



Information Technology Project – IT2080

Batch 02

Group No – WD\_B02\_ITP\_03

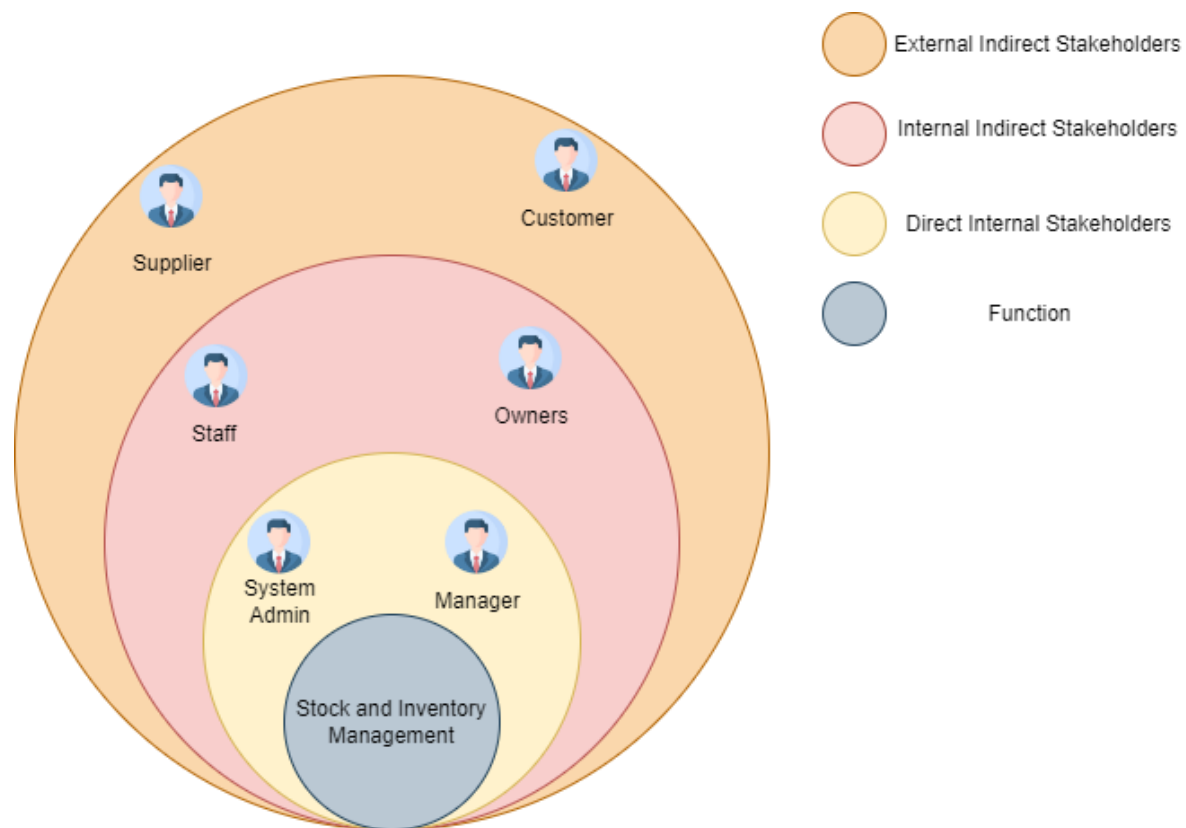
Requirements Engineering Report

Supermarket Management System

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## IT21006548 - Liyanage S.D.K

### Onion Diagram



### User Stories

1. As a manager I want to keep track of all the inventories once they are added to the system, so I can keep track of all the selling records of the items and update or delete whenever necessary, so I can replenish the items without overstocking.

2. As the manager I want to increase the customer satisfaction to attract more customer, so I want to organize all the kind of inventories, so customers will not spend too much time on finding whatever they want.

## **Functional Requirements**

1. Store Inventory
2. Manage Inventory
3. Generate Reports

## **Non-Functional Requirements**

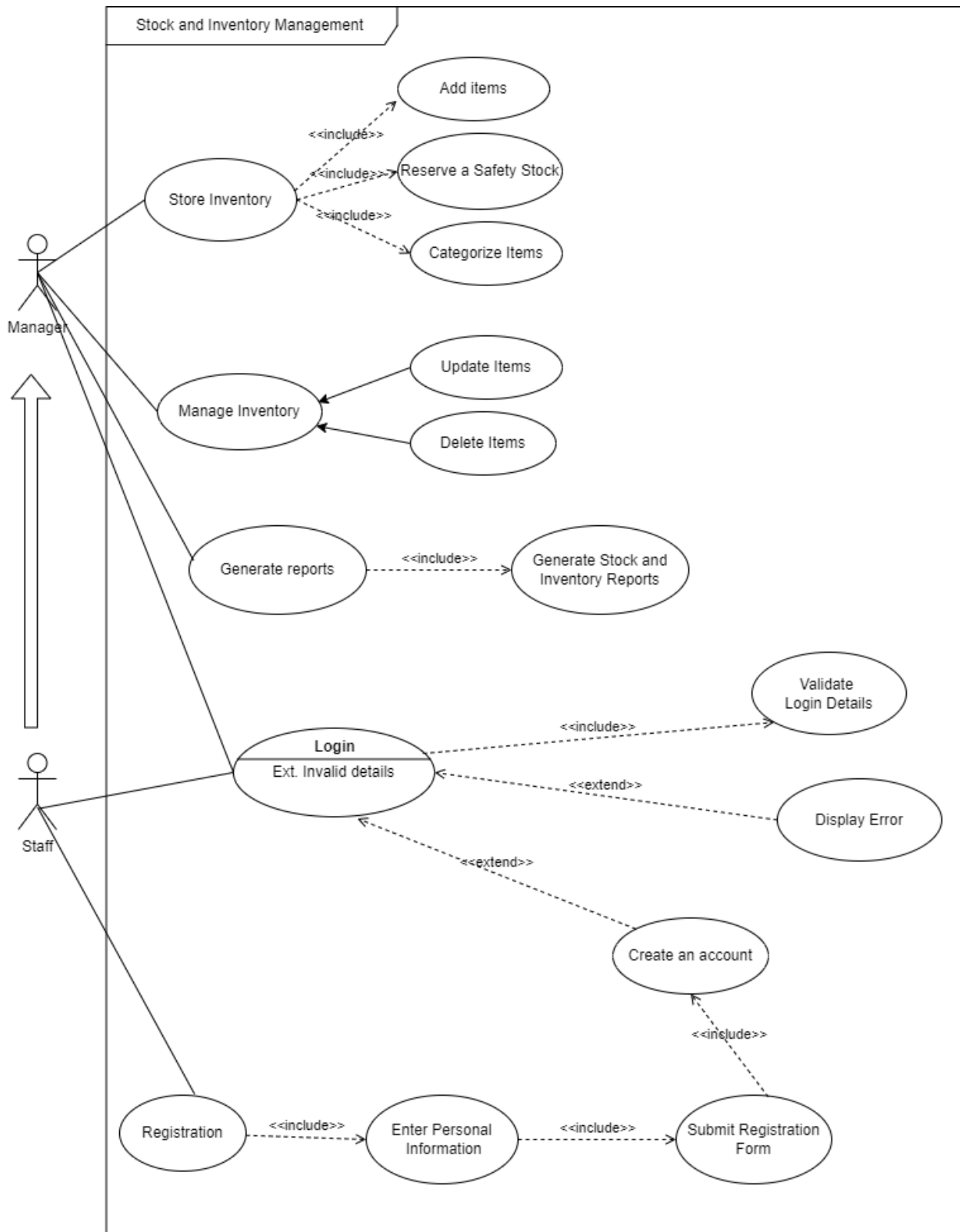
1. Performance constraints – security, capacity, response time, data integrity
2. Operating constraints – manageability
3. Interface constraints – usability
4. Economic constraints – cost

## **Technical Requirements**

MERN stack

1. MongoDB – document database (cloud Database)
2. Express.js – Node.js web framework (Back end)
3. React.js – a client-side JavaScript Framework (Front end)
4. Node.js – the premier JavaScript web server (Back end)
5. Development IDE – Visual Studio Code

## Use Case Diagram



## Use case Scenarios

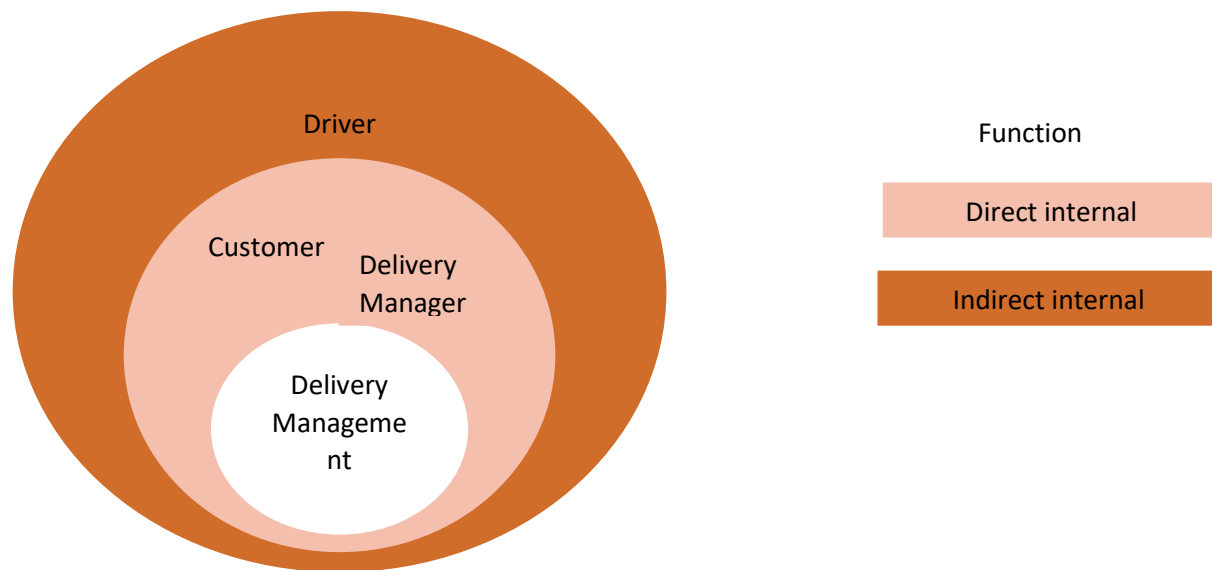
<b>Number</b>	008	
<b>Name</b>	Store Inventory	
<b>Summary</b>	Manager Stores the Purchased Inventory and Stocks	
<b>Preconditions</b>	Manager has to login to his account Manager needs to purchase items from the supplier	
<b>Postconditions</b>	Stored items are managed by the manager	
<b>Primary Actor</b>	Manager	
<b>Priority</b>	8	
<b>Trigger</b>	Manager has chosen to store the items	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Manager logs into the system
	2	System validates the manager by checking log in details
	3	Manager goes to the stocks and inventory page
	4	Manager selects the add stock option
	5	Manager fills the form to add item details
	6	Manager categorizes the items into departments
	7	Manager Reserves a safety stock
	8	Manager stores damaged goods, non-usable goods information
	9	System validates the information
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	System identify log in details are incorrect, relogging
	5a	If one of the fields are empty, show fill details message
	5b	If manager tries to add the same item again, show error message
	9a	If wrong information has entered, re add the stock

<b>Number</b>	009	
<b>Name</b>	Manage Inventory	
<b>Summary</b>	Manager edits and deletes stored inventory and stocks	
<b>Preconditions</b>	Manager has to add inventory and stocks to the system	
<b>Postconditions</b>	Remained and edited items will be available in the system	
<b>Primary Actor</b>	Manager	
<b>Trigger</b>	Manager has chosen to edit , delete details	
<b>Priority</b>	6	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Manager logs into the system
	2	System Validates the Manager by checking log in details
	3	Manager goes to the stock and inventory page
	4	Manager selects the update items option
	5	Manager fills the form to provide details of the updated item
	6	System checks the validity
		System generates the update success message
	7	Manager deletes an item from the system
	8	System generates delete success message
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	System identify login details are incorrect, ask to relogging
	5b	If one of the fields are incorrect, show fill details message
	6a	If wrong information has entered, system ask to update again.
	7a	If manager tries to delete an already deleted item, display message

<b>Number</b>	010	
<b>Name</b>	Generate Report	
<b>Summary</b>	Manager Generates Remaining Items Report	
<b>Preconditions</b>	Manager login to the system	
<b>Postconditions</b>	Display remaining items report	
<b>Primary Actor</b>	Manager	
<b>Trigger</b>	Manager has chosen to generate the remaining items	
<b>Priority</b>	7	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Manager logs into the system
	2	System Validates the Manager by checking log in details
	3	Manager goes to the stock and inventory page
	4	Manager selects the generate report option
	5	Manager filters the remaining items of after update and delete
	6	System generates the remaining items
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	System identify login details are incorrect, ask to relogging

## IT21446030 – Fernando W.C.S

### Onion Diagram



1. As a customer, I want to be able to track my order, so that I can ensure it arrives at the correct destination.
2. As a Delivery Manager, I want to notify customers about any delays with their orders so that I can maintain a good relationship with the customer and avoid further inconveniences.

### FR

1. Login – Customer, Delivery Manager
2. Browse content– Customer
3. Add items to cart – Customer
4. Make payment - Customer
5. View delivery details – Customer
6. Notify customers of delays – Delivery Manager
7. Cancel order – Customer
8. Manage deliveries – Delivery Manager



## NFR

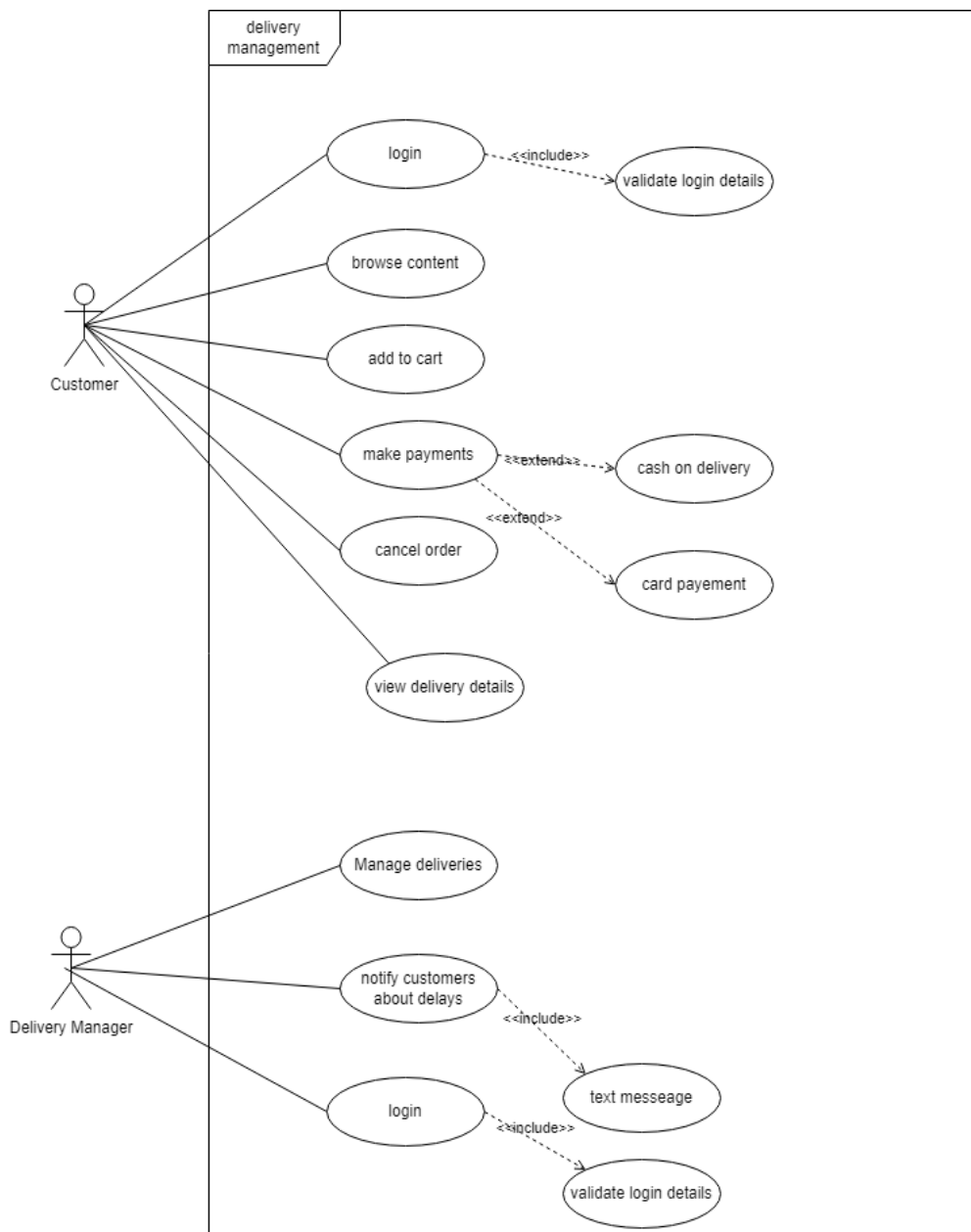
Security, Accuracy – Customer, Delivery Manager

Performance– Delivery Manager

## TR

Mongo DB, React(.js), Express(.js), Node(.js)

## Use case diagram



## Use Case Scenarios

<b>Number</b>	1	
<b>Name</b>	Updates delivery details	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer confirms an order	
<b>Post-condition</b>	Updates delivery details	
<b>Primary Actor</b>	Delivery Manager	
<b>Secondary Actor</b>	Registered Customer, System	
<b>Trigger</b>	Customer confirms order	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Delivery Manager gets Customer's order details
	2	Delivery Manager sets the new order to delivery
	3	Delivery Manager assigns driver for the delivery
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	If delivery is delayed, send delayed text to customer
	2b	if Customer cancels order, System changes status to "order cancelled"

<b>Number</b>	2	
<b>Name</b>	Make payments	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer proceeds to checkout	
<b>Post-condition</b>	Confirm payment	
<b>Primary Actor</b>	Registered Customer	
<b>Secondary Actor</b>	System	
<b>Trigger</b>	Customer proceeds to checkout	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Customer selects payment option
	2	Customer enters payment details

	3	System validates payment details
	4	Customer confirms payment
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	If Customer enters promo code, System updates the total amount to the discounted amount
	3a	If payment details are invalid, System asks Customer to reenter the details

<b>Number</b>	3	
<b>Name</b>	Customer login to the system	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer enters username	
<b>Post-condition</b>	Successful login	
<b>Primary Actor</b>	Registered Customer	
<b>Secondary Actor</b>	System	
<b>Trigger</b>	Customer logs in to the system	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Customer enters username
	2	Customer enters password
	3	System validates username and password
	4	Customer clicks on “login” button
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	3a	If username or password is incorrect, System displays error message and asks user to relog in

<b>Number</b>	4	
<b>Name</b>	Delivery Manager login to the system	
<b>Priority</b>	1	
<b>Pre-condition</b>	Delivery Manager enters username	
<b>Post-condition</b>	Successful login	
<b>Primary Actor</b>	Delivery Manager	

<b>Secondary Actor</b>	System	
<b>Trigger</b>	Delivery Manager logs in to the system	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Delivery Manager enters username
	2	Delivery Manager enters password
	3	System validates username and password
	4	Delivery Manager clicks on “login” button
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	3a	If username or password is incorrect, System displays error message and asks user to relog in

<b>Number</b>	5	
<b>Name</b>	Browse items	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer logs in to the system	
<b>Post-condition</b>	Browse items	
<b>Primary Actor</b>	Customer	
<b>Trigger</b>	Customer decides to browse items	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Customer browse items using the “Shop by Category” in the home page or by clicking in the “Categories” drop down list
	2	Customer checks availability of items

<b>Number</b>	6	
<b>Name</b>	Add to cart	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer logs in to the system	
<b>Post-condition</b>	Add item to cart	
<b>Primary Actor</b>	Customer	

<b>Secondary Actor</b>	System	
<b>Trigger</b>	Customer decides to add item to the cart	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Customer selects an item
	2	Customer selects the quantity of the item
	3	Customer clicks on “add to cart” button
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	If item is out of stock, System displays “out of stock” message and disables the “add to cart” button

<b>Number</b>	7	
<b>Name</b>	Cancel order	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer confirms an order	
<b>Post-condition</b>	Cancel order	
<b>Primary Actor</b>	Customer	
<b>Secondary Actor</b>	System	
<b>Trigger</b>	Customer decides to cancel order	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Customer selects on “my orders”
	2	Customer clicks on the particular order
	3	Customer clicks on “Cancel order” button
	4	System displays success message

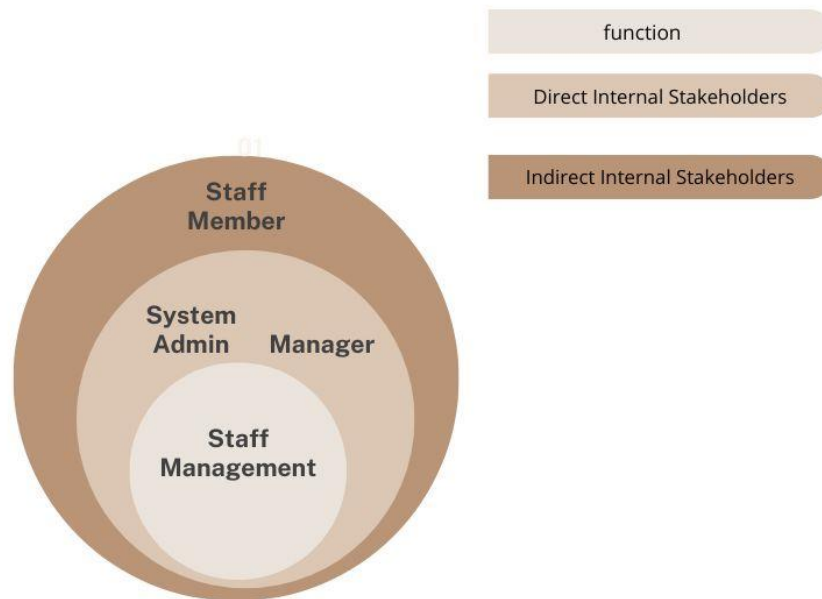
<b>Number</b>	8	
<b>Name</b>	View delivery details	
<b>Priority</b>	1	
<b>Pre-condition</b>	Customer confirms an order	
<b>Post-condition</b>	View delivery details	

<b>Primary Actor</b>	Customer	
<b>Trigger</b>	Customer decides to view delivery details	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Customer clicks on “My profile”
	2	Customer selects “my orders”
	3	Customer clicks on particular order
	4	Customer selects on “track my order”

<b>Number</b>	9	
<b>Name</b>	Notify customers about delays	
<b>Priority</b>	1	
<b>Pre-condition</b>	Delivery Manager selects on delayed order	
<b>Post-condition</b>	Send text message	
<b>Primary Actor</b>	Delivery Manager	
<b>Secondary Actor</b>	System	
<b>Trigger</b>	Delivery Manager receives message of delayed order	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Delivery Manager selects on particular delayed order
	2	Delivery Manager clicks on “send delayed order text” button
	3	System sends text message regarding delayed order to the customer’s phone number

Onion diagram

01)



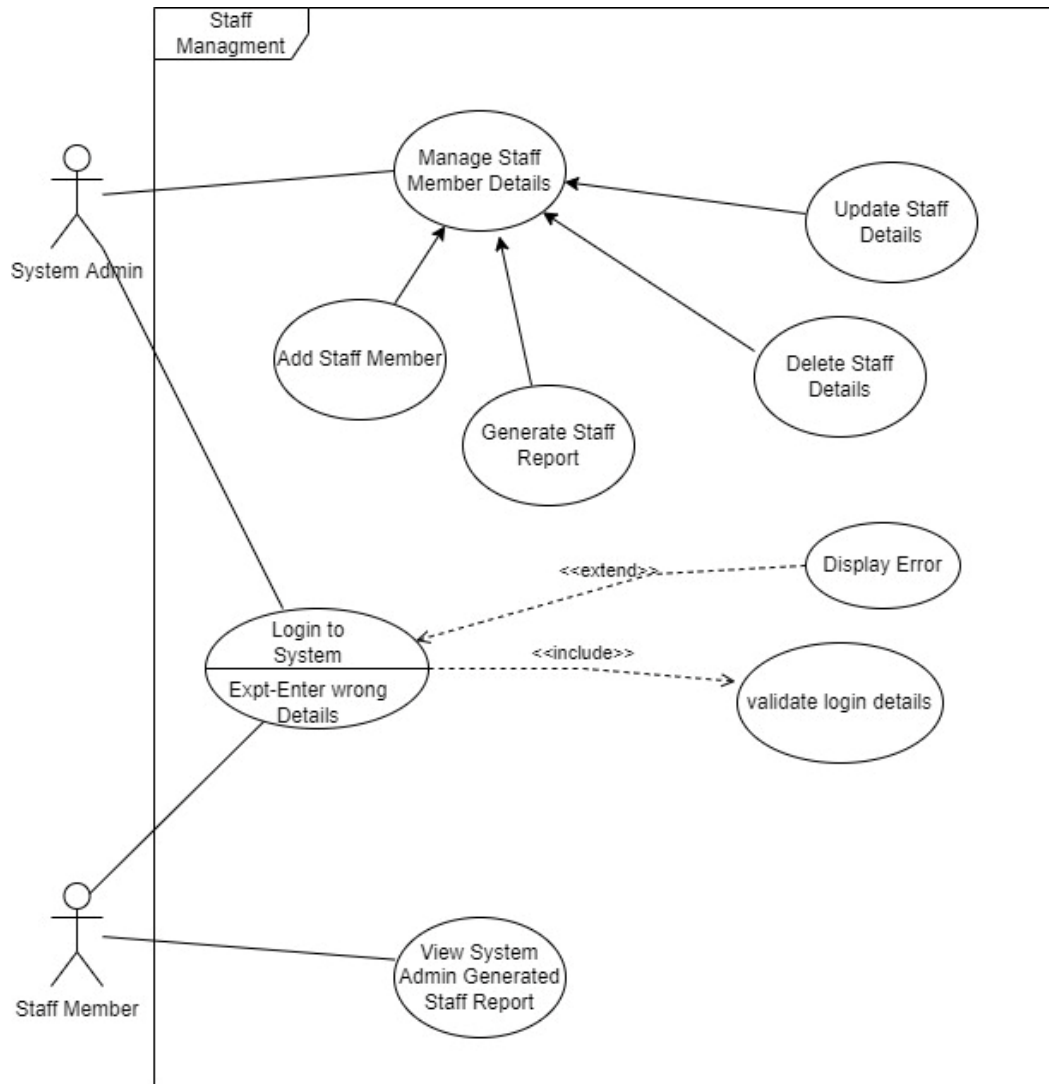
02) As a System Admin, I Want to Add Submission Links for Workers to Submission Their Daily. Works So that I Can Measure Who Most Efficient Worker In the group. Not Only That, as a System Admin, I Want to Add Staff Members to the System So that I can Easily Generate Reports in Each Staff Member.

03) FR- Staff Management.

NFR-Security Testing, Reliability

TR- MongoDB,Express(.js),React(.js),Node(.js)

## Use Case Diagram





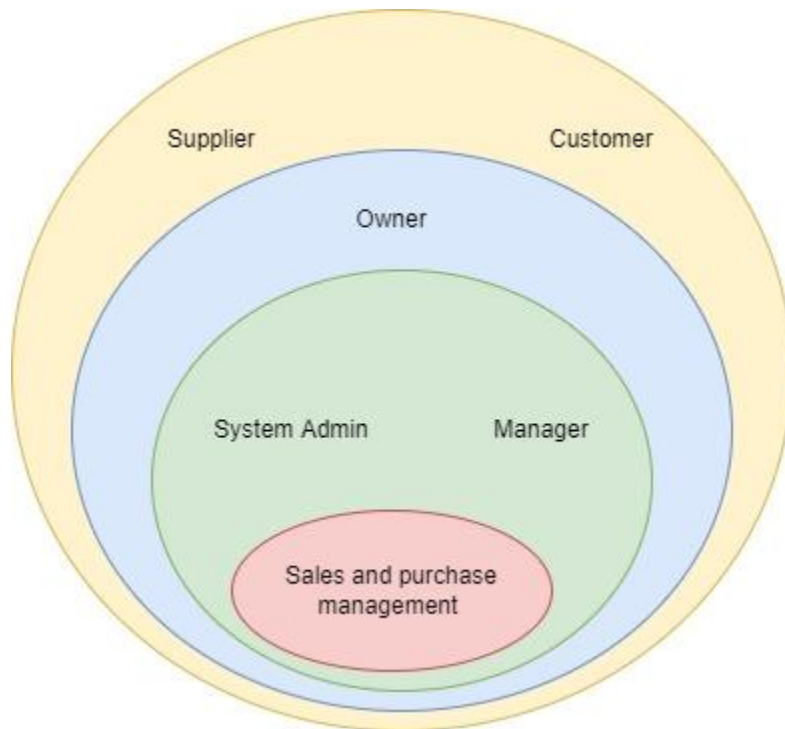
## Use Case Scenarios

<b>Use Case ID</b>	0528	
<b>Use Case Name</b>	Staff Member Login to the System.	
<b>Priority</b>	5	
<b>Pre-conditions</b>	Staff Member enter valid details to the System.	
<b>Post-conditions</b>	Staff Member Login to the system.	
<b>Primary Actor(s)</b>	Staff Member	
<b>Trigger</b>	Staff Member Wants to Login to System.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Staff Member Try to Open Staff Member's Dashboard.
	2	Some security Reasons, the system will ask Staff Member's email and password.
	3	After enter Email and Password, Staff Member enters the Staff Member's Dashboard.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the System Admin can't verify details, he will be re direct to the login page.

<b>Use Case ID</b>	0530	
<b>Use Case Name</b>	Staff Member View System Admin Generated Report	
<b>Priority</b>	5	
<b>Pre-conditions</b>	Staff Member Login to the System.	
<b>Post-conditions</b>	Staff Member view Admin Generated Report.	
<b>Primary Actor(s)</b>	Staff Member	
<b>Trigger</b>	Staff Member View Admin Generated Report.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Staff Member Try to Open Staff Member's Dashboard.
	2	Some security Reasons, the system will ask Staff Member's email and password.
	3	After enter Email and Password, Staff Member enters the Staff Member's Dashboard.
	4	Staff Member View Admin Generated Report.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the System Admin can't verify details, he will be re direct to the login page.

<b>Use Case ID</b>	0529	
<b>Use Case Name</b>	Manage Staff Member Details	
<b>Priority</b>	5	
<b>Pre-conditions</b>	System Admin must log into the System.	
<b>Post-conditions</b>	System Admin Generate Report & Identify Most Efficient Worker through the report.	
<b>Primary Actor(s)</b>	System Admin	
<b>Trigger</b>	System Admin Wants to Generate Staff Report.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	System Admin Try to Open System Admin's Dashboard.
	2	Some security Reasons, the system will ask System Admin's email and password.
	3	After enter Email and Password, System Admin enters the System Admin's Dashboard.
	4	System Admin Looks All Features and Go through one by one.
	5	System Admin Select Add Staff Option.
	6	Therefore, System Admin Can Add New Staff Members to the System entering Their Details.
	7	After, System Admin Select Remove Staff Option.
	8	Therefore, System Admin Can Remove Staff Members.
	9	After, System Admin Select Update Staff Option.
	10	Therefore, System Admin Can Update Staff Member Details.
	11	After that, System Admin Select Generate Report option.
	12	Therefore, System Admin Can Generate Staff Member Details Report.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the System Admin can't verify details, he will be re direct to the login page.

**Onion Diagram**



**2. User Stories**

- As a system admin I want to add a new sale to the sales records to get a total sale of items and total number of items sold.
- As a system admin I want to delete a sales record that was added twice.

**3. Functional Requirements**

- User access management
- Add new sale
- Update sales information
- Delete sale
- Retrieve sales and purchases information
- Display supplier details
- Generate reports

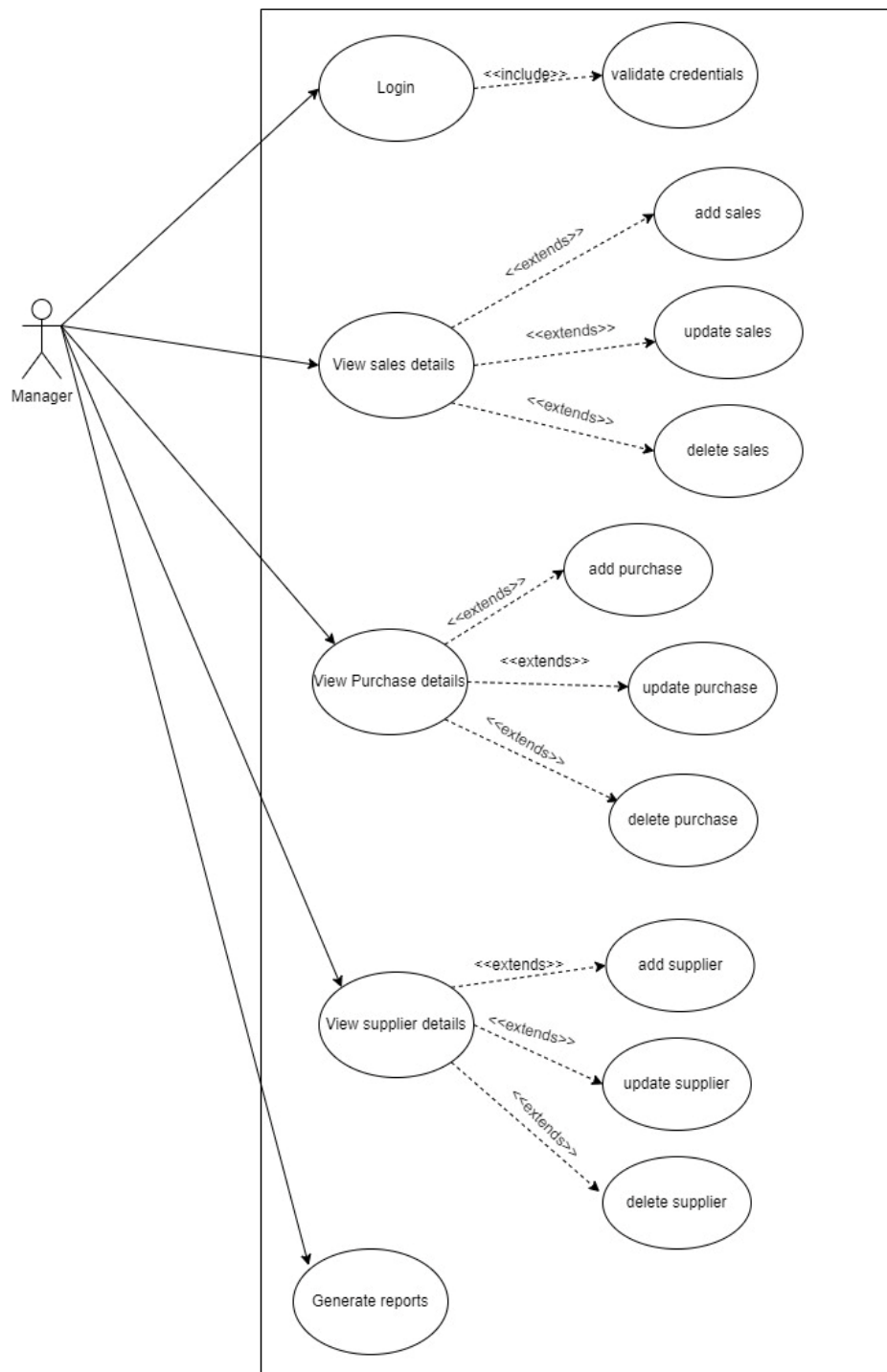
**Non - functional requirements:**

- Availability

Technical requirements:

- Mongo DB , Express(.js) , React(.js) , Node(.js).

## Use case diagram



<b>Use Case ID</b>	001	
<b>Use Case Name</b>	Manager login to the system.	
<b>Priority</b>	1	
<b>Pre-conditions</b>	Manager enters correct credentials to the system.	
<b>Post-conditions</b>	Manager logs into the system.	
<b>Primary Actor(s)</b>	Manager	
<b>Trigger</b>	Manager logs into the system.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Manager clicks on user profile.
	2	Manager logs into the system by providing username and password.
	3	After entering username and password, Manager re-directs to Manager's dashboard.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the Manager can't verify details, he will be re direct to the login page.

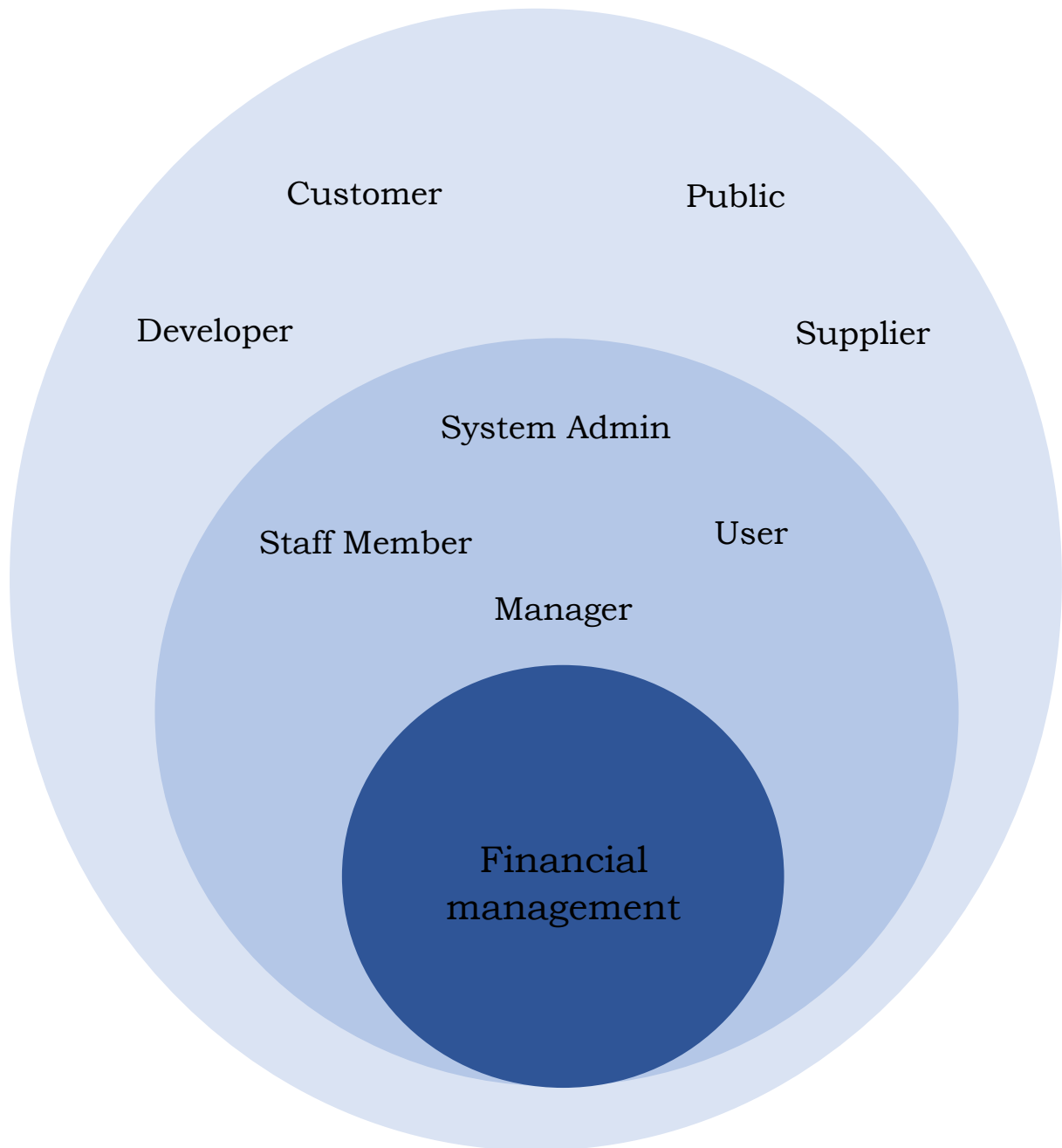
<b>Use Case ID</b>	002	
<b>Use Case Name</b>	Manage sales details	
<b>Priority</b>	2	
<b>Pre-conditions</b>	Manager must log into the System.	
<b>Post-conditions</b>	Retrieve sales information.	
<b>Primary Actor(s)</b>	Manager	
<b>Trigger</b>	Generation of reports monthly.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Manager clicks on user profile.
	2	Manager logs into the system by providing username and password.
	3	After entering username and password, Manager re-directs to Manager's dashboard.
	4	Manager adds sales records.
	5	Manager updates sales records.
	6	Manager deleted sales records.
	7	Manager retrieves sales records.
	8	At last, generation of reports
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the Manager can't verify details, he will be re direct to the login page.

<b>Use Case ID</b>	003	
<b>Use Case Name</b>	Retrieve supplier details	
<b>Priority</b>	3	
<b>Pre-conditions</b>	Manager must log into the System.	
<b>Post-conditions</b>	Retrieve supplier information.	
<b>Primary Actor(s)</b>	Supplier	
<b>Trigger</b>	Retrieve supplier information.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Manager clicks on user profile.
	2	Manager logs into the system by providing username and password.
	3	After entering username and password, Manager re-directs to Manager's dashboard.
	4	Retrieve supplier details.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the Manager can't verify details, he will be re direct to the login page.

<b>Use Case ID</b>	004	
<b>Use Case Name</b>	Generation of reports	
<b>Priority</b>	4	
<b>Pre-conditions</b>	Manager must log into the System.	
<b>Post-conditions</b>	Generation of reports.	
<b>Primary Actor(s)</b>	System	
<b>Trigger</b>	Report generation.	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Manager clicks on user profile.
	2	Manager logs into the system by providing username and password.
	3	After entering username and password, Manager re-directs to Manager's dashboard.
	4	Retrieve sales records.
	5	Generate monthly reports.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a	If the Manager can't verify details, he will be re direct to the login page.

**IT21004186 – H.M.H.N Medawatta**

**Onion Diagram**

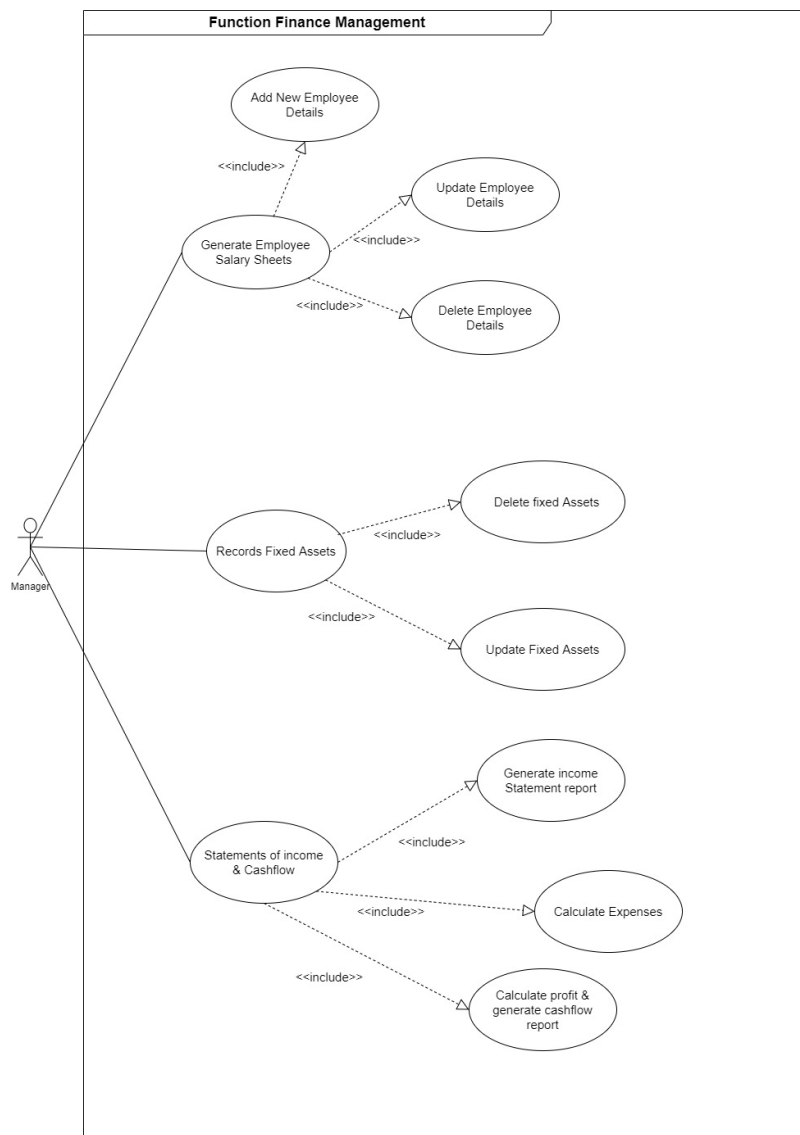


2. As a Financial Manager I want to keep tracking the external financial statements such as balance sheets, statement of stockholder's equity & income. So that I can ensure that the organization has sufficient cash to meet its short-term operating costs. And I want to Keep Analyzing Employees Salary records so then I can get an idea of company's financial stability.

3.

- Functional Requirements – Business Rules, Financial Principles
- Non- Functional Requirements – Usability Objectives, Response Time, Data Structure.
- Technical Requirements – Mongo DB, React js, Express js, Node js

## Use Case Diagram





## Use Case Scenarios

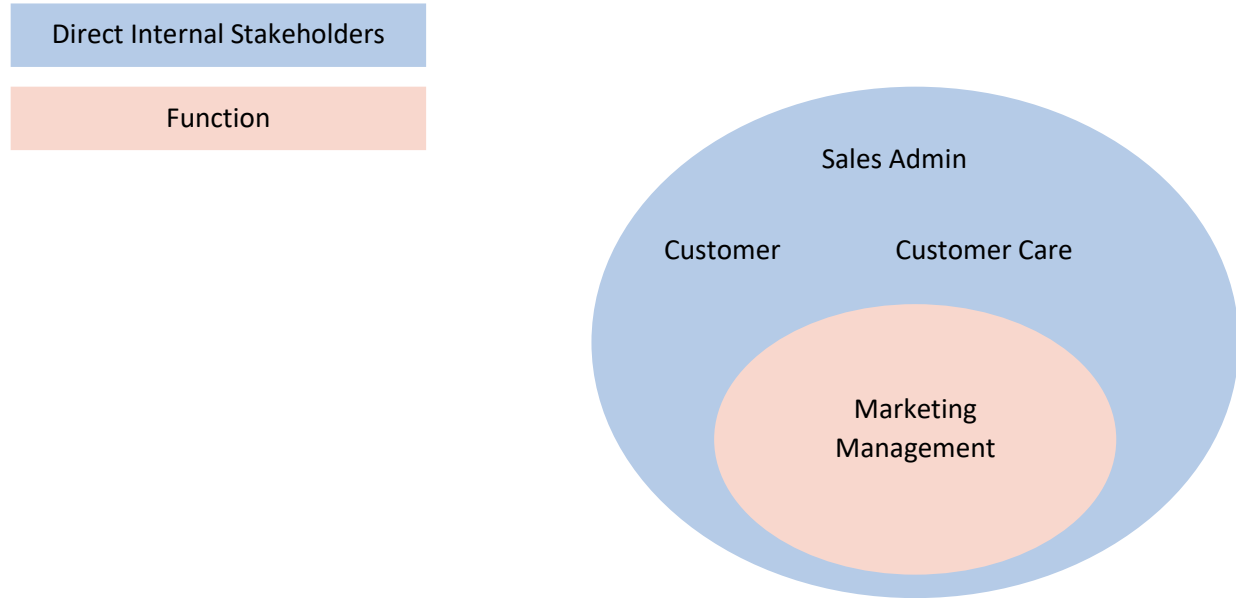
<b>Use Case ID</b>	002	
<b>Use Case Name</b>	Manage Employee Salary Sheets	
<b>Priority</b>	2	
<b>Pre-conditions</b>	Manager must log into the System.	
<b>Post-conditions</b>	Retrieve Employee Salary Details	
<b>Primary Actor(s)</b>	Finance Manager	
<b>Trigger</b>	Generate an Employee Salary Record	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Manager provides his/her User Login credentials
	2	Manager logs into the system.
	3	After entering username and password, Manager re-directs to Manager's dashboard.
	4	Manager selects Financial Records.
	5	Selects Employee Salary Sheet.
	6	Add New Employee details to the table.
	7	Update Old Employee Details such as Phone number, Salary Amount... etc..
	8	Delete Retired Employee details from the System. & Generate a Report.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	2a 6a	If the Manager can't verify details, he will be re direct to the login page.  If the New phone number already exists in system, the system will prompt an error message.

	6b	If the Employee details already exists in the system, the system will prompt an error message.
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<b>Use Case ID</b>	003	
<b>Use Case Name</b>	Manage Fixed Assets Records	
<b>Priority</b>	3	
<b>Pre-conditions</b>	Manager must log into the System.	
<b>Post-conditions</b>	Retrieve fixed Assets report	
<b>Primary Actor(s)</b>	Finance Manager	
<b>Trigger</b>	Generate fixed assets Record	
<b>Main Success Scenario</b>	<b>Step No.</b>	<b>Action</b>
	1	Selects financial Records.
	2	Selects Assets Section.
	3	Add New Assets Details to the System Mentioned its Type and Value
	4	Update Assets details.
	5	Delete Assets details
	6	Generate new Assets report.
<b>Extensions</b>	<b>Step No.</b>	<b>Action</b>
	4a	If the Enter Details such as type does not match with the system requirements, the system will prompt an error message.
	3a	If the Newly added Assets has the Same details that exists in the system, it will prompt an error message.

## IT21446108 – Fernando W.A.M

### Onion Diagram



1. As a Customer, I want to view notices on discounts, so that I can get updated on discounts given by the store.
2. As a Customer Care Agent, I want to provide replies to customer messages on the text message medium, so that I can answer their inquiries without a delay.

### FR

1. Login – Customer, Sales Admin, Customer Care Admin
2. View Notices – Customer
3. Viewpoints – Customer
4. Entitle for discounts - Customer
5. Add comments – Customer
6. Add Complaints – Customer
7. Add Rating – Customer
8. Text message admin – Customer
9. Add notices – Sales Admin
10. Add promo code – Sales Admin
11. Reply to complaints – Customer Care Admin
12. Reply to messages – Customer Care Admin

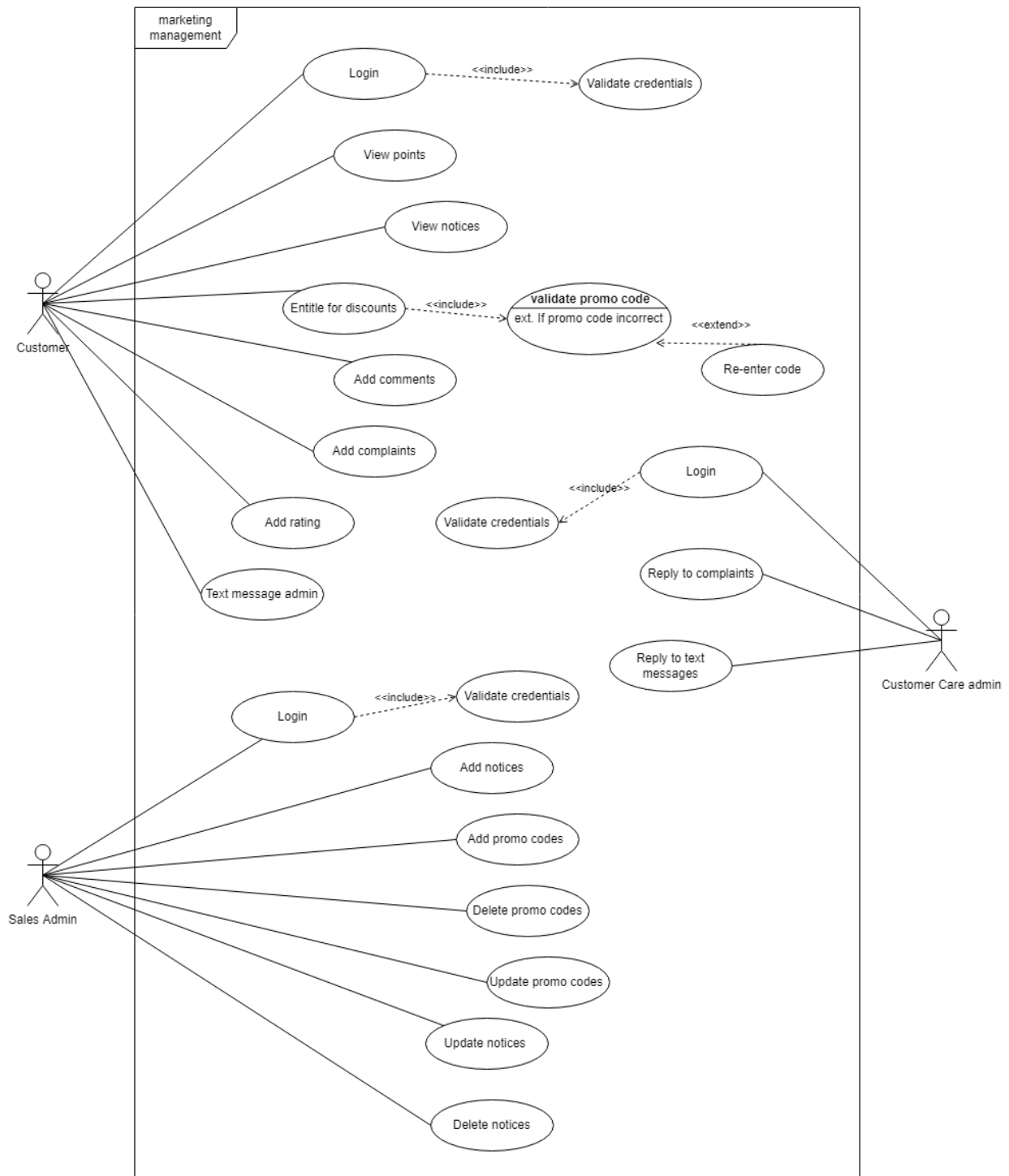
### NFR

Security, Accuracy – Customer, Sales Admin, Customer Care Admin

## TR

Mongo DB, React(.js), Express(.js), Node(.js)

## Use case Diagram



## Use Case Scenarios

<b>Number</b>	1	
<b>Name</b>	Entitle for discounts	
<b>Priority</b>	4	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Apply discounts to purchases	
<b>Primary Actor</b>	Registered Customer	
<b>Trigger</b>	Discounts with promo codes are made available	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Enter promo code during payment
	2	Confirm payment
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	1a	If promo code is correct, re-enter the code

<b>Number</b>	2	
<b>Name</b>	Give feedback	
<b>Priority</b>	2	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Provide feedback bases on Customer's experience	
<b>Primary Actor</b>	Registered Customer	
<b>Trigger</b>	Customer decides to give feedback	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to feedback panel
	2	Provide feedback based on experience
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	2a	If feedback is a comment, select 'Comments' option
	2b	If feedback is a complaint, select 'Complaints' option

	2c	If feedback is a rating, select number of stars
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<b>Number</b>	3	
<b>Name</b>	View points	
<b>Priority</b>	4	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	View Customer's points	
<b>Primary Actor</b>	Registered Customer	
<b>Trigger</b>	Customer wishes to view points	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to profile
	2	View the points displayed

<b>Number</b>	4	
<b>Name</b>	Text message Customer Care Admin	
<b>Priority</b>	3	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Message admin	
<b>Primary Actor</b>	Registered Customer	
<b>Trigger</b>	Customer wants to contact an admin for assistance	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Click message icon
	2	Type the message
	3	Select send icon to send message

<b>Number</b>	5	
<b>Name</b>	View notices	

<b>Priority</b>	1	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	View notices	
<b>Primary Actor</b>	Registered Customer	
<b>Trigger</b>	Customer wishes to view notices	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to notice panel
	2	View displayed notices

<b>Number</b>	6	
<b>Name</b>	Add promo codes	
<b>Priority</b>	1	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Add promo codes	
<b>Primary Actor</b>	Sales Admin	
<b>Trigger</b>	New discounts are been given by store	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to 'Coupons' panel
	2	Select 'Add Coupon' option
	3	Add necessary details
	4	Select 'Create' to add new promo code
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	1a	If existing code needs to be updated, select update icon
	1b	If existing code needs to be deleted, select delete option

<b>Number</b>	7	
<b>Name</b>	Add notices	

<b>Priority</b>	1	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Add notices	
<b>Primary Actor</b>	Sales Admin	
<b>Trigger</b>	Sales Admin needs to add new notices	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to notices panel
	2	Select 'Add Notice' option
	3	Add notice with specific code
	4	Select 'Add' to add the notice
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	1a	If existing notice needs to be deleted, select delete icon
	1b	If existing notice needs to be updated, select update icon

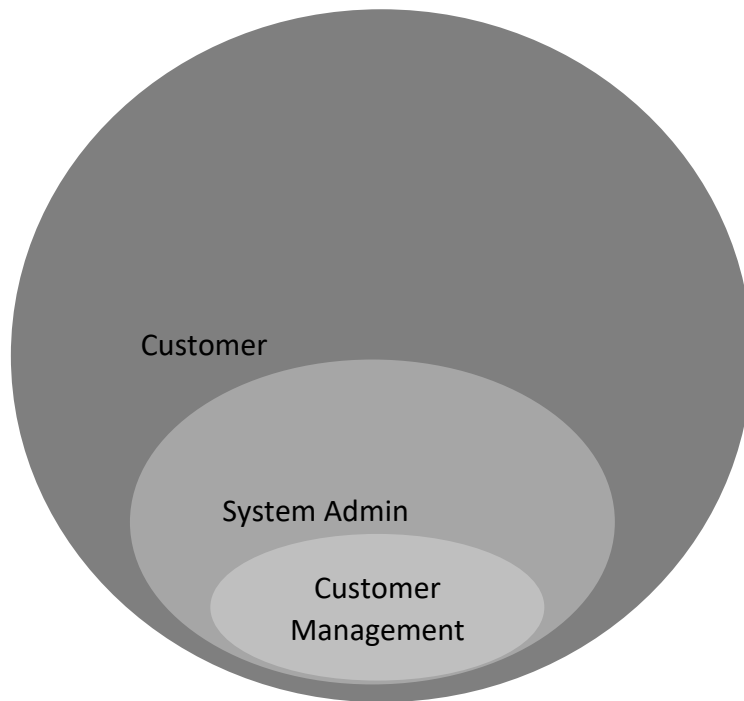
<b>Number</b>	8	
<b>Name</b>	Reply to text messages	
<b>Priority</b>	1	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Reply to text messages	
<b>Primary Actor</b>	Customer Care Admin	
<b>Trigger</b>	Receives message from Registered Customer	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to 'Messages' panel
	2	Select chat box with incoming message
	3	Provide reply to message
<b>Extensions</b>	<b>Step</b>	<b>Branching Action</b>
	3a	If message doesn't require a reply, exit chat box



<b>Number</b>	9	
<b>Name</b>	Reply to Complaints	
<b>Priority</b>	1	
<b>Pre-condition</b>	Log in to system	
<b>Post-condition</b>	Reply to Complaints	
<b>Primary Actor</b>	Customer Care Admin	
<b>Trigger</b>	Receives complaint from Registered Customer	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Go to 'Complaints' panel
	2	Provide reply for complaints received

**IT21050626 – Gamage A.G.R.U**

**Onion Diagram**



## **User Stories**

- As a system admin, I want to add new customers to the system so that I can easily generate report of every customer.
- As an unregistered customer, I want to register to the system so that I can get maximum shopping experience provided by the supermarket system.

## **Functional Requirements**

Registering- Unregistered Customer  
Login- Registered Customer, System Admin  
View Customer Details- System Admin  
Add Customers- System Admin  
Update Customer Details- System Admin  
Remove Customers- System Admin  
Generate Reports- System Admin

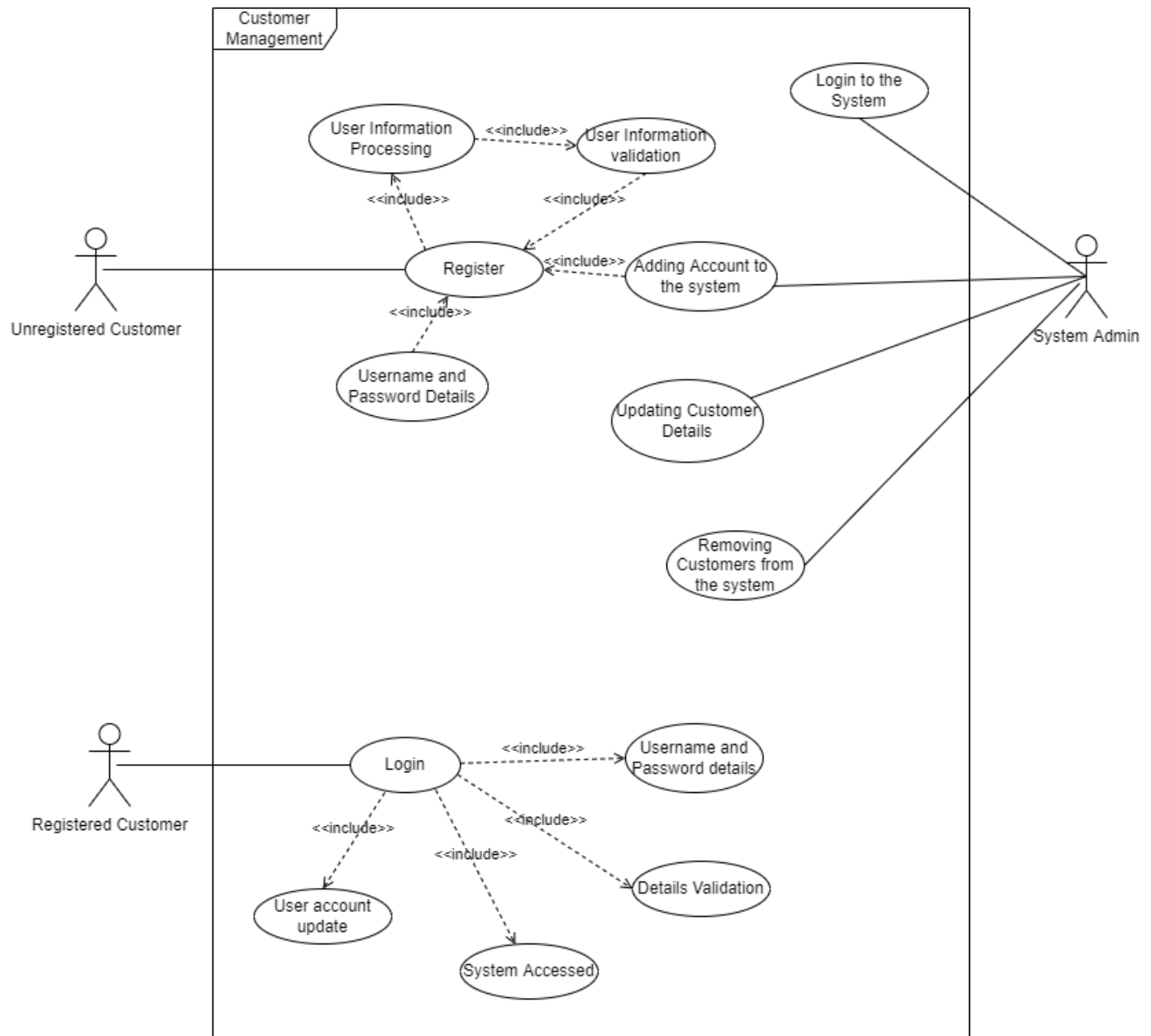
## **Non-Functional Requirements**

Security, Accuracy- Customer, System Admin

## **Technical Requirements**

Mongo DB, React(.js), Express(.js), Node(.js)

## Use Case Diagram



## Use Case Scenarios

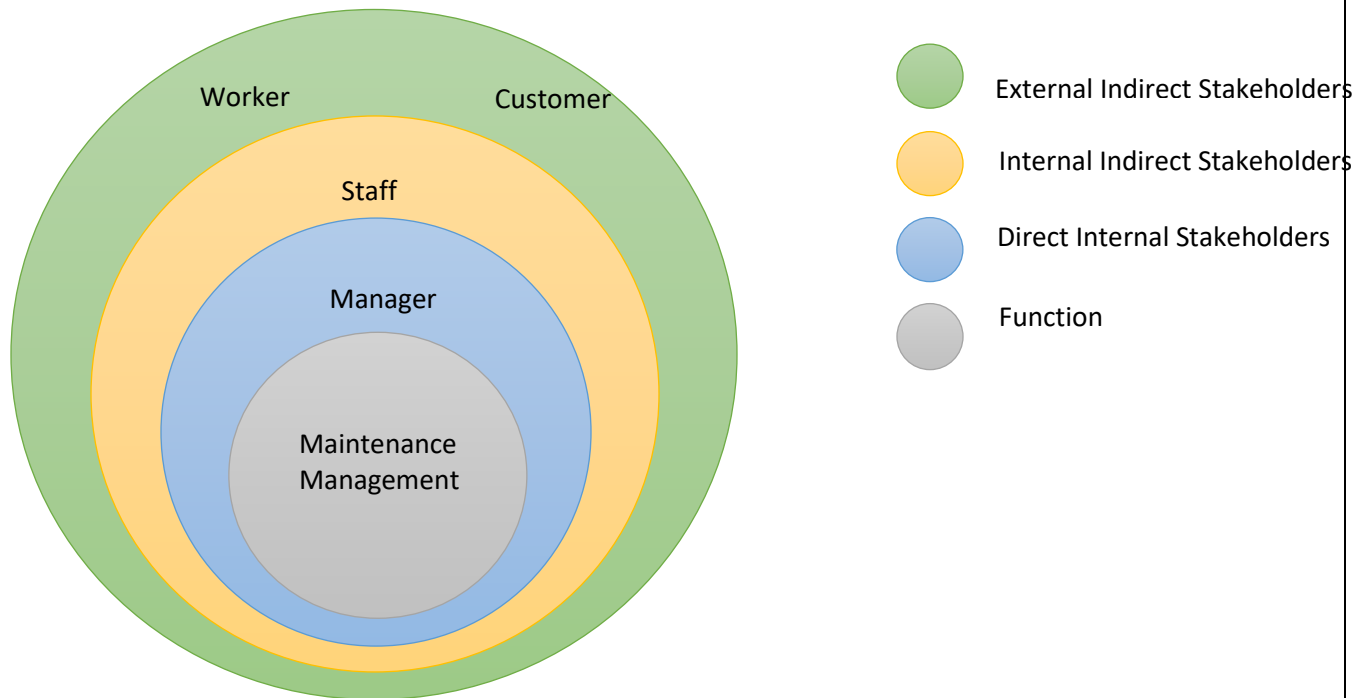
<b>Use Case ID</b>		
<b>Use Case Name</b>	Manage Customer Details	
<b>Priority</b>		
<b>Pre Conditions</b>	System Admin should log in to the system	
<b>Post Conditions</b>	System Admin generate reports of every customer's details.	
<b>Primary Actors</b>	System Admin	
<b>Trigger</b>	System Admin wants to generate Customer Reports.	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	System Admin logs in to the system by giving username and password.
	2	System Admin views all new customers' registration forms.
	3	System Admin selects Add Customer option so that he can .
	4	System Admin goes through registered customer details.
	5	System Admin selects Update details option.
	6	System Admin Update Customer details.
	7	System Admin goes through registered customer details.
	8	System Admin selects Remove Customer option so he can remove customers from the system.
	9	System Admin selects Generate Report option so he can generate the final report of the customer.

<b>Use Case ID</b>		
<b>Use Case Name</b>	Customer Registering to the System	
<b>Priority</b>		
<b>Pre Conditions</b>	Customer should enter valid username and password to the system.	
<b>Post Conditions</b>	Customer registering to the system.	
<b>Primary Actors</b>	Unregistered Customer.	
<b>Trigger</b>	Unregistered Customer wants to register to the system.	
<b>Main Scenario</b>	<b>Step</b>	<b>Action</b>
	1	Unregistered Customer go to the web page.
	2	Unregistered Customer selects Register option.
	3	Unregistered Customer provides a valid username and password to the system.
	4	Customer selects the register button.
	5	System shows a customer details form.
	6	Customer enters the correct customer details to system.
	7	If the customer registered successfully System shows a registration Success message.
<b>Extensions</b>	<b>Step</b>	<b>Action</b>
	7a	If the customer enters an invalid username or password, system shows an error message.

Use Case ID		
Use Case Name	Customer Logging to the System	
Priority		
Pre-Conditions	Customer should enter correct username and password to the system.	
Post Conditions	Customer Logging to the system.	
Primary Actors	Registered Customer.	
Trigger	Registered Customer wants to login to the system.	
Main Scenario	Step	Action
	1	Registered Customer go to the web page.
	2	Registered Customer selects Log in option.
	3	registered Customer provides the correct username and password to the system.
	4	Customer selects the Log in button.
	5	If the customer logged in successfully System shows a welcome message.
Extensions	Step	Action
	5a	If the customer enters an invalid username or password, system shows invalid username or password, Try again message.

## IT21001802 – Panditharathne I.G

### Onion Diagram



### User Stories

As a manager, I want to notify managers about maintenance so that I can take action to keep the maintenance process efficient.

As a manager, I want to assign maintenance workers to inspected maintenances so that I can conduct the workers to the repairs and maintenance and it can be done well.



## **FR**

- Login
- Add maintenance
- Delete maintenance
- Update maintenance
- Assign workers
- Generate repots

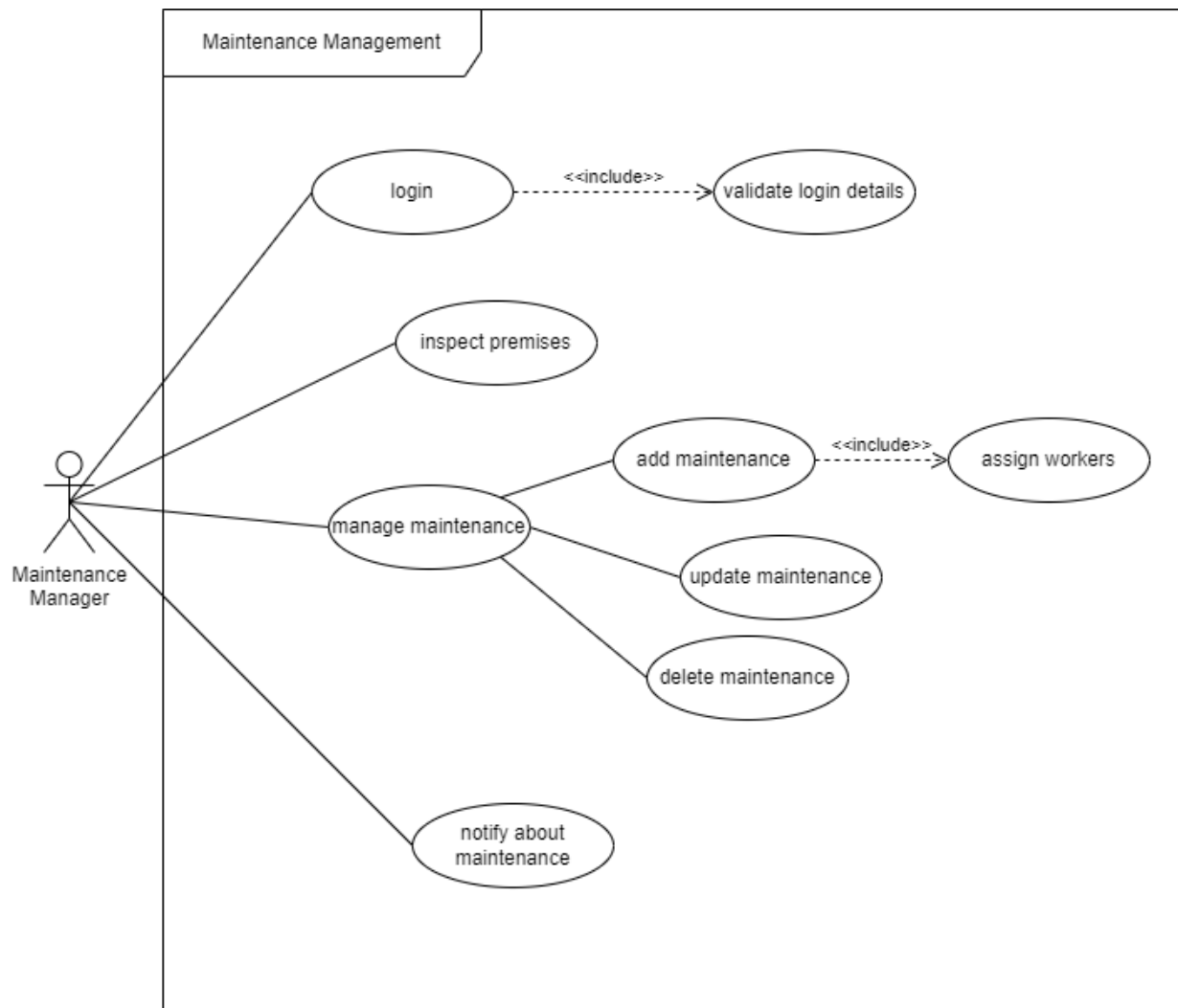
## **NFR**

- Availability
- Performance

## **TR**

- MongoDB
- React(.js)
- Express(.js)
- Node(.js)

## Use case Diagram



## Use Case Scenarios

<b>Use Case ID</b>	01	
<b>Use Case Name</b>	Manager login to the system.	
<b>Primary Actor</b>	Manager	
<b>Priority</b>	1	
<b>Pre-conditions</b>	Manager have to enters correct credentials to the system.	
<b>Post-conditions</b>	Manager login to the system	
<b>Trigger</b>	Manager logs into the system	
<b>Main success scenario</b>	<b>Steps</b>	<b>Action</b>
	1	Manager clicks on user profile
	2	Manager directed to log in page
	3	Manager input username and password.
	4	Manager re-directs to Manager's dashboard.
<b>Extensions</b>	<b>Steps</b>	<b>Action</b>
	3.a	If either the username or password is incorrect or both are incorrect the system will re direct to the login page and display error message

<b>Use Case ID</b>	02	
<b>Use Case Name</b>	Manager inspect premises	
<b>Primary Actor</b>	Manager	
<b>Priority</b>	2	
<b>Pre-conditions</b>	Manager should be valid user and login to the system	
<b>Post-conditions</b>	Retrieve maintenances.	
<b>Trigger</b>	Inspect maintenance	
<b>Main success scenario</b>	<b>Steps</b>	<b>Action</b>
	1	Manager clicks on user profile
	2	Manager directed to log in page
	3	Manager input username and password.
	4	Manager re-directs to Manager's dashboard.
	5	Manager search details for inspected maintenance
<b>Extensions</b>	<b>Steps</b>	<b>Action</b>
	3.a	If either the username or password is incorrect or both are incorrect the system will re direct to the login page and display error message
	5.a	If have details inspected maintenance add to maintenances process.

<b>Use Case ID</b>	03	
<b>Use Case Name</b>	Manage maintenance details	
<b>Primary Actor</b>	Manager	
<b>Priority</b>	1	
<b>Pre-conditions</b>	Manager should be valid user and login to the system	
<b>Post-conditions</b>	Manager assign inspected maintenance to the system	
<b>Trigger</b>	Maintenance	
<b>Main success scenario</b>	<b>Steps</b>	<b>Action</b>
	1	Manager clicks on user profile
	2	Manager directed to log in page
	3	Manager input username and password.
	4	Manager re-directs to Manager's dashboard.
	5	Manager adds maintenance
	6	Manager assign maintenance workers
	7	Manager updates maintenance
	8	Manager delete maintenance
	9	Manager retrieves maintenance
<b>Extensions</b>	<b>Steps</b>	<b>Action</b>
	3.a	If either the username or password is incorrect or both are incorrect the system will re direct to the login page and display error message
	5.a	If manager added maintenance only can assign maintenance workers

<b>Use Case ID</b>	04	
<b>Use Case Name</b>	Generate Reports.	
<b>Primary Actor</b>	Manager	
<b>Priority</b>	2	
<b>Pre-conditions</b>	Manager should be valid user and login to the system	
<b>Post-conditions</b>	View generated report	
<b>Trigger</b>	View report	
<b>Main success scenario</b>	<b>Steps</b>	<b>Action</b>
	1	Manager clicks on user profile
	2	Manager directed to log in page
	3	Manager input username and password.
	4	Manager re-directs to Manager's dashboard.
	5	Retrieve maintenance.
	6	Generate Maintenance Reports.
<b>Extensions</b>	<b>Steps</b>	<b>Action</b>
	3.a	If either the username or password is incorrect or both are incorrect the system will re direct to the login page and display error message