

Point of Sale System
Specially design for Super Store
(Software Requirement Specification DOC)

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INTRODUCTION

The following section provides an overview of the derived Software Requirements Specification (SRS) for the subject Food Store Management System. To begin with, the purpose of the document is presented and its intended audience outlined. Subsequently, the scope of the project specified by the document is given with a particular focus on what the resultant software will do and the relevant benefits associated with it. The nomenclature used throughout the SRS is also offered. To conclude, a complete document overview is provided to facilitate increased reader comprehension and navigation.

Under this project, an Inventory Control System for “Super City” Mega Food Store will be developed into a partially automated Food Store. Currently the above-mentioned food store depends upon a manually managed system which has caused them to face number of problems, mainly having a big deal of paper work to do, eventually leading to inefficiency, security issues and management problems. Also one of the major priorities that count in a food store is the duration of the food products.

The Super City mega food store had transferred into a new premise with a higher Food Item capacity and now because of that the demand for an efficient way to manage the Food store is as high as it has ever been so implement a system that will take the strain of a high Food Item volume from the staff members and will help them to manage the food store better.

The proposed system for the “Super City” Mega food store will manage most of the data on the store and will automate some of the more tiring and labor consuming tasks off the hand of the staff and make time for them to do the tasks that are absolutely necessary of the attention of the staff. Mainly the proposed system covers the,

- Food Item's registering.
- Registering Employees.
- Food Item enrolment and management.

- Employee management.
- Archiving valuable details for future usage.
- User management.
- Generate reports for necessary instances.
- Notifying parents about the arrival of the students to the class.
- Implement a system to identify the students who are not paying the fees and are attending the wrong class.
- Placing purchase orders.
- Maintaining the system.

Definitions

Term	Definition
User	Authorized Members of the “Super City” mega food store
Actor	Is a person who directly involve with the system.
Use case Scenario	A list of steps, typically defining interactions between a role (actor) and a system, to achieve a goal.
Assumption	A proposition that is taken for granted, that is, as if it were known to be true.
Graphical User Interface (GUI)	A type of user interface which allows users to interact with features of the system.
Software developer	A person or organization concerned with facets of the software development process wider than design and coding.
Integrated Development Environment (IDE)	A software application that provides comprehensive facilities to software developer for software development.

DB	Database, where we store all the information.
Java	A software package which is used to develop the system.
My SQL	A database management system (DBMS) used to implement and manage the databases.
Jasper I Report Designer	Report designer software which is used to design and view charts, reports (payment reports etc.) and so on.
Software framework	A set of programming codes that would be very commonly used so that when you build your own software, instead of everyone building everything from scratch, you use a common framework that has all the basic common functions already built.
Client	The person who employed the developers to develop the system.
ID card	Employee identification card issued by the Food Store to the employees for a duration of their service period.

Purpose

The purpose of this SRS is to outline both the functional and non-functional requirements of the subject FMS. In addition to said requirements, the document also provides a detailed profile of the external interfaces, performance considerations and design constraints imposed on the subsequent implementation. It is the intention that the presented set of requirements possesses the following qualities; correctness, unambiguousness, completeness, consistency, verifiability, modifiability and traceability. Consequently, the document should act as a foundation for efficient and well-managed project completion and further serve as an accurate reference in the future. The primary audience of this SRS document will be the development team employed to implement the specified FMS. It will not only provide an extensive capacity for project planning and progress assessment but it will further assist with developer/stakeholder interactions. The secondary document audience comprises the stakeholders of the project, that is, Food Stores and associated staff. To this audience group, this SRS should convey and confirm the required functionality and represent a contractual agreement between the involved parties.

Product Scope

In current formal selecting environments, some form of physical static is utilized to convey the available food and beverage choices to customers. Item lists are generally paper based and hence impose restrictions on the textual real estate available and the ability store has to update them. This document specifies the requirements for a Mega food store and ordering replacement strategy to alleviate the problems associated with the current archaic method. It should be noted that while the suggested strategy incorporates the use of various hardware components, the primary focus of the presented SRS relates to the constituent software elements.

The main scope is managing the Food items which are being stored and sold. Most of the processes done by the Food Store is partially automated in this system as something as precious

as the future of our country should never be handled without the human consent. The limitations of the software are registering of the food item batches, Registering food items, categorizing, employment registration. Furthermore the enrolling and banishing any Food item from the Food Store falls to the client as for his request. The user privileges of the software are managed by the client and he have the ability to assign and take away access to the system from the users.

This system is developed in a spiral architecture and the system in this stage will prioritise in the Food management section. Hence the attendance of the employees are managed and handled in this software all the salary payments are also automated. However the payments of the institute is somewhat handled by the software in order to achieve the main goal of making the Food Store function efficiently.

Definition

The structure of this Software Requirements Specification is as follows. Section 2 presents an overall description of the subject RMOS. Attention is given to putting the resultant software product into perspective and further outlining end-user characteristics, system constraints and assumptions. Section 3 is devoted to the explicit specification of software requirements both functional and non-functional in nature. The functional requirements listed have been demarcated according to the categories of system users. For completeness, Section 4 extends upon Section 3 through the inclusion of UML analysis models and diagrams. To begin with, the identified RMOS use cases are given. In supplement, activity diagrams for each use case are presented along with an overall class diagram and relevant state chart diagrams.

Reference

Tutorialspointcom. 2017. *Wwwtutorialspointcom*. [Online]. [26 April 2017]. Available from: <https://www.tutorialspoint.com/java/> In-text citation: (Tutorialspointcom, 2017)

Codecademycom. 2017. *Codecademy*. [Online]. [26 April 2017]. Available from: <https://www.codecademy.com/learn/learn-java> In-text citation: (Codecademycom, 2017)

Wordpresscom. 2018. *Wordpresscom*. [Online]. [24 August 2018]. Available from: <https://kungfumas.files.wordpress.com/2017/09/099.pdf>

Gvsuedu. 2018. *Gvsuedu*. [Online]. [24 August 2018]. Available from: <https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1222>

Overall Description

Software Perspective

The client for this software is the “Super City” Mega food store. The food store was a very famous one regardless of its larger premises. Because of this a large number of customers have gathered to the class and hence the need to expand the facilities of the food store has risen. This software is a user friendly but an efficient piece of technology, designed specifically to manage the Food Item load.

Uses and Characteristics

There are few users that must be included and give access to the system for it to operate correctly.

- Super Admin

Branch Manager of the “Super City” Mega Food Store. In this software he holds the absolute authority to do anything that the software is capable of performing.

- Admin(Supervisor)

Supervisor for handling most of the payments and details in the institute that deemed ok. The authority of him is lesser than that of the super admin.

- Accountant

This actor is responsible for the management of the cash flow and maintaining accounts. These operations are majorly based on the Buying and Selling operation of the Food Store.

- Cashier

Cashier is responsible for handling most of the transactions and billing of the payments made by the customers. Because this actor is handling money he gets a higher priority than the rest of the users apart from the admins.

- Card Marker

This is the lowest privileged access level. This user is responsible for the marking of the cards of the Employees. He only can access few frames.

- Crew Members

These are the co-workers of the Food Store.

- Customer

These are the main users of the system.

- Supplier

These are also the users of the system.

Operating Environment

Currently this Food Store uses only have 4 Desktop Computers in use of the Windows OS. After some research some useful hardware were salvaged from previously failed software installation attempts of the Food Store.

- 4 POS printer.
- 2 inkjet printer.

To our system, all the above components are vital to the operation of the system. There are some other major implementation hardware needed to the implementation and they are managed by the developers.

Design and Implementation Constraints

There are few types of hardware required for the fluent functioning of this system.

1) A Computer

Processor - core i3 or higher with a clock speed of 2.8Ghz or higher.

Ram – 8 Gb or more.

OS – Windows

HDD – more than 1tb hard disk capacity

2) Internet Connection.

20Mbps or higher connection

User Documentation

Site configuration for the FMS is expected to encompass the following steps:

- Install the server, surface computers and displays
- Acquire sufficient tablets for all staff that need to use them
- Network all devices, install operating systems, server software, DBMS.
- Secure network, distribute initial paskeys
- Install FMS software
- Configure server FMS software

Some customization of RMOS software elements may be required, including:

- Table layout maps
- GUI elements, especially for customer-facing UIs

Assumptions and Dependencies

The SRS assumes that none of the constituent system components will be implemented as embedded applications. The implication is that the target hardware will provide a capacity for standalone program/application deployment and not require customized embedded firmware to be written. It is further assumed that laptop PCs of sufficient processing capability and battery life will be utilized. The surface computers employed by the system should facilitate being utilized/left on for extended periods (sufficient for daily use) and that they are programmable in the same fashion as x86 architecture computers. Finally, it is further assumed that the deployment environment is capable of supporting an IEEE 802.11 wireless network and Bluetooth 4.0 for system communication.

Existing systems

All small businesses are required to keep track of accounting details. There are various software and non-software accounting solutions available to small businesses, the major approaches are summarized below.

Manual system

A manual system involves documenting all accounting related information by hand.

❖ Advantages

- No computer skills necessary
- Inexpensive

❖ Disadvantages

- Error prone
- Inflexible

OVERALL DESCRIPTION

- Inefficient and time consuming
- Difficult to organize and maintain
- Requires accounting expertise
- Expensive if training is required
- No built-in audit trail
- No authentication or authorization
- Very difficult to backup

Spreadsheet

Spreadsheet software is used to manage data and provide various calculations.

❖ Advantages

- Good integration with other office software
- Very flexible and customizable

❖ Disadvantages

- Not scalable for larger businesses
- Requires high level of spreadsheet skills
- Requires accounting expertise
- Lack of automation
- Expensive if training is required
- No built-in audit trail

Proposed System

The team aims to build a new accounting management system that has much the same Functionality as existing commercial software, but released under an open source license And with no ties to a specific operating system.

OVERALL DESCRIPTION

Aims

The proposed system aims to deliver an open source (General Public License) desktop accounting package with the particular aim of servicing the Australian Small to Medium Enterprises (SMEs). The system will also address other perceived deficiencies of existing accounting packages,

providing an open source, cross platform, scalable and user-friendly accounting management solution. These characteristics will be individually explained in detail as follows:

Cross-Platform

The product does not require a specific operating system, allowing users to select their operating system of choice. If a business wishes to migrate its systems from one operating system to another, the product must allow the data to also be migrated and the interface must be sufficiently similar to minimize training costs.

Scalable

Engineered to cater for rapid growth in:

- Functionality: Allowing for integration of new features (e.g. Stock or Payroll Sub-sidiary Ledgers).
- Changes to accounting reports: Allowing the manager to change the way accounting information is reported by the system either due to business needs or evolving accounting standards.
- Future internationalization: Allowing users in new regions to interact with the system in different languages.
- Future localization: Allowing users in new countries to manage their accounting and produce reports relevant to their local accounting practices and laws.

Usable

Small business owners may not have detailed accounting knowledge or computer skills. The system needs to allow these users to work effectively and efficiently with little training costs. The

proposed system will provide existing small businesses with a competitive, flexible, open source and cheaper alternative to existing accounting management systems.

System Functionality

The proposed system can be broken down into 8 separate modules of functionality, based on distinct accounting functions that small businesses require. 3 of these modules form the backbone and the remaining 5 add other core functionality. The modules will be explained in further detail below.

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Specific Requirement

External Interfaces Requirements

Software Interfaces

Login Panel



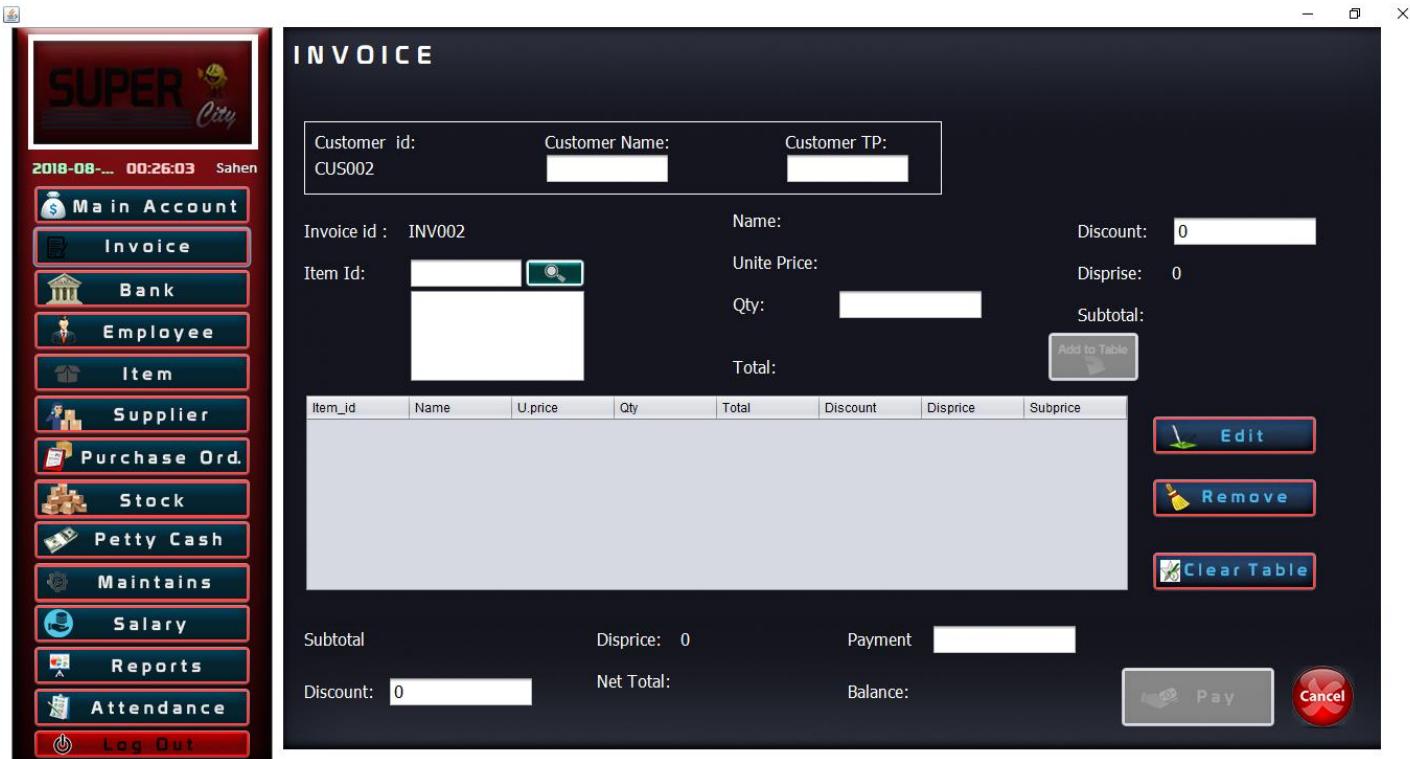
This is the main frame that we used to enter to the system. This login frame got ability to switch to pin mode. So user can easily log into the main window panel by using this frame. If the user forget the password of his/her user account, so he/she can reset his password by using that forget password function. After answering to the security questions user can successfully change the password.

Main Menu



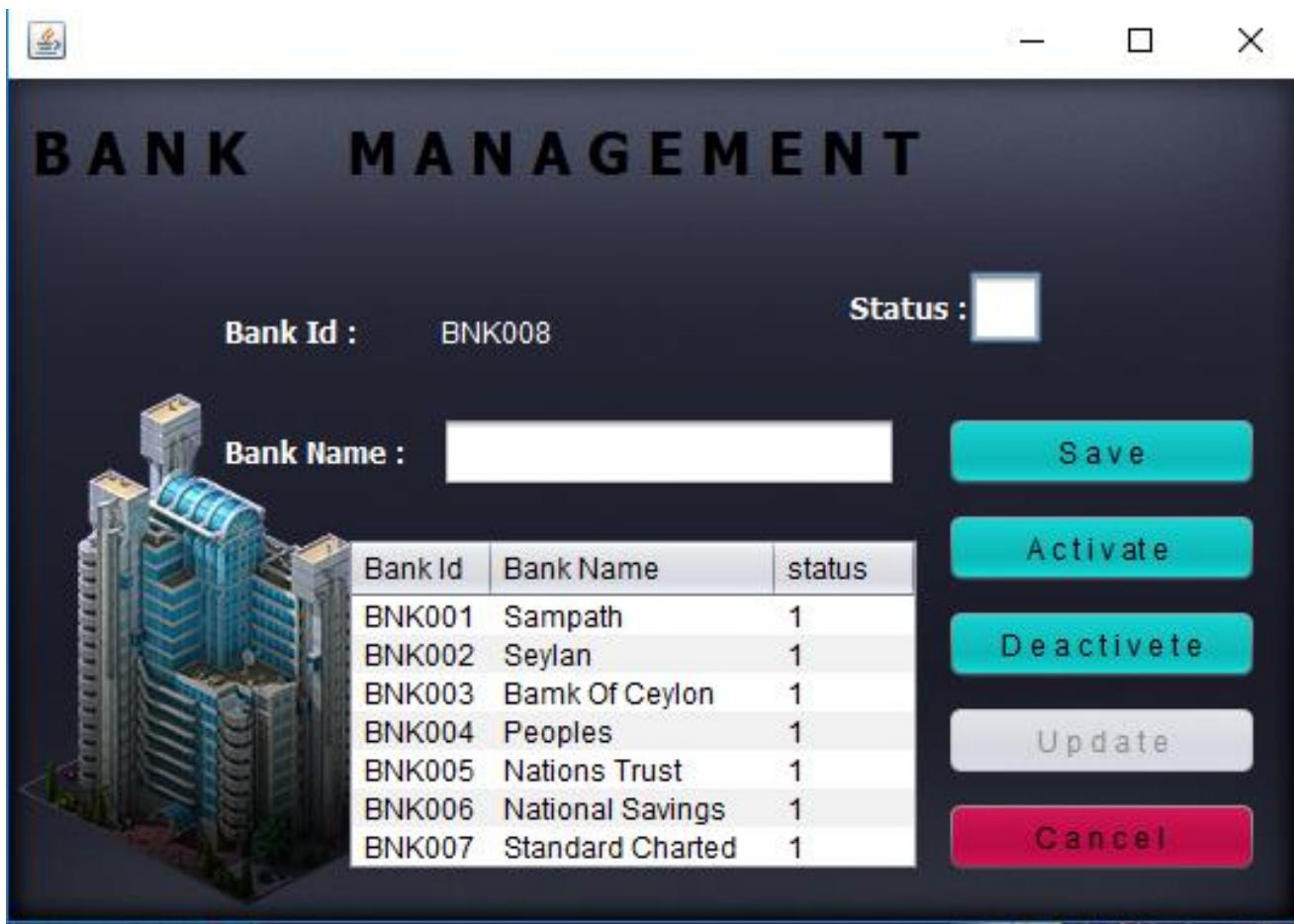
This is the main window panel. After login five actors can visit this panel .Super Admin and Admin can see all the buttons given in this panel. But the Cashier, Accountant and crew members see only their panels as enabled. Other buttons will be disabled. Each of the employee category has its own privileges and rights.

Invoice Interface



By using the interface The Manager, Supervisor, Account Division and the Cashier can lend the invoices for the purchases for the customers. Here first of all we can add the items to the table by using the Item ID. After that if we want to edit the added items we edit the details and update the order. Finally we can give discounts to items specifically and also we can lend the discount for the complete Bill.

Bank Interface



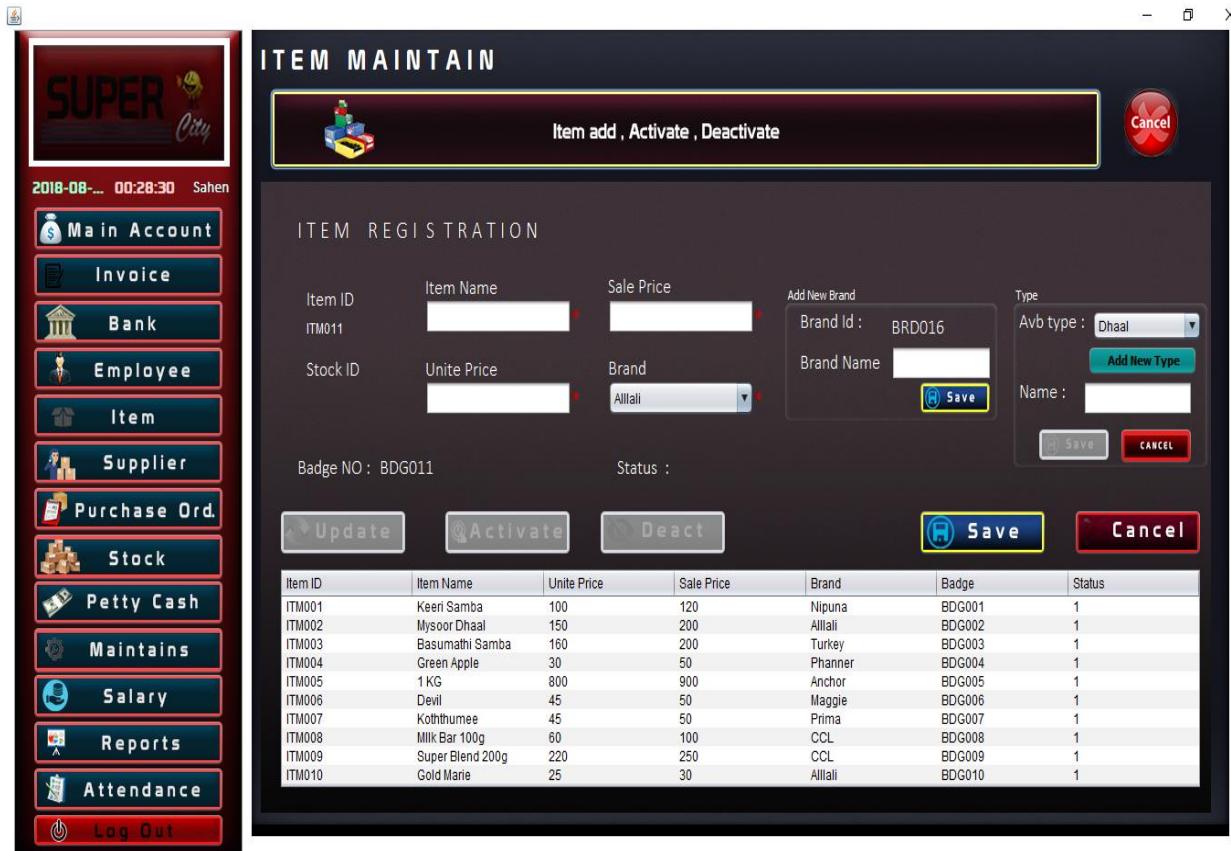
By use of this interface of the system we can register the Banks to the system, Deactivate the status of the banks, activate the status of the banks and update the bank details. First of all the users of the system has to add the banks to the system because this system has been designed to pay for the employees by sending their net salary to their bank account.

Employee Interface

Employee_id	First_Name	DOB	Nic	Gender	Post	Status
EMP001	Sahen	2018-08-31	925663221V	male	Supervisor	1
EMP002	Senura	1994-08-20	942330090V	male	Supervisor	1
EMP003	Samith	1994-05-05	945689233V	male	Supervisor	1
EMP004	Devin	1998-08-25	985662321V	male	Accounting	1
EMP005	Nadya	1994-07-31	945896252V	female	Crew	1
EMP006	Udani	1989-08-04	895623144V	female	Supervisor	1
EMP007	Pamodhi	1996-05-28	963321565V	female	Crew	1
EMP008	Thisumi	2003-08-22	20020822	female	Admin	1

This is the interface that used to register the employees, update the employee details, activate and deactivate the employees. In here we don't delete the data of the employees. We only deactivate the status of the employee. We keep all the employee details in our system. To add the employees to the system as I above mentioned we have to register the banks in order to add the employees. Also the employees must have a bank account to collect their salary.

Item Management Interface



This is the interface that used to register the Food items, update the item details (such as the unit price, sale price), activate and deactivate the items. In here we don't delete the data of the Items. We only deactivate the status of the specific item. We keep all the item details in our system. To add the items to the system as I above mentioned we have to register the employees, in order to add the items.

Supplier Management Interface

SUPER City

2018-08-... 00:29:30 Sahen

SUPPLIER MAINTAIN

SUPPLIER REGISTRATION

Info

Supplier ID :	SUP004
Name :	<input type="text"/>
Joined Date :	<input type="text"/>

Contact

Telephone 1 :	<input type="text"/>
Telephone 2 :	<input type="text"/>
E-mail :	<input type="text"/>

Address

No :	<input type="text"/>
Street :	<input type="text"/>
City :	<input type="text"/>

Available Item

Item Id	Name
ITM001	Keeri S...
ITM002	Mysoor ...
ITM003	Basum...
ITM004	Green A...
ITM005	1 KG
ITM006	Devil
ITM007	Koththu...
ITM008	Milk Bar...
ITM009	Super B...
ITM010	Gold Ma...

To Supplier

Item Id	Name

Buttons: Save, Cancel, >, <, Cancel

Table:

Sup ID	Name	Joined date	T.P	Mail
SUP001	Sasindu	2018-01-01	0718235689	sasinduviduravi@gmail.c...
SUP002	CBL	2018-01-01	0716562325	info@cbl.lk
SUP003	CCL	2018-01-01	0715484848	ccl@info.lk

SUPER City

2018-08-... 00:30:06 Sahen

SUPPLIER MAINTAIN

EDIT SUPPLIER

Info

Supplier ID :	<input type="text"/>
No :	<input type="text"/>
Street :	<input type="text"/>
City :	<input type="text"/>

Info

Name :	<input type="text"/>
Joined Date :	<input type="text"/>

Status :

Status 1 = Available
Status 0 = Not Available

Available Item

Item Id	Name
ITM001	Keeri S...
ITM002	Mysoor ...
ITM003	Basum...
ITM004	Green A...
ITM005	1 KG
ITM006	Devil
ITM007	Koththu...
ITM008	Milk Bar...
ITM009	Super B...
ITM010	Gold M...

To Supplier

Item Id	Name

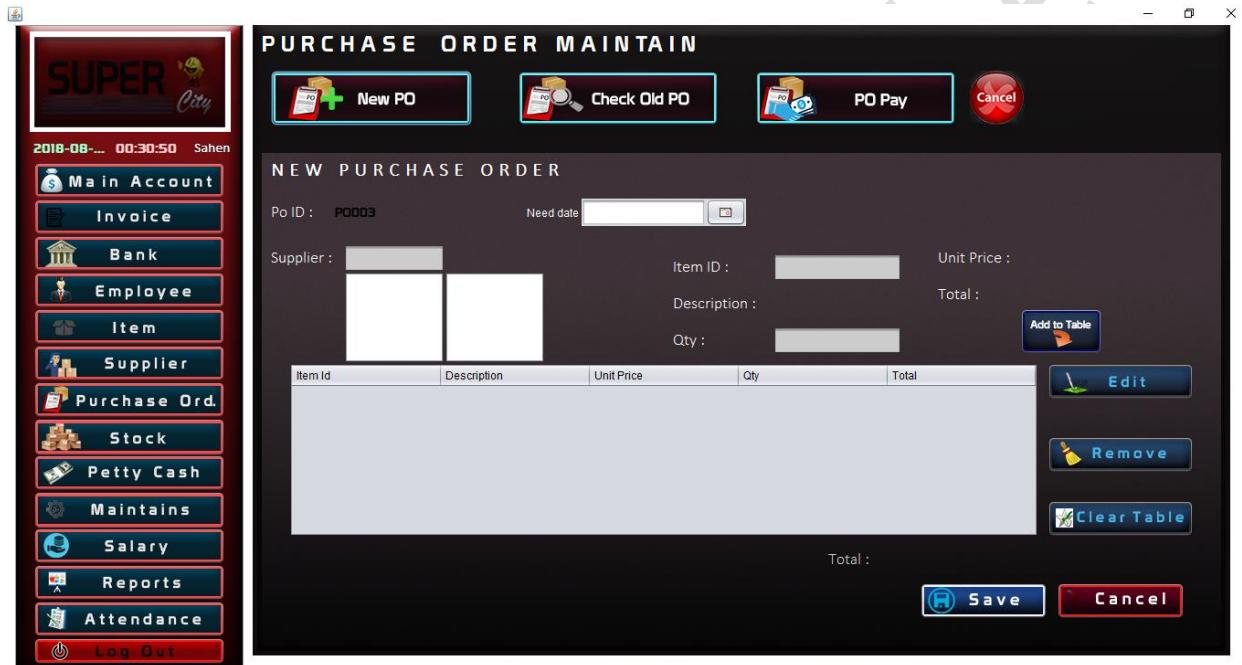
Buttons: Activate, Deact, Update, Cancel

Table:

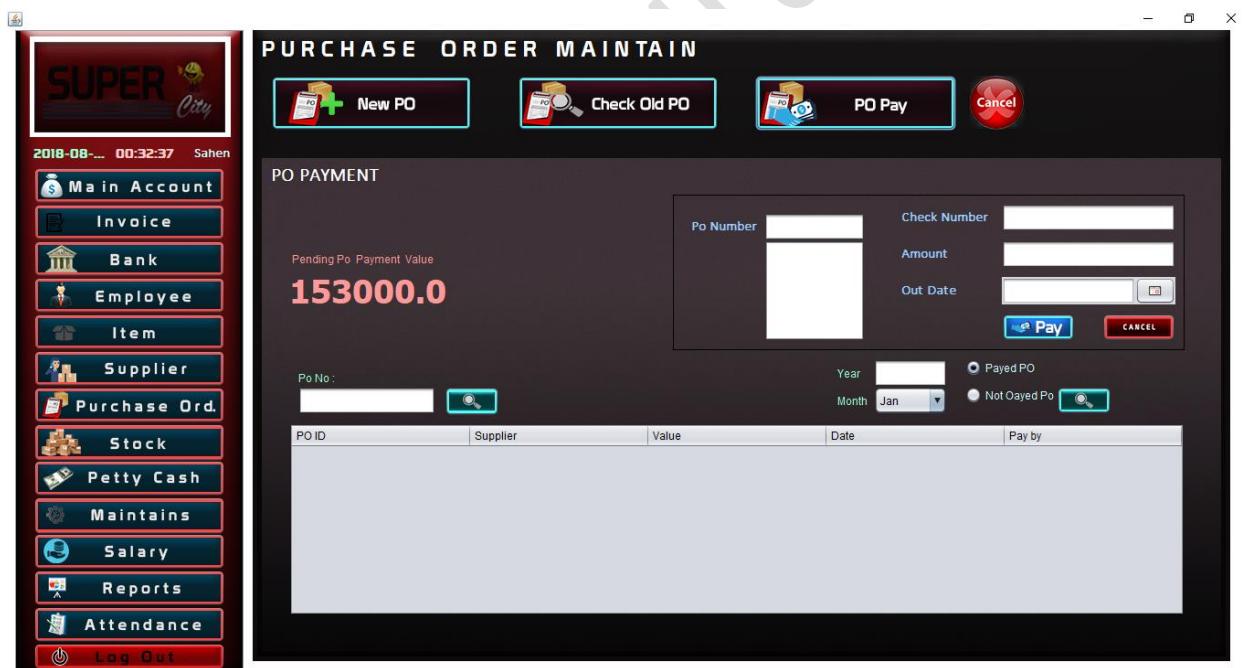
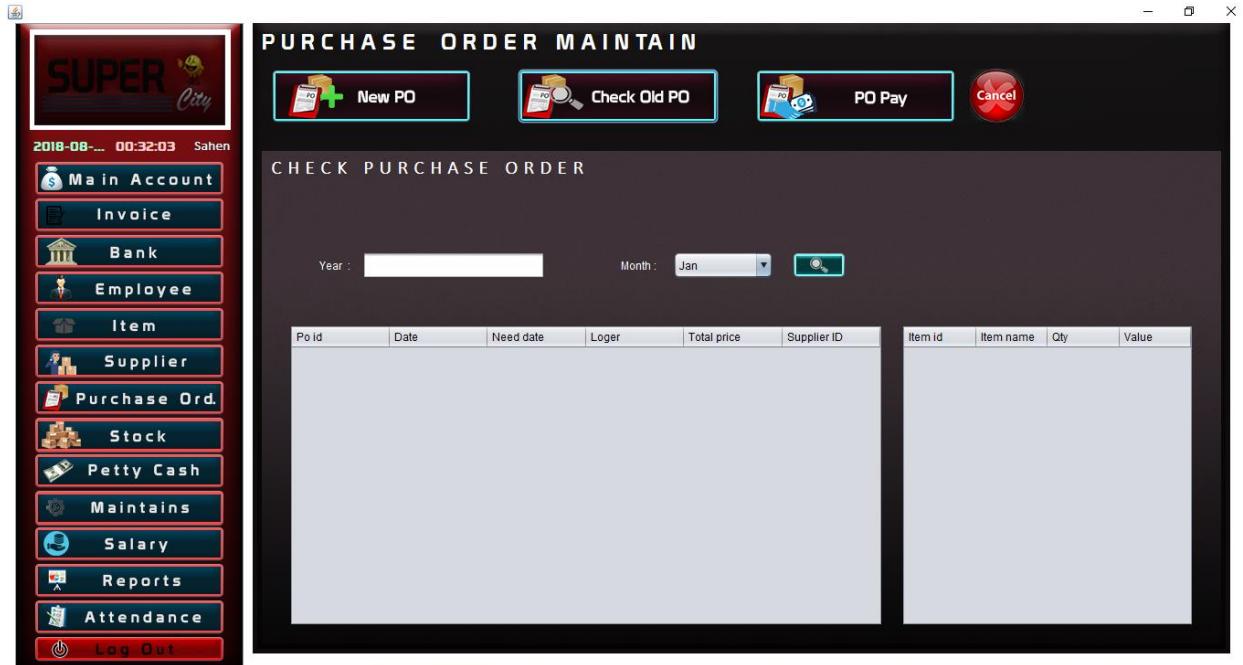
supplierid	name	joined date	telephone	E mail	status
SUP001	Sasindu	2018-01-01	0718235689	sasinduviduravi@gmail.com	1
SUP002	CBL	2018-01-01	0716562325	info@cbl.lk	1
SUP003	CCL	2018-01-01	0715484848	ccl@info.lk	1

By use of these two of the interfaces the users can register the Supplier Details, update the Supplier Details (such as the number of products that he supplies, Product brands that he supplies and add new product items), activate and deactivate the Suppliers. In here we don't delete the data of the Suppliers. We only deactivate the status of the specific Supplier. We keep all the supplier details in our system.

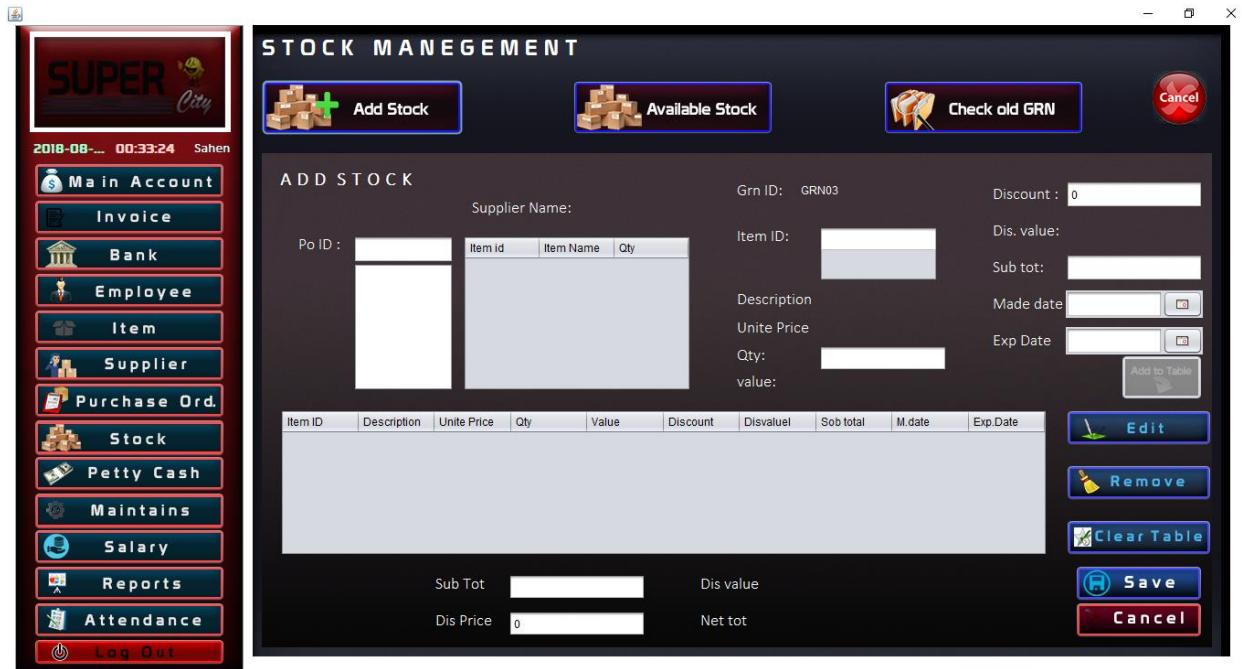
Purchase Order Placing Interface



By use of the above interface and the two interfaces below the users can place a purchase order to the company registered suppliers , update the placed purchase order Details (such as the number of products that we ordered, quantity of the ordered items and the unit price). In here we keep the data of the old purchase orders for a 1 year duration time. By the use of the below interfaces the users can search for the old purchase orders and pay for the newly placed purchase orders.



Stock Management Interface



This is the interface that used to add stock to the inventory control system. In here we get the details of the adding stock by the purchase order id. As you can see in the interface when purchase order id is inserted in the Po Id field you can see the purchase order details in the other fields of the interface. By this interface we can get discounts to the specific items from the supplier and also we can get discounts for the complete order by the supplier. Here the main thing is that when a user is adding a stock to the system we have enter the manufactured date and the expired date of the product to the system. Here is the place that the supplier gets the good received note. So by the use of the below given interfaces we can check the available stocks of the system and also check for the old GRN's. Here also we can get the copy of the GRN, but it holds the duplicate icon.

Available Stock Management Interface

STOCK MANAGEMENT

AVAILABLE STOCK

Item ID	Description	Qty
ITM001	Keeri Samba	1000
ITM002	Mysoor Dhaal	0
ITM003	Basumathi Samba	500
ITM004	Green Apple	0
ITM005	1 KG	0
ITM006	Devil	0
ITM007	Koththumee	0
ITM008	Milk Bar 100g	348
ITM009	Super Blend 200g	295
ITM010	Gold Marie	0

Check for Old GRN Interface

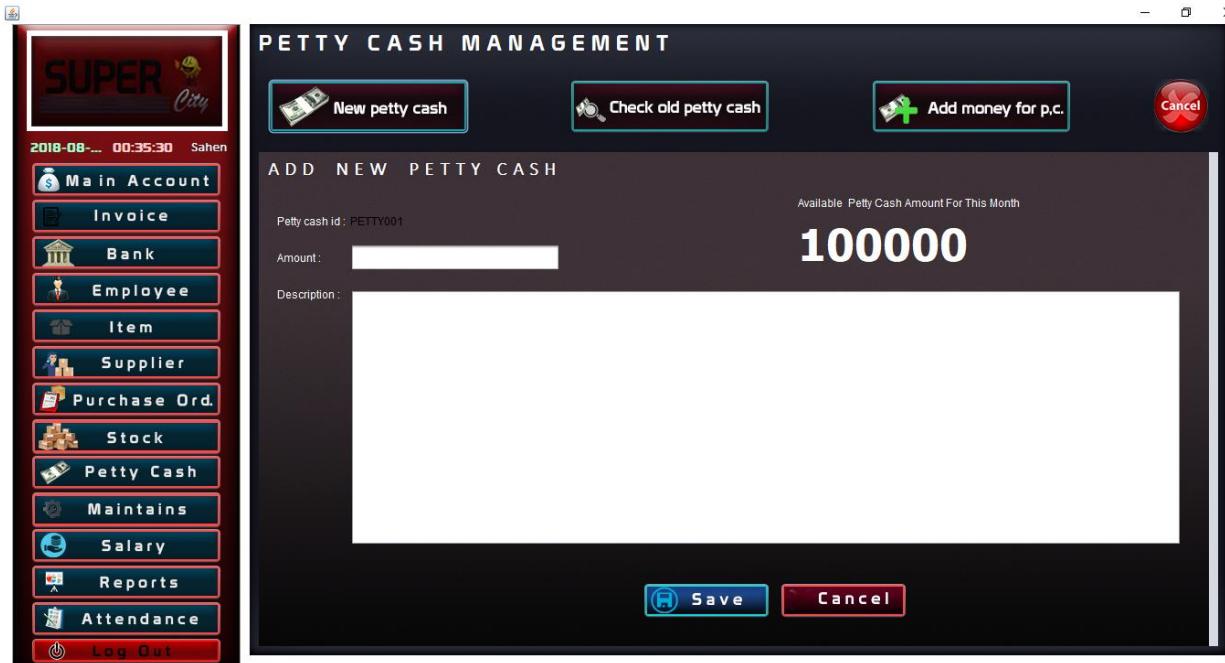
STOCK MANAGEMENT

CHECK OLD GRN

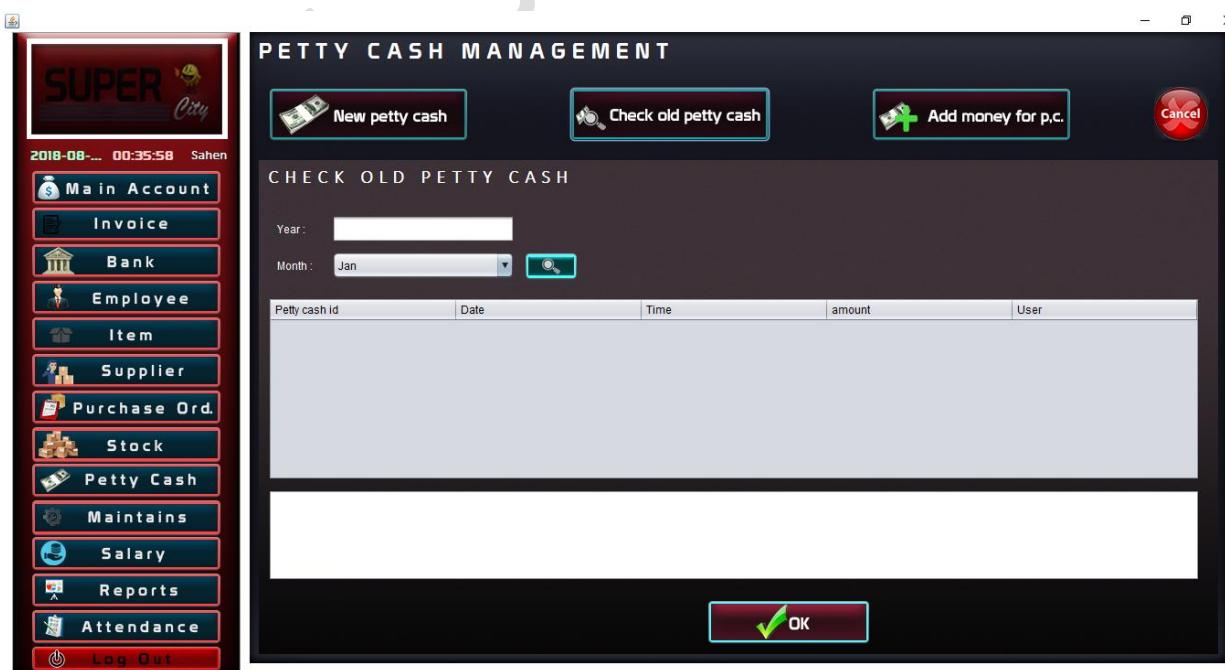
Year:	Month:	Grn ID:	Print
2018	Aug	GRN01	

Grn Id	Date	Discount	Dis Value	Net Tot
GRN01	2018-08-24	0	0	80200
GRN02	2018-08-24	10	17000	153000

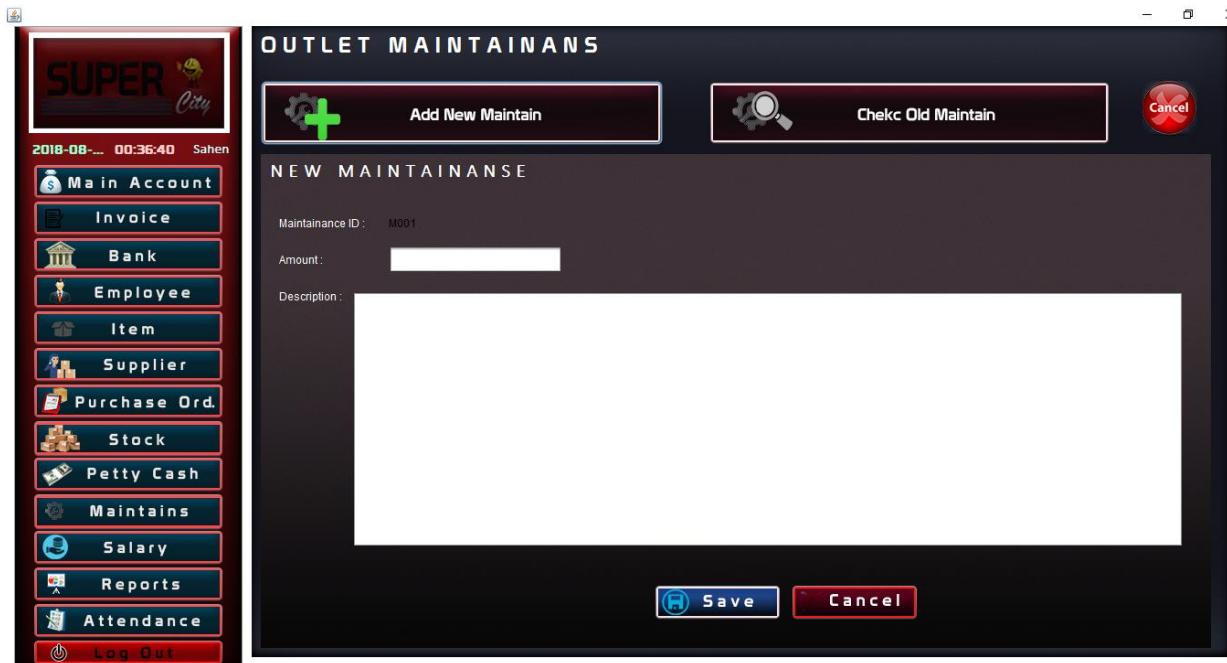
Petty Cash Interface



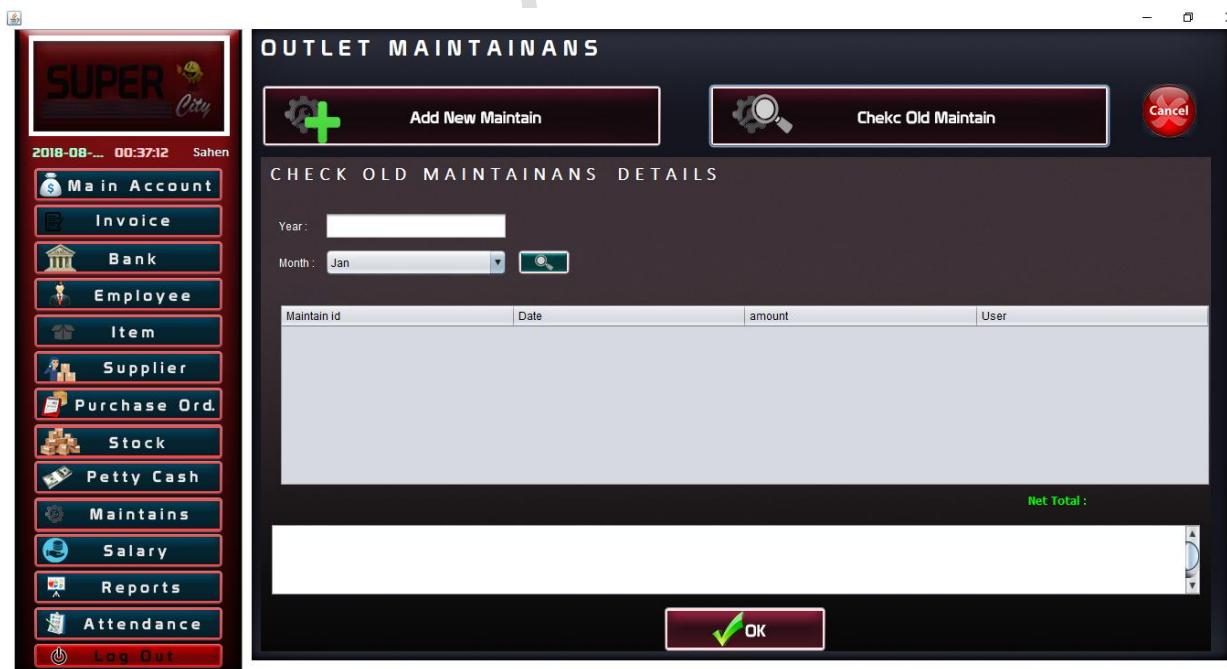
This interface is used to accuracy of the account system of the shop. By the use of this interface we can add the small loses and money misplaces of the system. And by the below interface we can check for the old petty cashes and the description of the petty cash details. The manager can only add the petty cash for month and the max amount is 100000.00 Rs.



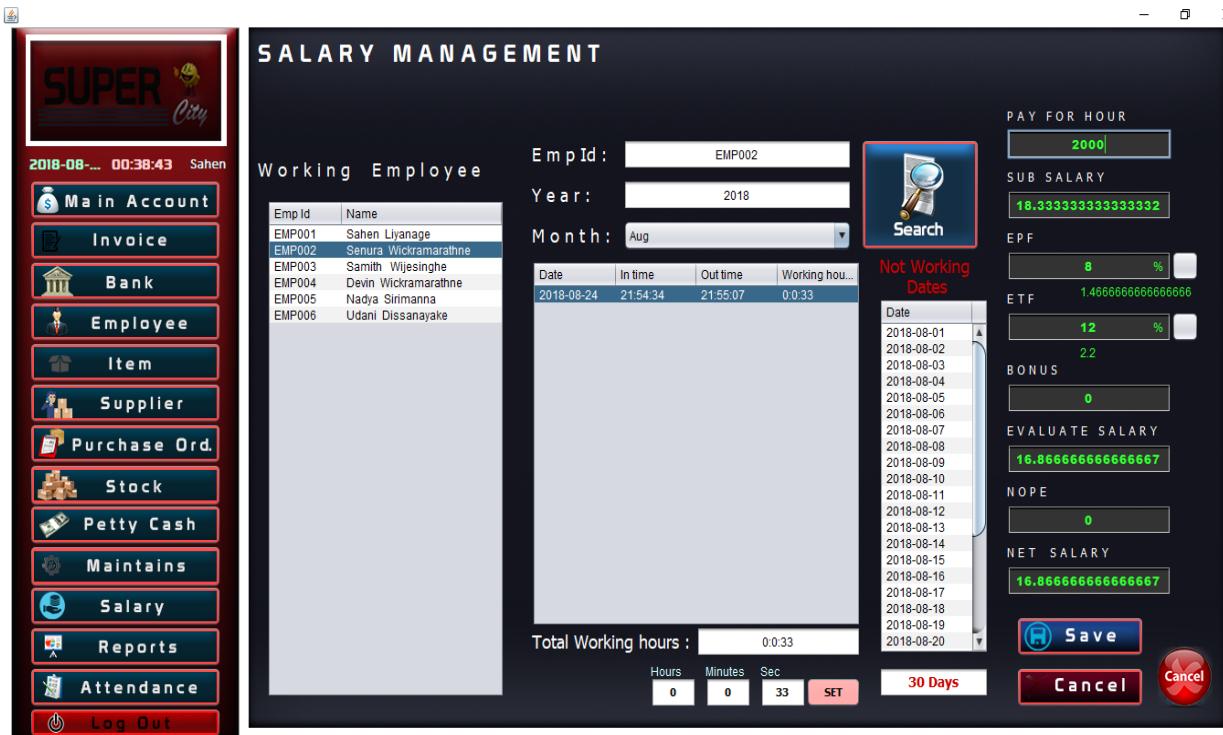
Maintainace Management Interface



By the use of this interface we can add the maintenances of large amounts as the (A/C machine break downs, Generator failures and rack displacements). Here the user has only have to do is add the description of the maintenance and the date and the amount of the maintenance. By the below interface we check of the old maintenances of the inventory control system of the branch.

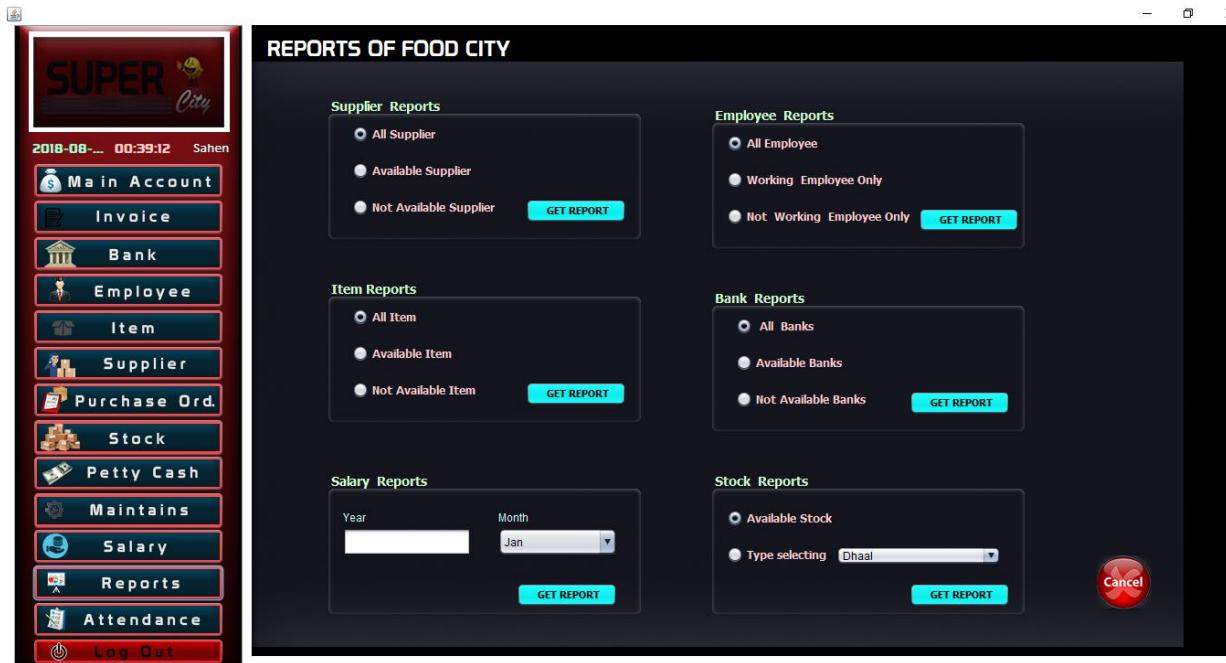


Salary Interface



Only the super Admin – The Manager has the access to this interface. By the use of this interface we can see the all active employees of the system and to create the salary statement to a specific employee. To create a salary statement, it gets data from the employee attendance interface. As you can see in the interface when we give the system to the specific EMP ID it shows us all working time and also the not working days. Here the manager has the privilege to set the Total working days of the employee. So as the customer requirement we create the salary statement for working hours. It's is an hourly payee system. Here it also deducts the EPF, ETF standard rates and also the manager can add the bonus for the month.

Reports Interface



By the use of this interface the users can generate reports for the following topics.

- All Suppliers
- All Available Suppliers
- Not Available Suppliers
- All Employees
- All Available Employees
- Not Available Employees
- All Items
- All Available Items
- Not Available Items
- All Banks
- All Available Banks
- Not Available Banks
- Salary Reports For All Employees
- Available Stock Details
- Specific Stock Item Details

All Suppliers

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

ALL SUPPLIER DETAILS

General		Address			Contact			
Supp . ID	Name	No	Street	City	Tell 1	Tell 2	Email	Joined Date
SUP001	Sasindu	56	Saranapala	Piliyandala	0718235689	0777852366	sasinduvidurav	2018-01-01
SUP002	CBL	45	Homagama	Homagama	0716562325	0775896325	info@cbl.lk	2018-01-01
SUP003	CCL	56	Industrial Zone Horana		0715484848	0115235989	ccl@info.lk	2018-01-01

All Available Supplier Details

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

AVAILABLE SUPPLIER DETAILS

General		Address			Contact			
Supp . ID	Name	No	Street	City	Tell 1	Tell 2	Email	Joined Date
SUP001	Sasindu	56	Saranapala	Piliyandala	0718235689	0777852366	sasinduvidurav	2018-01-01
SUP002	CBL	45	Homagama	Homagama	0716562325	0775896325	info@cbl.lk	2018-01-01
SUP003	CCL	56	Industrial Zone Horana		0715484848	0115235989	cd@info.lk	2018-01-01

All Employee Details

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

ALL EMPLOYEE DETAILS

General				Address			Contact			Post
ID	Name	Dob	Nic	Gen	No	Street	City	Tell 1	Tell 2	mail
EMP00	Sahen	8/31/1925663	male	58		Sudarshan Kirulapana	07789525	01125888	sahenliyanag	Supervisor
EMP00	Senura	8/20/9942330	male	8/24		Berawawal Piliyandala	07114218	01126154	senurakeheli	Supervisor
EMP00	Samith	5/5/94945689	male	23A	Hirana	Bandaraga	07662081	01127030	samithwijesii	Supervisor
EMP00	Devin	8/25/9985662	male	5/25	Dewala	Nugegoda	07158991	01145823	devinvindula	Accounting
EMP00	Nadya	7/31/9945896	femal	45	Isuru	Piliyandala	07789525	01126141	nadyasiriman	Crew
EMP00	Udani	8/4/89895623	femal	85	Dutugaunu Thalawath	07152365	01158965	sanchalasew	Supervisor	
EMP00	Pamodhi	5/28/9963321	femal	56	Robert	Thimbiriga	07123569	01135689	pamodhiprart	Crew
EMP00	Thisumi	8/22/0200308	femal	456	Sudarshan	Moratuwa	07589635	01154659	thisumisanda	Admin
EMP00	Bhagya	4/9/18985623	femal	45	St Mitchell	Piliyandala	07896654	01145646	bhagyakanda	Crew
EMP01	Nethmi	12/22/925638	femal	23	Ekamuthu	Bandaraga	07756124	01158756	nethminissan	Crew

All Available Employee Details

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

AVAILABLE EMPLOYEE DETAILS

General				Address			Contact				Post
ID	Name	Dob	Nic	Gen	No	Street	City	Tell 1	Tell 2	mail	
EMP00	Sahen	8/31/1925	663	male	58	Sudarshan	Kirulapana	07789525	01125888	sahenliyanag	Supervisor
EMP00	Senura	8/20/9942	330	male	8/24	Berawawal	Piliyandala	07114218	01126154	senurakeheli	Supervisor
EMP00	Samith	5/5/94	945689	male	23A	Hirana	Bandaraga	07662081	01127030	samithwijesii	Supervisor
EMP00	Devin	8/25/9985	662	male	5/25	Dewala	Nugegoda	07158991	01145823	devinvindula	Accounting
EMP00	Nadya	7/31/9945	896	femal	45	Isuru	Piliyandala	07789525	01126141	nadyasiriman	Crew
EMP00	Udani	8/4/8989	5623	femal	85	Dutugaunu	Thalawath	07152365	01158965	sanchalasew	Supervisor
EMP00	Pamodhi	5/28/9963	3321	femal	56	Robert	Thimbiriga	07123569	01135689	pamodhiprat	Crew
EMP00	Thisumi	8/22/020030	8	femal	456	Sudarshan	Moratuwa	07589635	01154659	thisumisanda	Admin
EMP00	Bhagya	4/9/18985	623	femal	45	St Mitchell	Piliyandala	07896654	01145646	bhagyakanda	Crew
EMP01	Nethmi	12/22/925638		femal	23	Ekamuthu	Bandaraga	07756124	01158756	nethminissan	Crew

All Items

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

ALL ITEM DETAILS

Item ID	Name	Add date	Unit Price	Sale Price	Badge	Brand
ITM001	Keeri Samba	8/24/18 12:00 AM	100.0	120.0	BDG001	Nipuna
ITM002	Mysoor Dhaal	8/24/18 12:00 AM	150.0	200.0	BDG002	Allali
ITM003	Basumathi	8/24/18 12:00 AM	160.0	200.0	BDG003	Turkey
ITM004	Green Apple	8/24/18 12:00 AM	30.0	50.0	BDG004	Phanner
ITM005	1 KG	8/24/18 12:00 AM	800.0	900.0	BDG005	Anchor
ITM006	Devil	8/24/18 12:00 AM	45.0	50.0	BDG006	Maggie
ITM007	Koththumee	8/24/18 12:00 AM	45.0	50.0	BDG007	Prima
ITM008	Milk Bar 100g	8/24/18 12:00 AM	60.0	100.0	BDG008	CCL
ITM009	Super Blend	8/24/18 12:00 AM	220.0	250.0	BDG009	CCL
ITM010	Gold Marie	8/24/18 12:00 AM	25.0	30.0	BDG010	Allali

All Available Item Details

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

AVAILABLE ITEM DETAILS

Item ID	Name	Add date	Unit Price	Sale Price	Badge	Brand
ITM001	Keeri Samba	8/24/18 12:00 AM	100.0	120.0	BDG001	Nipuna
ITM002	Mysoor Dhaal	8/24/18 12:00 AM	150.0	200.0	BDG002	Allali
ITM003	Basumathi	8/24/18 12:00 AM	160.0	200.0	BDG003	Turkey
ITM004	Green Apple	8/24/18 12:00 AM	30.0	50.0	BDG004	Phanner
ITM005	1 KG	8/24/18 12:00 AM	800.0	900.0	BDG005	Anchor
ITM006	Devil	8/24/18 12:00 AM	45.0	50.0	BDG006	Maggie
ITM007	Koththumee	8/24/18 12:00 AM	45.0	50.0	BDG007	Prima
ITM008	Milk Bar 100g	8/24/18 12:00 AM	60.0	100.0	BDG008	CCL
ITM009	Super Blend	8/24/18 12:00 AM	220.0	250.0	BDG009	CCL
ITM010	Gold Marie	8/24/18 12:00 AM	25.0	30.0	BDG010	Allali

All Available Banks Details

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

AVAILABLE BANKS DETAILS

ID	Name
BNK001	Sampath
BNK002	Seylan
BNK003	Bamk Of Ceylon
BNK004	Peoples
BNK005	Nations Trust
BNK006	National Savings
BNK007	Standard Chartered

Sample

All Stock Item Details

SUPER CITY

SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

STOCK

Item ID	Name	Brand id	Brand name	Qty
1 ITM001	Keeri Samba	BRD004	Nipuna	1000.0
1 ITM002	Mysoor Dhaal	BRD001	Allali	0.0
1 ITM003	Basumathi Samba	BRD006	Turkey	500.0
1 ITM004	Green Apple	BRD008	Phanner	0.0
1 ITM005	1 KG	BRD009	Anchor	0.0
1 ITM006	Devil	BRD011	Maggie	0.0
1 ITM007	Koththumee	BRD007	Prima	0.0
1 ITM008	Milk Bar 100g	BRD013	CCL	328.0
1 ITM009	Super Blend 200g	BRD013	CCL	275.0
1 ITM010	Gold Maria	BRD001	Allali	0.0

Stock of the selected Item Details

SUPER CITY

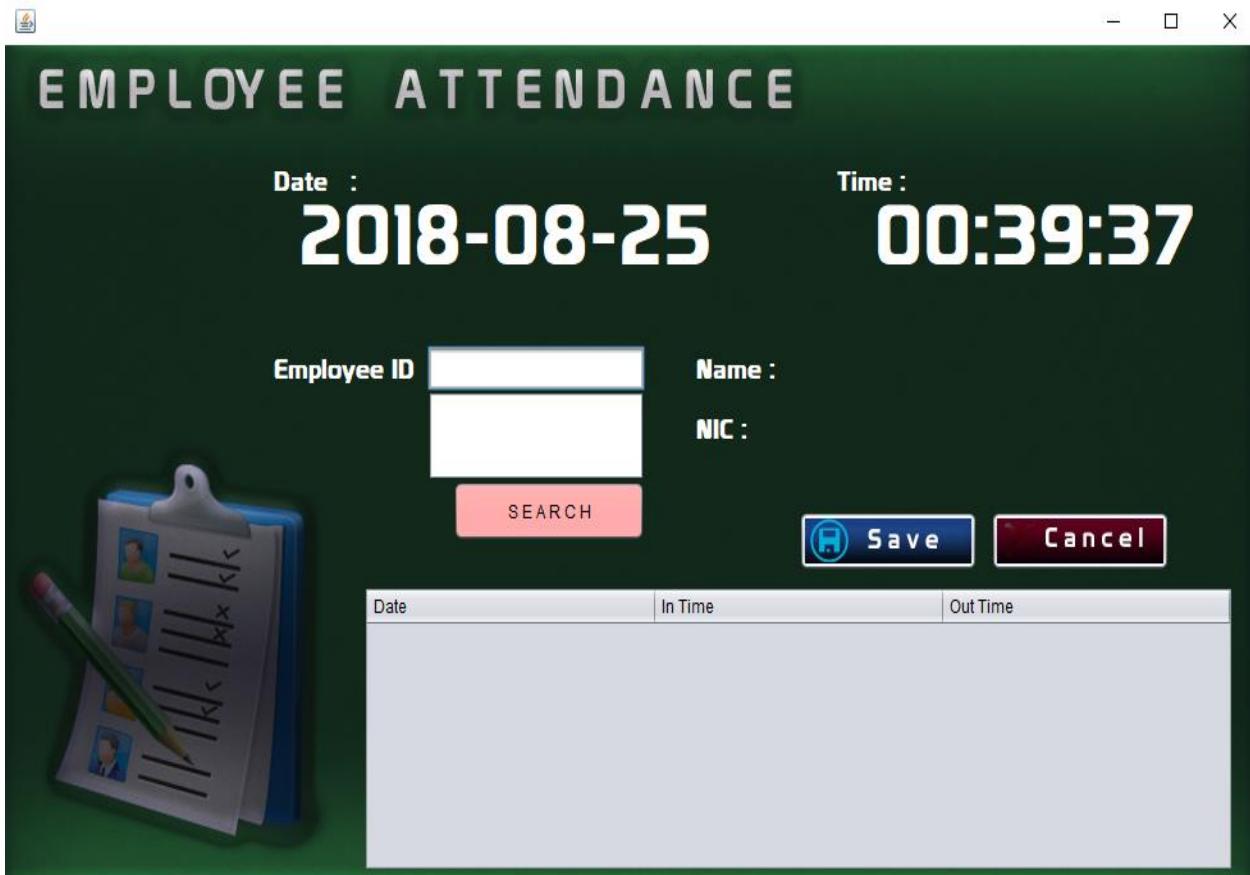
SUPER CITY (PVT) Ltd
York Street
Colombo 07
011-2224445
SuperCity@hotmail.com

STOCK OF BISCUIT

Item ID	Name	Brand	Badge	Qty
1 ITM012	chocolate busicket	Maliban	BDG012	0.0

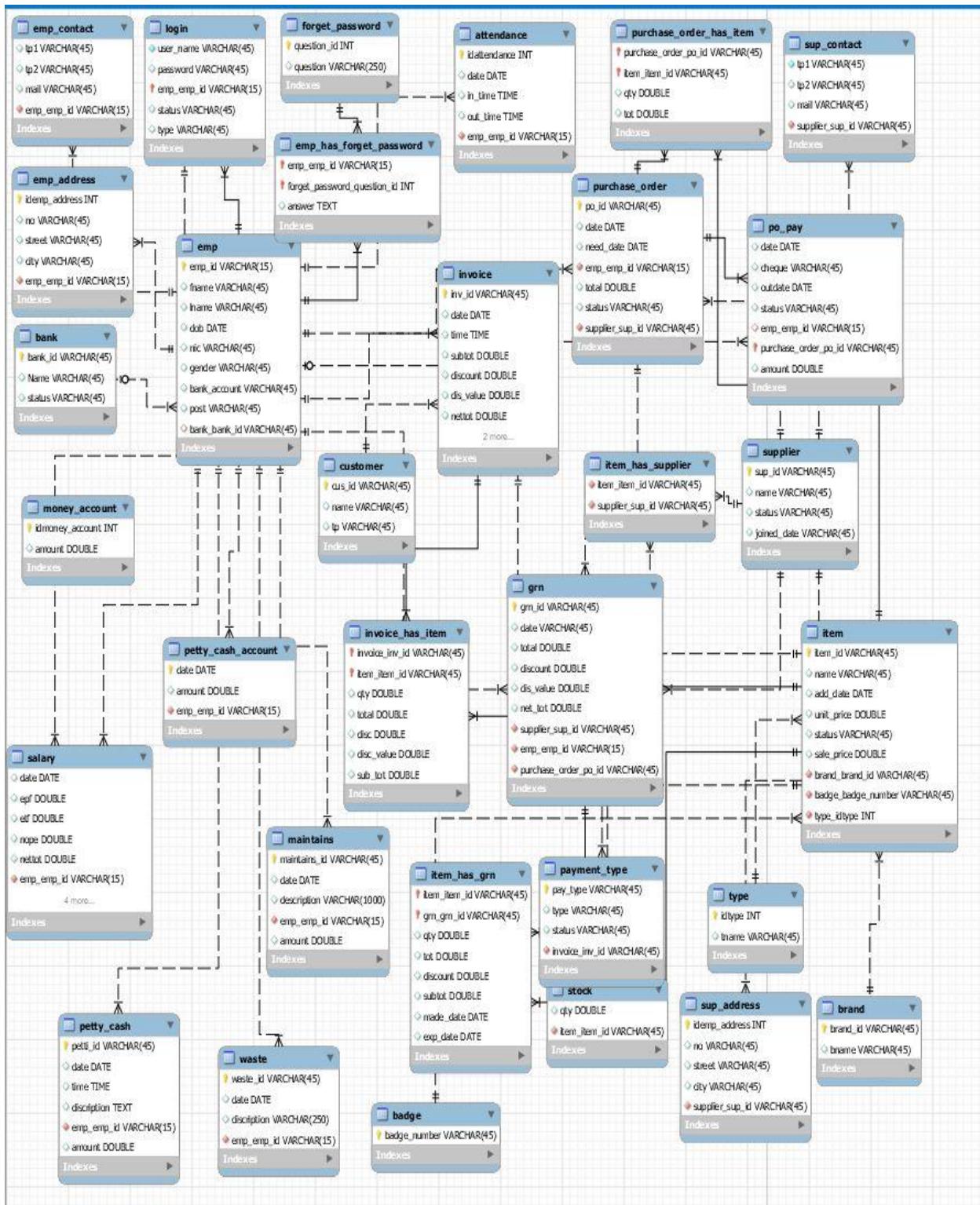
Samithri.

Employee Attendance Interface



By the use of this interface the employees can mark the attendance to the system. If the users logged into a system once and set signed off, they can't log into the system again.

ER Diagram of the Super City Mega Food Store.



LOGGER Files



logger - Notepad

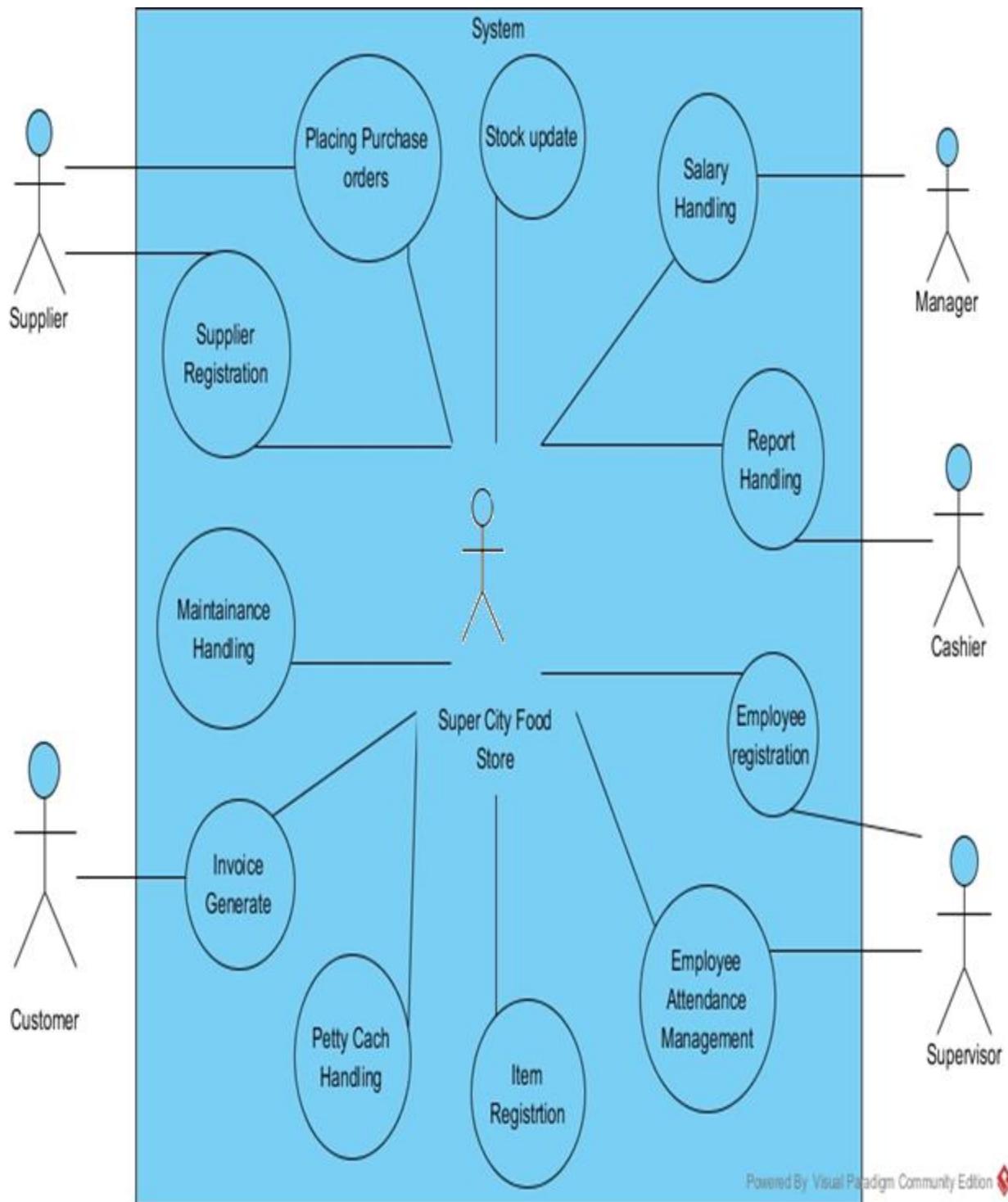
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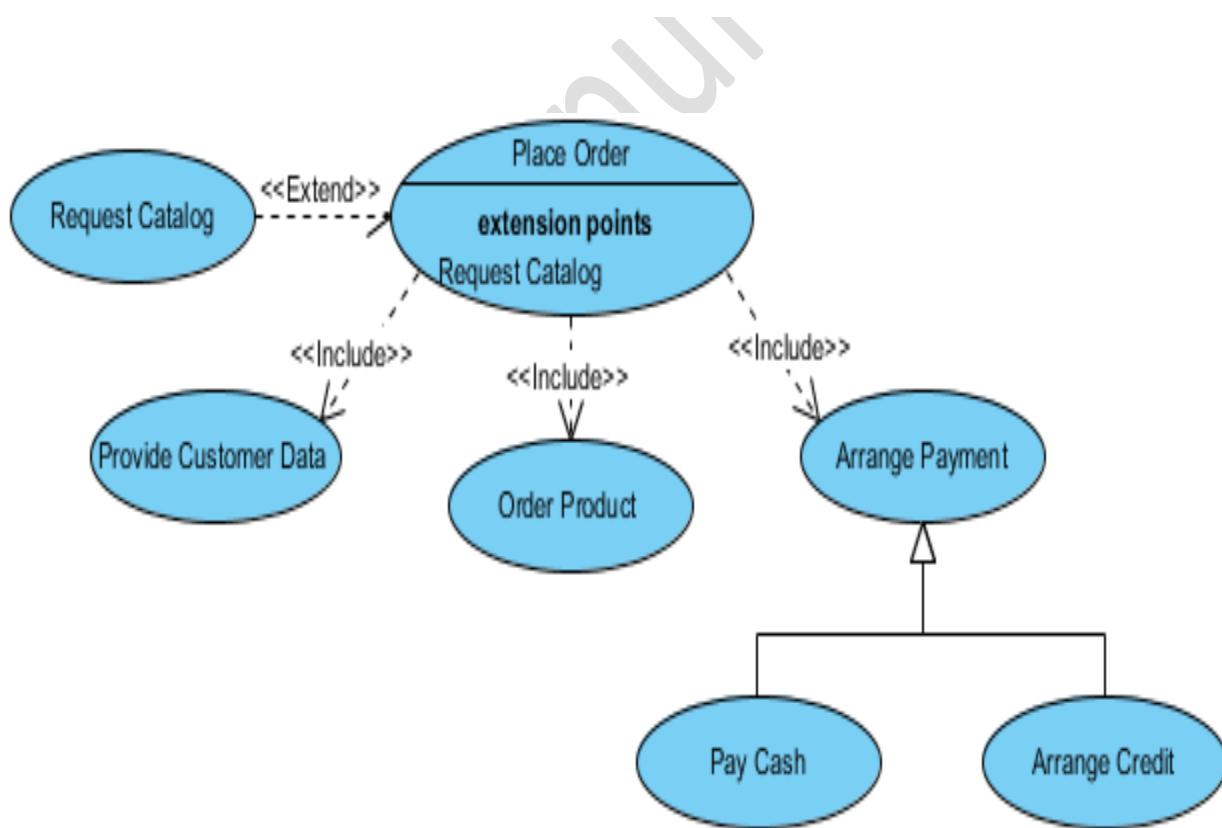
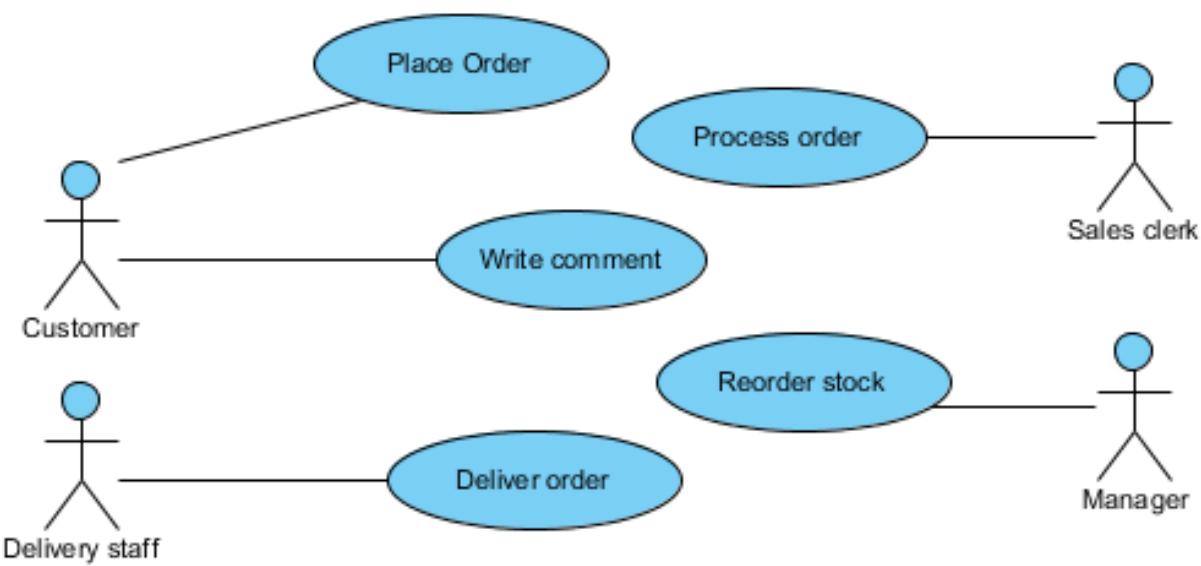
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Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,246 451
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,250 451
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,253 451
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,258 451
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,263 451
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,267 451
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-25 20:18:42,270 451
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Log Without Error : User Name-Sahen.....Password :sahen 2018-08-27 19:12:07,560 179
Log Without Error : User Name-Sahen.....Password :sahen 2018-08-27 19:12:17,575 159
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Log Without Error : User Name-Sahen.....Password :sahen 2018-08-27 19:12:35,452 172
Log Without Error : User Name-Bhagya.....Password :bhagya 2018-08-27 19:12:35,452 172
Log Without Error : User Name-Nadya.....Password :nadya 2018-08-27 19:12:35,452 172
Log Without Error : User Name-Senura.....Password :senura 2018-08-27 22:56:25,327 152
```

Behavior Requirements

Use Case Diagrams

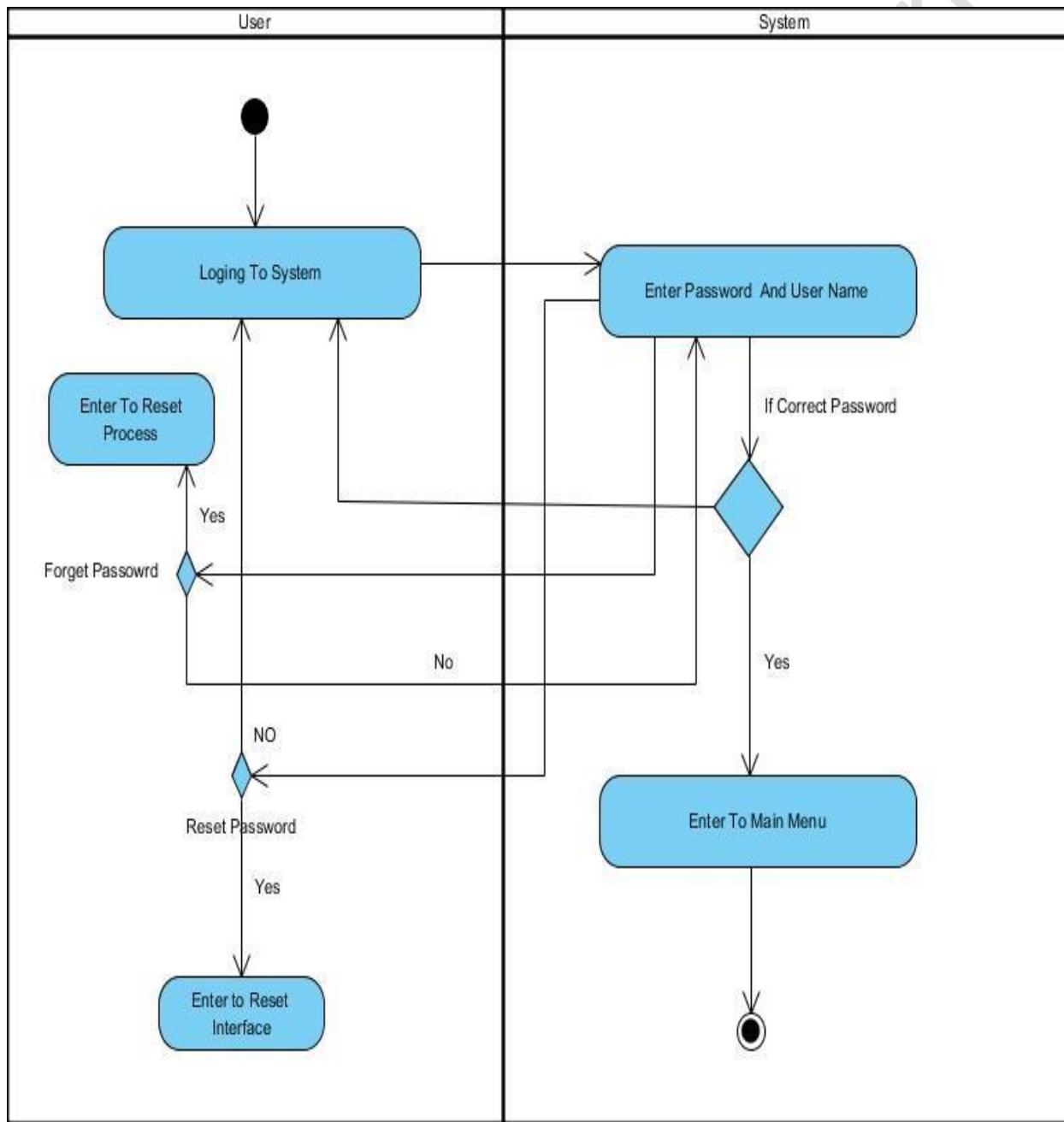
System Use Case Diagram



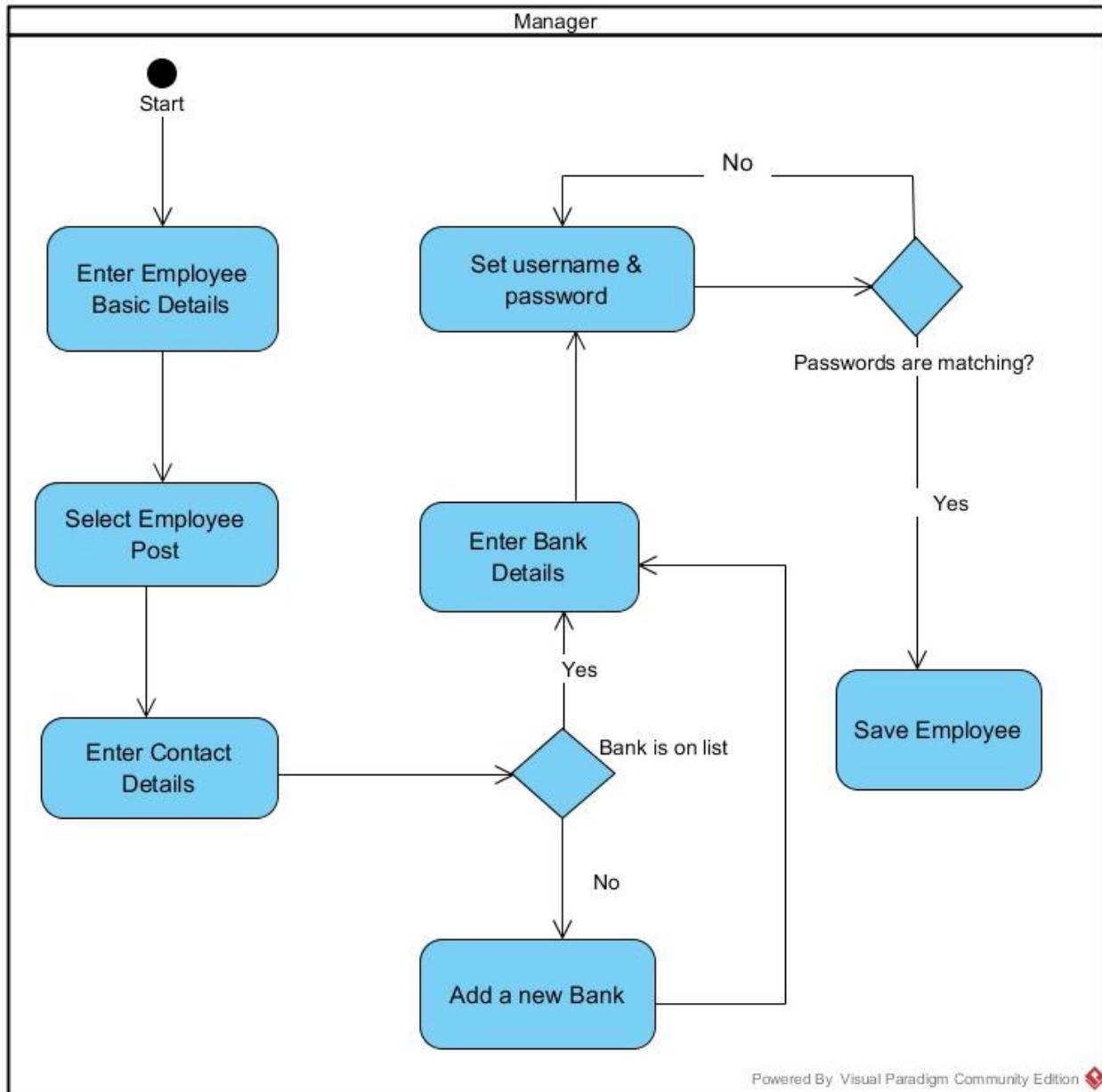


Activity Diagrams

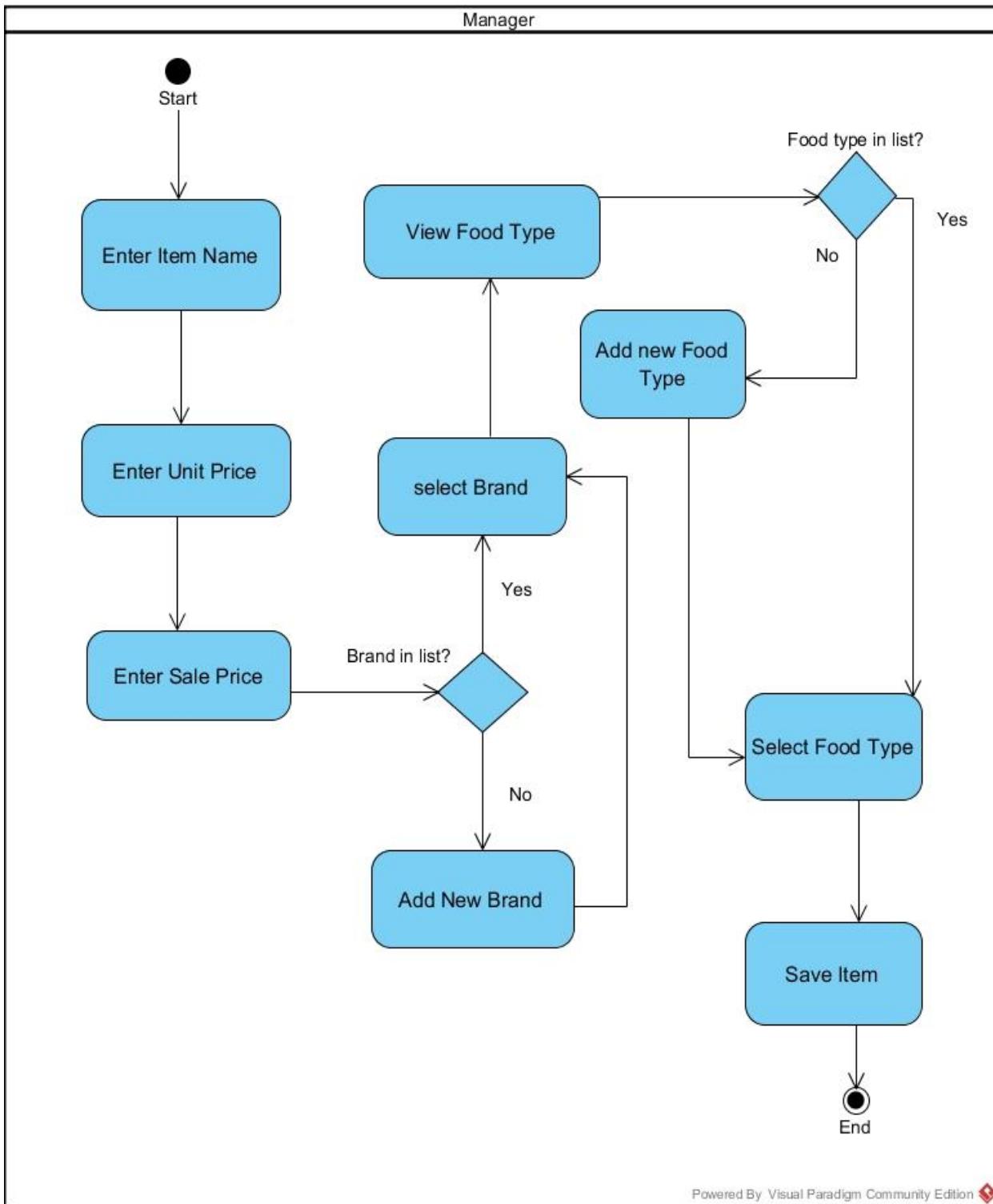
Login to the System



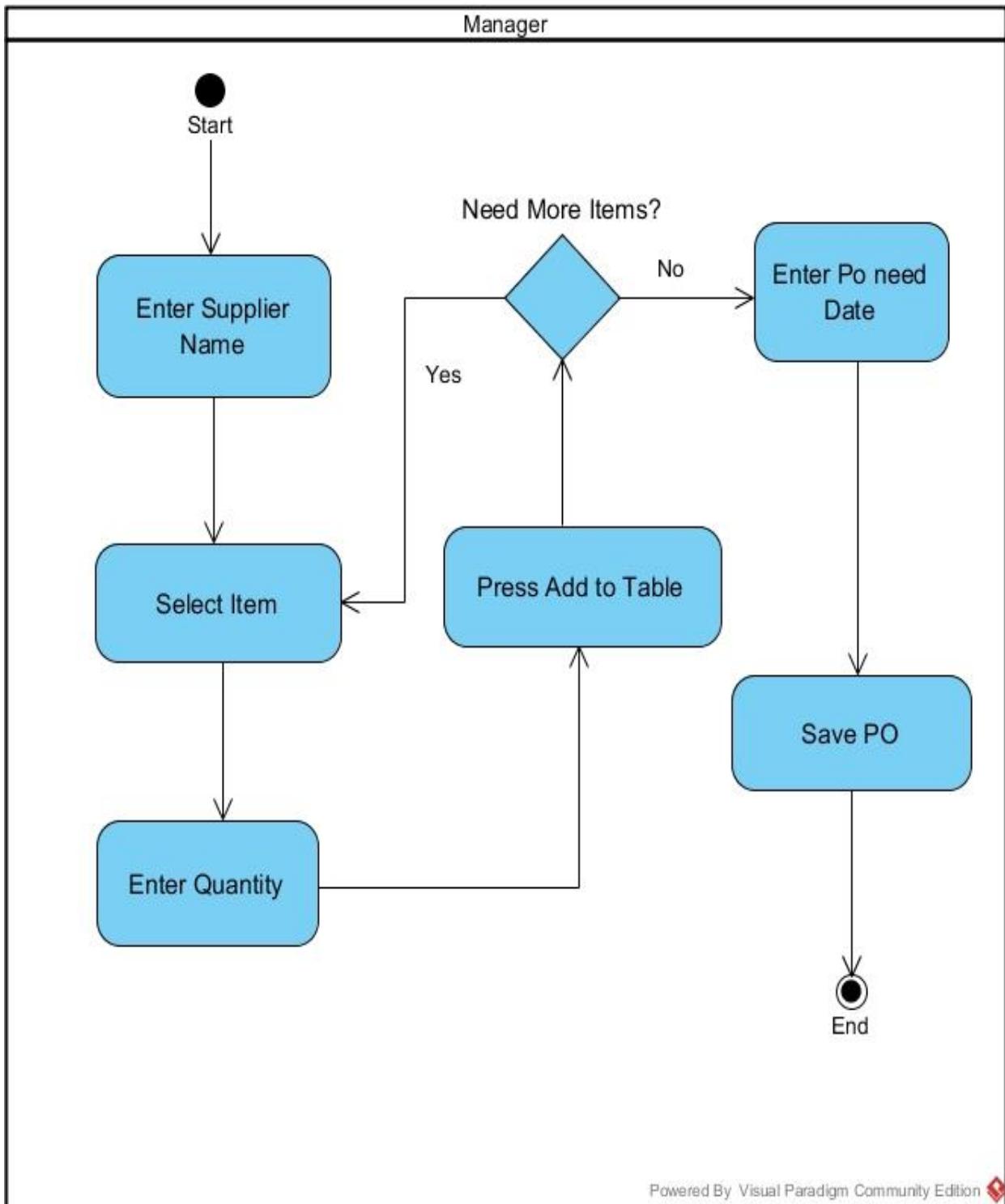
Employee Registration



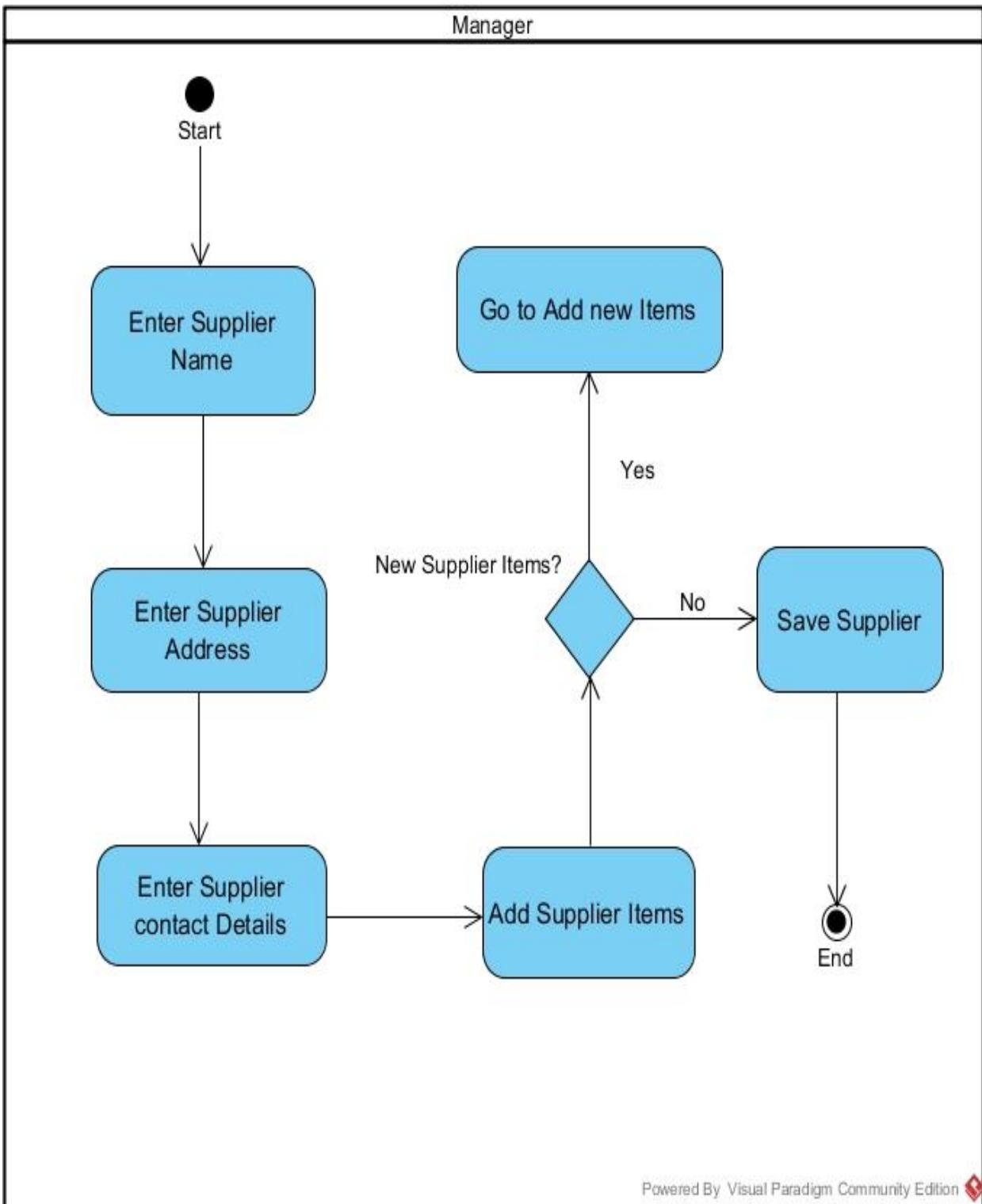
Add Item to the System



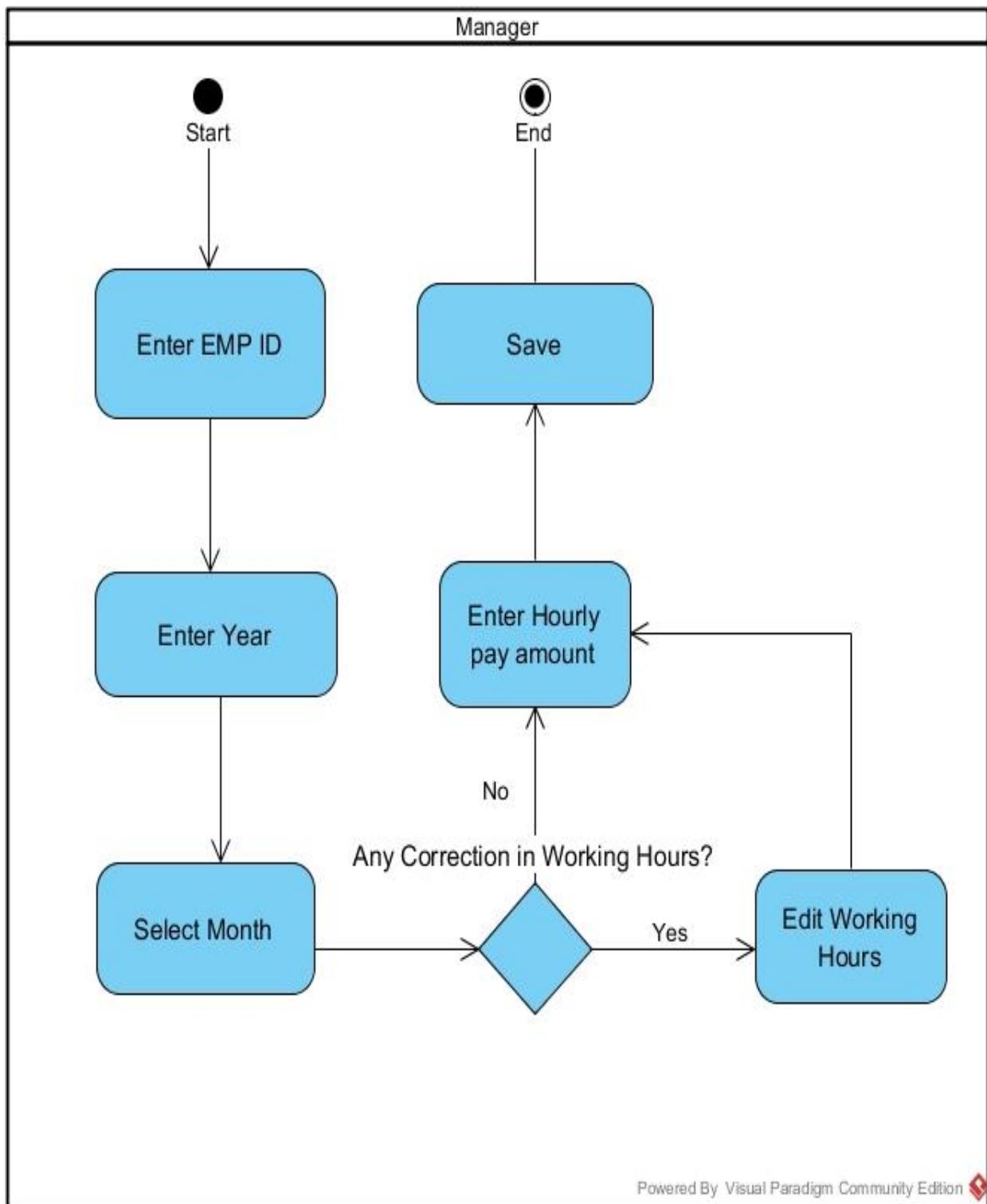
Place a purchase order



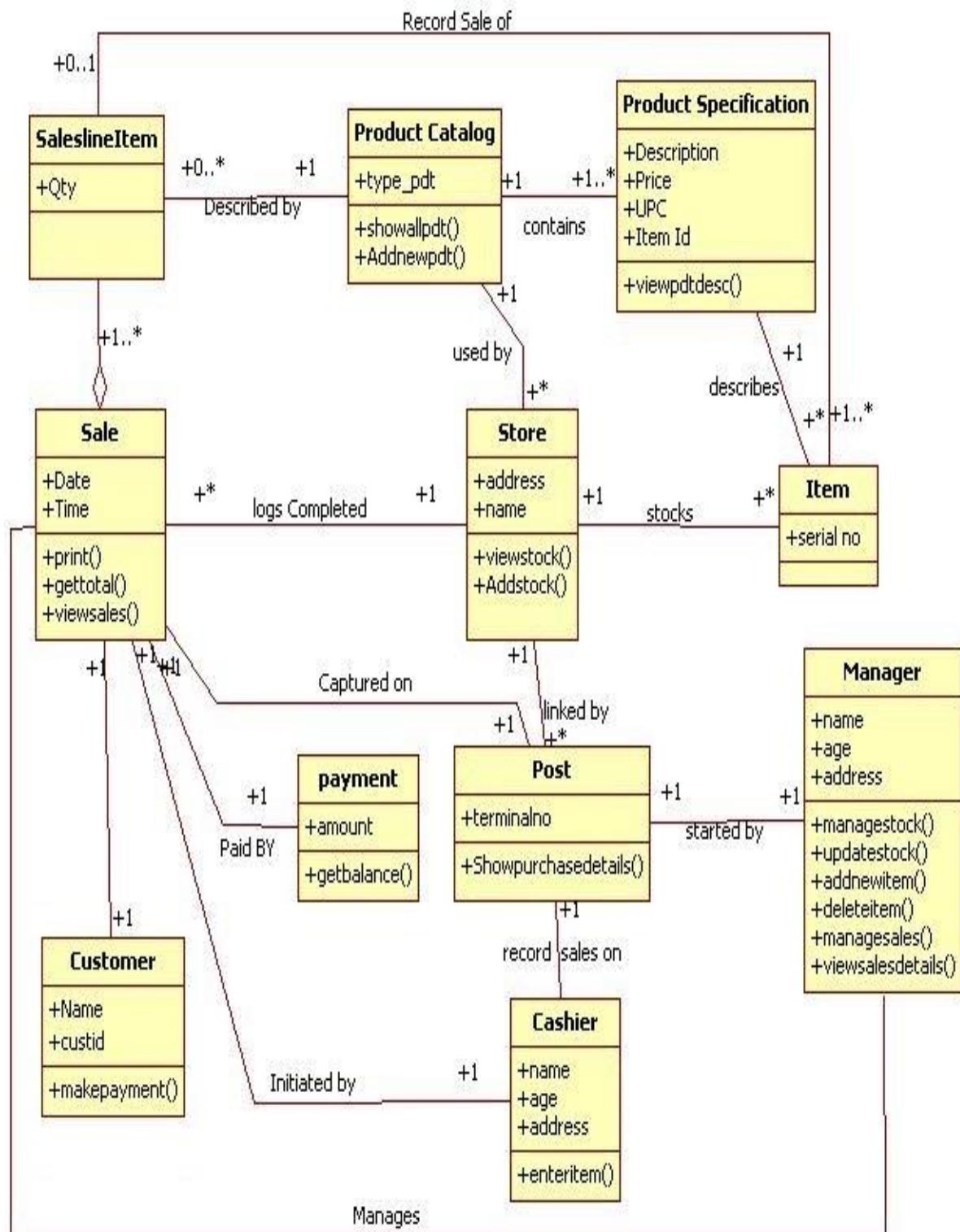
Add Supplier to the system



Salary Pay for the employee



Class Diagram



Other Preferences

MySQL

We use MySQL. Because we control database management. Then MySQL is the best for Our Software. MySQL is free and open source with a commercial license available. Facilitating bundles and can be effectively set up in a Linux, UNIX or Windows condition.

Operating System

We choose Window operating system because it's very user friendly. As well as most application, feature, develop according to Windows.

Libraries

We use "mysql-connector-java-5.0.7-bin, Jcalendar, Jasper, jar files to develop the system. They are very useful to connect to database and add to some features.

Functional requirement

Logging to System:-

When user open the system they must fill text filed User name, Password. Then, if details are correct User can enter to Menu. If Password forget to User. They can Forget Password they must change password .using Email access. They can't change it using that method they must inform to administrator.

Ordering the Food Items:-

Customer Enter the Item list they can view Food Items. When he chose the food, if they registered checked nearest branch and checked food item availability in nearest branch. If they don't register they must submit correct address and telephone number. After this process. Customer must select payment method and must confirm payment. After they confirm payment, massage received by food company.

Register Customer:-

If customer want to register they can register. When they register, must submit their full name, address, post code, telephone numbers, and email. If they fill telephone number, food restaurant send messages about offers, packages, new food item. If they fill address, its help to access the nearest branch.

Other Non-Functional Requirements

Performance Requirements

Execution Qualities

In this Super City Mega Food Store we have specially focused on data protection. Below ones are some of the examples for that.

- Navigation

Our system has provided an efficient way for each user to navigate the software efficiently according to his or her position in the software. The interfaces are designed to follow the flow of work the actor has to do.

- User-Friendly Application

We have used Eye-Catching colours in our Interfaces which makes users to stay more time with the system. Our System can be understood by anyone. So we can proudly say that it can be understood by 5 year old Child (not recommended).

Evaluation Qualities

- Database

As you already know we have used MYSQL Server as our professional Server in our system. We can purge Data from the server after every one and half year. We can make backups and you can restore earlier data whenever you wanted them. Else you can save those purged data for future circumstances.

- Software Maintenance

We maintain our software once a year according to the requirements which was given in the session of Requirement Analysis Stage. And we have to say that we do not do any other Upgrades Exclude those Requirements.

Safety and Security Requirements

- Login & Forgot Password

No one can log into our system except the Staff in the Branch. Unauthorized Login Attempts will only receive Three Instances. Immediately Our System will Banned out Those Users. And Unauthorized Users also get only three chances to make the correct logins. Unless our System will send Emails and user will need to the log into their User's Email Accounts verify them for future Processes.

- Privilege Management

We have added Privileges to Our System .So the Admin can view every Function in the Software and cashier will view only his Cashier Interface. Additionally Delivery Riders will only see their Interfaces. So no one can interfere with other work while the normal Processes.

Appendix A – Group Log

Date	Time	Activity
02/01/2017	8.00 am-1.00 pm	Meeting with Client : Group
06/01/2017	8.00 am-1.00 pm	Getting Requirements
10/01/2017	8.00 am-1.00 pm	Getting Requirements
15/01/2017	8.00 am-1.00 pm	Getting Requirements
20/01/2017	8.00 am-2.00 pm	Observation
26/01/2017	9.00 am-1.00 pm	Questionnaires with Client
31/01/2017	10.00 am-5.00 pm	Meeting with Client : Group

05/02/2017	9.40 am-1.50 pm	Observation
10/02/2017	8.00 am-1.00 pm	Observation
15/02/2017	8.00 am-1.00 pm	Questionnaires with cashier
20/02/2017	9.00 am-3.00 pm	Interview with the Staff
24/02/2017	8.00 am-5.00 pm	Designing ER Diagram
26/02/2017	8.30 am-2.00 pm	Verifying ER Diagram
28/02/2017	9.00 am-1.00 pm	Designing Interfaces
04/03/2017	8.30 am-1.00 pm	Designing Interfaces and Buttons
05/03/2017	9.00 am-1.00 pm	Started Coding : Group
06/03/2017	8.00 am-1.00 pm	Meeting with Client : Group
08/03/2017	8.00 am-1.00 pm	Finished Login Part
10/03/2017	8.00 am-2.00 pm	Started Billing Part
12/03/2017	9.00 am-1.00 pm	Working in Billing Part
15/03/2017	8.00 am-1.00 pm	Working in Billing Part
17/03/2017	10.00 am-1.00 pm	Finished Billing Part
19/03/2017	8.30 am-1.00 pm	Started Working in Delivery System
21/03/2017	10.00 am-1.00 pm	Meeting with Client : Group
24/03/2017	8.00 am-1.00 pm	Working in Delivery System
25/03/2017	8.00 am-1.00 pm	Working in Delivery System
28/03/2017	8.00 am-1.00 pm	Finished Working in Delivery System
05/04/2017	10.00 am-1.00 pm	Collecting All the Interfaces
06/04/2017	9.00 am-1.00 pm	Making Navigations
10/04/2017	8.00 am-2.00 pm	Testing With the Group
16/04/2017	8.00 am-3.00 pm	Verified by Client
19/04/2017	8.40 am-1.00 pm	Host the application
20/04/2017	10.00 am-5.00 pm	Run Real Time
26/04/2017	8.50 am-6.00 pm	Close the Project