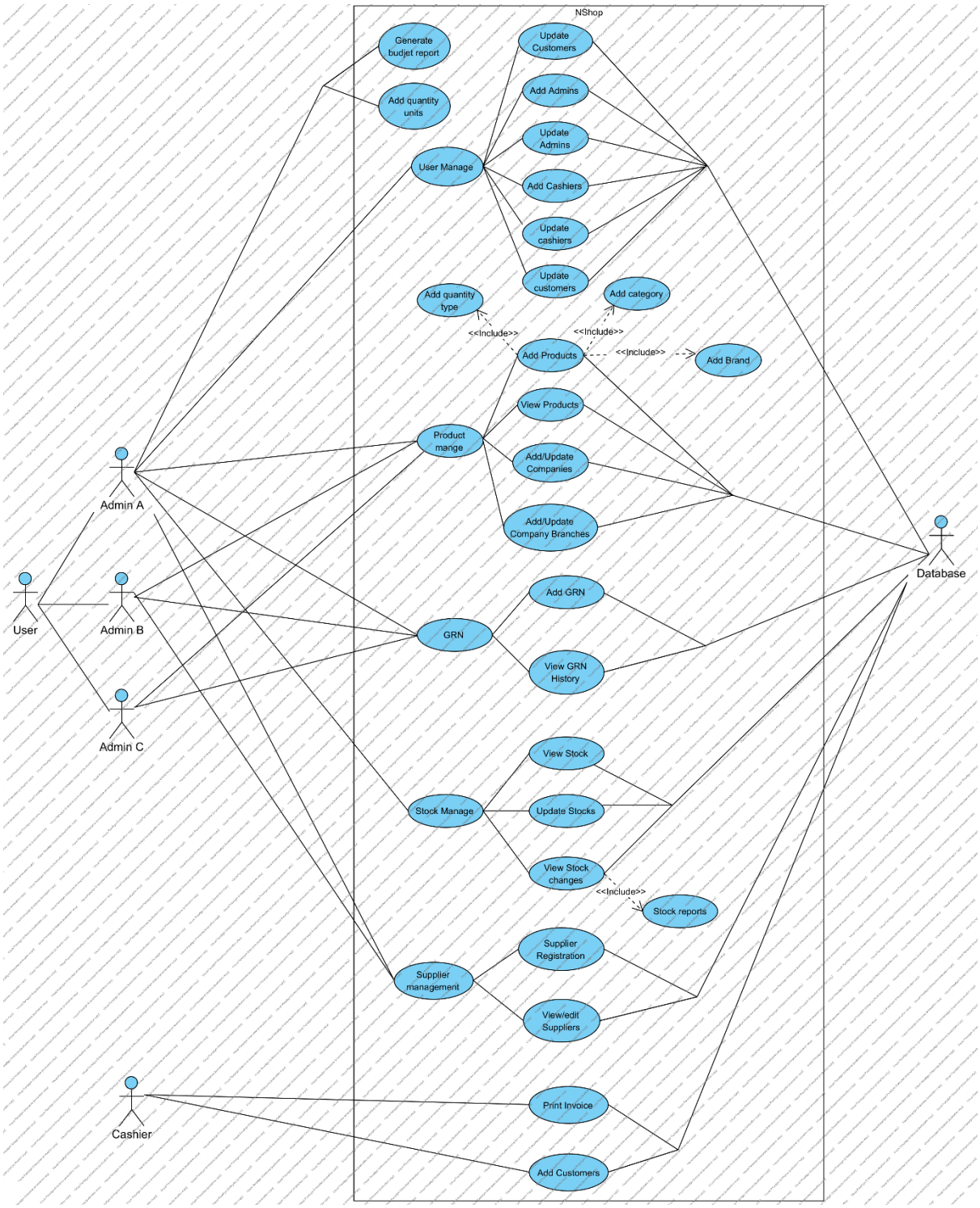
- Suppliers can be registered and updated suppliers through here

Budget reports

- Admin A can generate budget reports for a day, month, year, and all the transactions.

Behaviour Requirements

Use Case View



Other Non-functional Requirements

Performance Requirements

Performance requirements mean acceptable response times for the system functionality. The system will be highly dependent on the performance of the hardware and software components of the installing computer. The loading time of the user interface will not take more than 2 seconds. It makes fast access to the system. And login verification will take about 5 seconds. Returning queries within 5 seconds will improve the search speed of the system.

Safety and Security Requirements

This system has several user levels. they can access the various subsystems which are protected by the user login screen that requires a username and a password. This will give different views and different functionalities for each user. And maintaining a backup will ensure the security of the database. The system can be restored in case of any emergency.

Customer service representatives and managers will be able to log in to the system. And managers will have access to the management subsystems. The owner has maximum access to all the systems. Access to the various subsystem will be protected by the login screen which requires a username and a password.