

# Contents

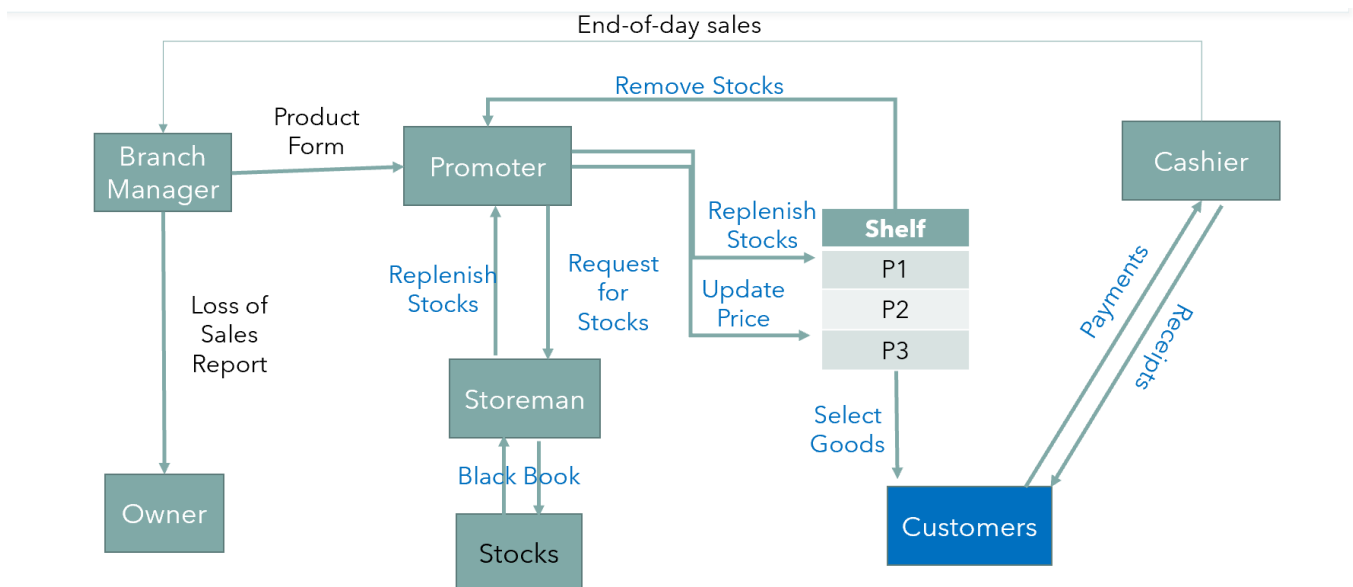
<b>1. Introduction</b>	
1.1 Background .....	1
1.2 Our Solutions.....	2
<b>2. Persona</b>	
2.1 Promoter Persona.....	3
2.2 Branch Manager Persona.....	4
<b>3. Journey Map</b>	
3.1 Promoter Journey Map.....	5
3.2 Branch Manager Journey Map.....	8
<b>4. User Stories</b> .....	10
<b>5. Use Case Model</b> .....	16
5.1 Domain Model.....	17
<b>6. Activity Diagram</b>	
6.1 Branch Manager .....	20
6.2 Customer .....	21
6.3 Store Man (Delivery) .....	22
6.4 Promoter .....	23
6.5 Storeman .....	24
<b>7. Class Diagram</b>	
7.1 Branch Manager .....	25
7.2 Customer .....	26
7.3 Store Man (Delivery) .....	27
7.4 Promoter .....	28
7.5 Storeman .....	29
<b>8. Screen/ Print-Out Design</b> .....	30
<b>9. Software Testing</b> .....	105
<b>10. Non-Functional Requirements</b>	
10.1 System Architecture.....	113
10.2 System Performance Requirements	
10.2 a) User Volume Table .....	114
10.2 b) Business Transaction Volume Table .....	114
10.2 c) Data Volume Table .....	117
10.3 Security Requirements	
10.3 a) From data point of view.....	119
10.3 b) From Use Case point of view.....	119
10.4 Reliability Requirement .....	120
<b>11. Appendix – Screens</b> .....	121

## Introduction

### Purpose

GetFreshFood supermarket has been facing several challenges and problems in their day-to-day operations. These issues include employees having to take stock and labelling the price tags of goods manually which are both time consuming and tedious. There are also discrepancies between the sales records, the cash collected at the end of day and the inventory record which leads to loss of sales.

In order to address these issues, we have come up with digital automation solutions to reduce the workload of staff and improve sales. This report discusses the design, functions and purpose of the user interfaces of the staff and customers, as well as future system implementation. Additionally, it also describes the user system specifications and how the system architecture will be implemented. By offering valuable insights into the design, function and purpose of the system, this report aims to help ensure the successful implementation of the new system.



GetFreshFoods (GFF) is a neighbourhood supermarket to serve customers around a neighbourhood. With a staff head count of the 31 (1 Branch Manager, 6 Cashiers, 20 Promoters and 4 storeman), the store operates in 2 shifts (7am – 3pm and 3pm – 10pm)

Above diagram is a simple flow chart of the basic operations of the supermarket. A typical day start with the Branch Manager issuing the handwritten product form to the Promoter. The Promoter then follow the product form to arrange the shelf and update the pricing using paper and pen. The Promoter also requests from the storeman to replenish for stocks. The Storeman will then update his black book with pen when stocks come in and out of the storeroom.

Customer then selects the products from the shelves and payment made at the cashier counter. At the end of each day the Cashier tabulates the receipts from the Customer and provide an end-of-sales report with pen and paper to the Branch Manager. Should there be any discrepancies in the sales, the branch manager will then raise a loss of sales report to the Owner.

In this report, it documents the digital solutions improve the situation of the company. We have undergone interview with different actors and came up with 2 important personas and user journey to help us to design our system for GFF. The key attributes that we look at for our design are as follows: 1) removing the pain points of your staff, the

work that is frustrating them, 2) we value the familiarity for your staff and we believe in seamless transition, with the minimal operational structure transformation, 3) after looking at point 1 and 2, we then improve on the overall business structure to stretch out to more customers and to take on other competitors.

### 1.1 Our Scope

The scope of this system encompasses the features and functions of our implemented system. These have been analyzed to be essential for enhancing the store's operations and mitigating the risk of financial losses resulting from human errors.

The scope of our Design system is as per below:-

- Automate Operation
  - There will be an inventory list to keep track of the movement of goods
  - Ordering of goods will be by the storeman, however the inventory list can trigger a notification to alert the need to order
  - System to alert Actors on the expiry of the goods to take note and act
  - Prices Update can be done automatically by the Branch Manager and the price change will be reflected on the shelves (There will no longer be the need to put the price tag on each product)
- Keep up with competition – Online Order, Delivery services
  - Online Delivery Option will be made available (Premium and Standard Delivery)
  - Split the Delivery Method to 2 Types (Within 5km of Store Radius & More than 5km)
  - Availability of Online Website and Phone Application for customers to access the store information and to purchase on the online platform.
- End-to-end customer service
  - Occasional Promotional Code can be use to target existing customers
  - Exclusive Promotional Code can be sent out to customers to encourage their return to the store
  - Feedback forms are provided online for customers to input their feedbacks.
  - Contac Us options are available for customer to reach out to GFF at any point of time when browsing the website.
  - Store information available on website platform for customers to know the details of the store
- Digitalised shop floor linked to backroom store.
  - Promoter will be issued a smartphone where there will screens which allow the Promoter to interact with the Storeman to inform of store replenishment.
  - Online store stocks will be tie to inventory list.
  - When the order is received, the system can check, and the user (storeman) can act appropriately.

The following are **not** included in the Scope of the System Architecture

- HR related issue
  - (such as AL & MC, Salary crediting, Bonus, Attendance taking)
- Finance
  - (Profit Loss analysis, Cash-Flow)
- Security Issue
  - Installation of CCTV

## 2. Persona

In this section, the impact of the current situation at the store on the staff and users will be elaborated upon through the perspectives of both the branch manager and promoter. To facilitate a better understanding of the user's needs, experiences, behaviours, and goals, a persona and journey map will be utilized for both the promoter and branch manager.

The persona, a fictional character developed through research, will be used to represent the different user types that may use the store's service and product. The journey map will provide a visual representation of the steps the users go through and their experiences, allowing for a more comprehensive analysis of the impact of the current situation on the staff and users.

### 2.1 Promoter Persona



## JOVIAL JENNIFER, 40

### PROMOTER

**"Your Solution Finder"**

*Jennifer is from Singapore and loves collecting exotic fishes. She has been working with GetFreshFoods for a couple of years. She has a very pleasant character and enjoys working as a promoter. She also has an excellent knowledge with products and presentation. She builds a strong rapport with old customers by informing them of new promotions and discounts. In addition, she strives to attract new customers. She enjoys the interaction with customers and always comes up with innovative marketing strategies.*

### Main Tasks

- Checking goods quantity on shelves
- Checking goods' expiry and damage
- Replenish Stocks
- Updating and labelling of prices in accordance with product form
- Stock arranging, display stocks appropriately according to their sales
- Booth set-up for advertisement and promotion of products
- Rearrange customer misplaced goods
- Helping customers to find the product for their needs.

### Goals

- Allocation of products on Display neatly
- Price to be labeled correctly
- Eliminate discrepancies between sales and inventory
- Ensure sufficient product to be on the shelf
- Address customer's wants and needs
- Increase sales volumes
- building good relationships with customers.

### Influences

- Customer attention
- New Products info
- Speed and efficiency
- Less Repetitive Work
- Readable Handwriting
- Clear instruction on what needs to be done (on organisation of products)
- Supportive work environment( Has a systematic workflow )
- Safety

### Pain Points

- Tedious and Repetitive. (Labelling price tags on each and every Product.)
- Frequent changing of labels due to price changes and promotions
- Has to wait for further instructions from Branch Manager before being able to proceed with price changes.
- Unclear organisation of Moderate Selling product and Slow Selling product, have to spend a lot of time and effort to decipher what the previous shift is thinking.
- May overlooked to remove and replenish goods which were damaged or expired.
- Troublesome to have to sign some form for Storeman prior to replenishing the products

### Metric

- Product Expert
- Impulsive
- Fast Learner
- Communication
- Customer Service
- Relationship with Co-worker
- Data Analytics Skills

## 2.2 Branch Manager Persona



### EXPEDITIOUS EDWARD, 48 BRANCH MANAGER

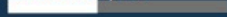
#### *"The on-the-ball, firm disciplinarian"*

Edward hails from the UK, has worked in grocery retail for the past 10 years. He holds a retail management degree from Cladiff university. He has established solid customer relationships with excellent interpersonal skills and is good at managing funds to reduce discrepancies.

He is also a service orientated team member who can delegate tasks to team members well and has articulate communication skills.

#### Metric

Product Expert



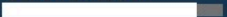
Delegation Skill



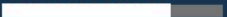
Fast Learner



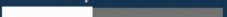
Communication



Customer Service



Relationship with Co-worker



Data Analytics Skills



#### Main Tasks

- Oversee the daily operations and manpower planning of staff members.
- Ensure that the end of day sales tally with the cash received at the end of day and the stock matches the inventory list of the item.
- Write up a loss of sales report to the owner if end of day sales records do not tally.
- Review weekly sales results of all products.
- Write up a product form (based on price, classification, and display of goods).
- Amend prices of products after communication with the owner.
- Regular updates of business statistics of the store to the owner.
- Address customer's complaints and staff arguments.

#### Goals

- Complete all his required tasks by the end of shift.
- Make sure that the staff members perform their allocated tasks.
- Reduce customer's complaints
- Building rapport and establishing communication between staff members
- Reduce loss of revenue by reducing discrepancies in the sales records
- Reduce repetitive paperwork
- Increase sales volume and improve profit margin

#### Influences

- -Customer satisfaction
- -Smooth transition of staff members between shifts and co-operative members
- -Staff mood and morale
- - Safety in workplace of staff members
- -Easy-to-use, cashless system
- -High accuracy of sale records and inventory
- -Ability to generate reports, e.g weekly sales results report, popular goods ranking list
- -New popular groceries trend info

#### Pain Points

- Cash is hard to manage and tends to not tally
- Customer complaints
- Colleagues unclear about some parts of their job scope.
- Discrepancies in inventory record
- Writing up lots of paperwork and reports
- Lack of accountability between staff members
- Owner's unhappiness or dissatisfaction in company's operations
- Not easy to track and monitor where and when errors will appear or who makes the error.

### 3. Journey Map

A customer journey map in GetFreshFood is used to understand the experience of a customer or staff as they navigate through the store, from the moment they enter to the point they leave. In this particular case, we use the example of the branch manager. The map typically shows the different pain points of the branch manager has with the supermarket, including his interactions with staff, products, displays, and technology.

The map is created by collecting data through surveys, interviews, and observations to identify the different stages of the customer journey, such as awareness, consideration, selection, and purchase. These stages can then be mapped out visually, along with the branch manager's emotions, motivations, and pain points at each stage.

3. Journey Map

3.1 Promoter Journey Map

## Customer Journey Map - Promoter

Stages of journey	Motivation	Start the Day	After meeting (for morning shift)/ After take over (for afternoon shift)- Walk the Ground Checking around assigned shelves
<b>Activity</b>	Understand Customer needs and help them Build relationship with Customers Wants to arrange goods neatly. Efficiently replenish correctly for those expiry and damaged goods. Label price correctly.	For Day Shift: Attend the morning briefing conducted by Edward at 7.30am for morning shift. Process instructions from Edward during the briefing. Any unfinished task from morning shift to be handed over to promoter starting the afternoon shift.	Morning shift- according to the product form issued by the manager after the meeting check the quantity of goods on display .  Afternoon shift-Ensuring the details provided by the previous shift was accurate should there be a replacement needed  Check running low goods and identify any damaged or expired goods  Go into the store to brings out require items to display on shelves. (This step is covered in the next journey)
<b>Feeling</b>	Excited	Frustrated	Frustrated
<b>Experience</b>	Excited to interact with customer and help them find what they need Excited to Chit-chat with existing customers	Frustrated as delays always happen due to discrepancies from previous shift. Puts a damper on her morale due to cashier's assumption that she made mistakes in the inconsistent labelling of prices	Frustrated, when walking the shelf is very difficult to tally the products as all the items were all over the place Everyone just work their own way.  Always have to check each and every expiry date of the products. sometimes face with confused expiry date information.
<b>Expectation</b>	To have pleasant customer experience To have lesser mundane task such as copying prices from a piece of paper to the product	If there is a system to reduce the discrepancies will make the taking over session alot better  Also a system to record all these details during the previous shift during taking-over, about the discrepancies, about the to-do list for the shift, and potentially trigger a notification so we will be reminded should we forgot Also with the system it can help to provide accountability as to where the issue was.	Reduce paperwork for written report. Want to see up to date information about running low items in store.  Have a Standard Operating Procedure in place especially what goes on the shelf and should there be any changes, it should be reflected to all related staffs immediately. Also, could have a tagging system to the product to identify the different products thats in the systems, and recorded (Would be good if there are pictures to assist the tagging) And should there be any changes to the tagging of the product, it can be updated there.  A better way to track the expiry date of the stocks and products and an notification to be triggered 1 month prior to expiry

Day to Day - Job Scope				
After Walking the ground Replenish stocks Going to the store to replenish Products	Take the Product form from branch manager and Label price tags and display goods		Customer Handling	End of Shift: Handover
<p>Replenish with fresh ones for those damaged or expiry goods. Also those that have been sold out from the stock, to replenish</p> <p>She needs to go to the storeroom and sign off the quantities to replenish and inform Tom (Storeman) Sometimes she will take herself</p>	<p>According to the product form that was issued from Branch manager, write price on every price tags and labels. After that, stick price tags on each product and stick label on the side of the related shelf.</p>	<p>Display goods based on the instruction form from manager. Check with cashier if there is any returned items from the customer and replenish this stock on the shelves.</p>	<p>Helping customer to find products for their need. Rearranging goods on which respective shelves after customer misplaced. Address the needs of customer and providing the best product for them Promote new products to customers and encourage them to try</p>	<p>Have an idea of how much products were taken from the store How much products were damaged and expired Any changes in price and have the prices been updated</p>
Stressed	Frustrated	Stressed	Neutral	Happy & Relieved
<p>Frustrated with signing the form for Tom (Storeman) as it makes her feel like she is responsible for the store items (Dont want to take the blame should there be any mistakes) Report to storeman for those whatever goods need to bring out, sometimes he is not there in his store And sometimes may risk running out of stocks</p>	<p>Frustrated that Promoter need to wait for Branch manager's instruction form to label the price tags. If there has any changes on price list, have to change each and every price for both new and old items. Also for newly taken out products from stores, will need to label the prices. Frustrated with the fact that labels need to be taken out should there be a change in price and the sticker can be very hard to come off leaving some sticker stuck on the shelves or products</p>	<p>find instruction on how to display goods. Sorting out goods to display based on fast ,moderate and slow selling list which provided from the manager instruction. Instruction stated was not clear as well, not sure whether to place the moderate selling product on the top shelf or the slow selling product. Causes alot of confusion and sometimes take up alot of time to figure out.</p>	<p>always need to check and put back on right place for those customer misplaced items. share to customer about poroduct information and help them to find goods from respective shelf. share information of new product and promote them to customer</p>	<p>Happy as it is the end of shift, and handover the product form to the next shift. Everything that Branch Manager handed to her, she will just pass to the next shift</p>
<p>Potentially create a system that can help keep track the stocks in the store and can be easily access by Promoter to input the quantities to extract out and show the remaining amount. And this values can be approved by Storeman prior from dispatching to Promoter</p>	<p>Hope to have a system where the Branch manager can update the prices with a different color to signify there is a change in prices. This helps the promoter to zoom into the changes. Prices can be tagged to a system (potentially a QR code) and promoter can just scan to receive and edit information of the products Price tags can just be place on the shelf which is digitalised and tagged to the system so that once the price changes online, it can also be reflected there</p>	<p>high communication with manager to have easier way to know up to date data about goods display. Promoter can be given a training package as to where ot place the goods and the standards and staff can actually refer to them as and when they like during their time in the company.</p>	<p>expect better system to know products information of the store to share with customer. Such as a search fuction where it can be downloaded by staff and help the customer to find their products.</p>	<p>If there are any sort of system that can be used to filled up these infomation in real time, it will be nice as promoters dont have to remember these things Especially at the end of the they have to add up all the products replenished, damages, expired...</p>

3. Journey Map

3.2 Branch Manager Journey Map

## Customer Journey Map - Branch Manager

stages of journey	Motivation	Start of Shift		
			Walk the Ground	Review Weekly Sales
<b>Activity</b>	Run the daily operations of the supermarket efficiently to ensure positive and long-term customer relationships and keeping the owner satisfied.	Hold a morning briefing at 7.30am. Any issues are settled prior to the start of the next shift Check attendance of staff members during the morning briefing. Processes sales report from the cashiers from the previous day in an excel spreadsheet.	Go around to see if goods are all displayed at the right places and if all the staff are ready to seize the day	Review weekly sales results of all products.
<b>Feeling</b>	Excited	Frustrated	Stressed	Stressed
<b>Experience</b>	Optimistic about running the departments efficiently by making sure staff perform their tasks and addressing their concerns and arguments. Looking forward to informing the owner of the company's operation efficiency and high accuracy of sales record and inventory.	Frustrated that there are always discrepancies in the total sales and physical stocks sold leading to extra work (loss of sales report).  It is very hard to trace the source of error as every department seems to be capable of causing the mistakes.  Physically check the attendance of the staff can be quite tiring as some staff may be late.	Stressed to keep the morale of his team up as everyone seems to be very stressed over the amount of labourous work which require high level of concentration.  Products can be placed in a very messy and inconsistent manner on the shelves which makes it hard to do stock take	Has to do lots of paperwork, calculate and analyze a huge amount of detailed sales data. Highly stressed as the end-of-day sales is an unreliable source due to discrepancies in the sales records.
<b>Expectation</b>	Smooth operation of supermarket and sales target are met.	Hope to have a system where daily activities / movement of stocks and cash received be recorded. This can be use to trace the source of error to improve on the efficiency of the system. Can also minimise human error	Can have a tagging system of the products to identify the different products and map it to their prices in the system, and the movement of its stocks being recorded in real time. Pictures can be added in the system to match their description to assist the tagging.	Reduce physical paperwork that needs to be written for the report. An auto-generalisation of product projection of sales report according to sales.

Day to Day job scope			End of shift
Loss-of-sales Report	Price Change	Business Development	
Check the cash collected at the end of shift to tally with the end-of-day sales records. With discrepancies, a Loss of sales Report needs to be filed	Change product price based on instructions from the owner.	Research popular supermarket goods trend	Check the cash collected at the end of shift to tally with the end-of-day sales records. Ensure smooth closing of shift.
Frustrated	Frustrated	Excited	Frustrated
Loss of sales report to write if sales figures don't tally. Have to check with staff members the root cause of why there are discrepancies.	Frustrated when there is an overlook of price changes and miscommunication of the updating of price changes by staff members.	Happy to pick out popular goods after analyzing sales data, observing competitors' transaction and researching social media data.	Upset that there is a lack of accountability between staff members when the sales figures do not tally. Has to write a loss of sales report to the owner in case of discrepancies in the sales figure.
Have a automation system to systemically monitor the sales record and inventory stock to reduce discrepancies in the sale  Would be good if this sytem also track business procedures.	If price change can be updated in a system and then reflected on the respective shelves placing the products, it will save alot of trouble and inefficiencies.	Would be good to develop an analytical system where business performance can be input in and capture the performance per month, and forecasting can be done to include the national buying trends.	Have a automation system to systemically monitor the sales record and inventory stock to reduce discrepancies in the sale

#### 4. User Stories

User stories in GetFreshFood are scenarios that focus on the needs and goals of the employees who work in GFF or scenarios that a customer may encounter while shopping in GFF. These stories help to identify areas where improvements or new features can be implemented to make the work environment more efficient and effective for the staff, which in turn can be used to guide the development of features or improvements to the supermarket experience.

By considering these user stories, we can better understand the needs, desires and pain points of GFF staff, and make improvements to the work environment that enhance efficiency, productivity, and job satisfaction. This, in turn, can lead to better service for the customers, who benefit from a staff that is motivated and equipped to provide the best possible experience.

Information from Promoter and Branch Manager Persona	User Story
<p><b><u>Handover/ Takeover shift:</u></b> There is no proper hand takeover process to address all the changes that were made during each shift Furthermore, they have no systematic workflow, causing a hard time to identify the root cause of error.</p>	<p>As a promoter, I would like to have a proper system to transfer incomplete task to the night shift so that the next shift can continue smoothly.</p> <p>As a cashier, I would like to have a separate login so that I am not accountable for the mistakes the previous shift made.</p> <p>As a branch manager, I would like a digital breakdown of the sales records at the end of shift so that these data trends can be handed over to the owner for forecasting.</p>
<p><b><u>General Day-to-day job:</u></b> Expiry Date were checked manually, there are no system or records in place to help monitor the expiry date, therefore, overlooking expiry date  Damaged goods were checked manually, and have to manually request from the store.</p>	<p>As a promoter, I would like to track the expiry of the goods so that I know when to replace the goods from the shelves.</p> <p>As a promoter, I would like to have an automated system to notify the need to replenish goods on the shelf so that I do not need to leave my post to inform them of replenishment.</p> <p>As a storeman, I would like to update a list of goods that are damaged/expiring so that I can consolidate them and communicate with suppliers for replacement.</p> <p>As a branch manager, I would like to have the list of goods that are damaged and expired so that I can analyze the performance of the goods in the store (i.e. if there are a lot of expiring goods, it means over-ordering).</p>

Information from Promoter and Branch Manager Persona	User Story
<p><b>1) Product Pricing</b> Updating and labeling of prices in accordance with product form. Product pricing was manually updated as instructed by the owner. There are no records for pricing history analysis. Pricing labels were written manually by the promoter for each product and it can be very tiring and prone to error.</p>	<p>As a promoter, I would like to have the price change digitally so that I can update it more efficiently.</p> <p>As a customer, I would like to be informed and updated on the price of the goods (especially promotion) so that I can plan my trip to the store more effectively.</p> <p>As a branch manager, I would like to be able to update pricing which can be reflected on the shelf immediately so that I can reduce staff error on price labeling.</p> <p>As a branch manager, I would like to keep a record of previous pricing so that I can do an analysis on the pricing which can impact sales.</p> <p>As a cashier, I would like to access the price tags digitally so that I can serve the customer more efficiently.</p> <p>As a cashier, I would like a bar-code system where the price can be stored in the bar-code so that I can retrieve the updated pricing through scanning them.</p>

Information from Promoter and Branch Manager Persona	User Story
<p><b>2) Stocks Movement and Inventory List</b></p> <p>When replenishing stocks, the promoter needs to find the storeman physically. Promoters then fill up a form, which is not closely monitored. The stocks were then recorded in the black book.</p> <p>All these human manual work will cause potential lapse and traceability issue.</p> <p>Staff members encounter issues with tallying of stocks, sales records and goods in the midst of doing their tasks.</p> <p>Stock movement is not accurate as staff can enter to replenish their goods as and when they like, which is a potential hiccup for the tallying of stores at the end of each shift.</p>	<p>As a promoter, I would like to have up-to-date information about the balance of stocks so that I can plan to replenish stocks efficiently.</p> <p>As a storeman, I would like to have an overall stock movement chart to capture realtime goods movement, so that I can manage resupply efficiently.</p> <p>As a storeman, I would like to be notified if the goods fall below a designated safety stock so that I can place an order from the supplier as soon as possible.</p> <p>As a storeman, I would like to record the lead time for each supplier to deliver their goods so that I can plan for the safety stock of the goods.</p> <p>As a branch manager, I would like to view the overall stock movement so that I can analyze the sales data for different time periods of the day.</p> <p>As a branch manager, I would like to read the monthly ordering pattern of goods so that I can plan the cash flow of the company.</p> <p>As a customer, I would like to check available stock so that I can visit the store.</p> <p><b><u>Access rights on stocks inventory</u></b></p> <p>As a storeman, I would like to have restricted access for my store room so that only authorized people can move around and issue the inventory.</p> <p>As a storeman, I would like to have restricted access to my inventory list so that only authorized people can amend this. That will prevent the occurrence of discrepancies.</p>

Information from Promoter and Branch Manager Persona	User Story
<p><b>CUSTOMER HANDLING PHASE:</b></p> <p><b>1) Attentive towards customers</b> Promoters must remember the previous purchases from the customer to strike a conversation and do product recommendation for returning customers.</p> <p>Getting to know customers from small talk, will not be able to target shy customers.</p> <p>The store faces frequent customer complaints.</p>	<p>As a promoter, I would like to view existing customer profiles so that I can refer to their purchase history.</p> <p>As a customer, I would like to view my purchase history so that I can repurchase them with ease during my next visit.</p> <p>As a branch manager, I would like to have a list of customers with their purchases history so that I can do an analysis of purchasing patterns.</p> <p>As a branch manager , I would like to have a feedback system for customers so that customers give feedback about the store based on their needs.</p> <p>As a customer, I would like to provide feedback to the store so that they can look into possible improvements to improve my shopping experience.</p> <p>As a branch manager, I would like to be notified by feedback from customers so that I can find out which part is being complained most, then I can delegate staff to solve that question more efficiently.</p>
<p><b>2) Product info (Product Launch / Product Updates)</b></p> <p>All product information is based on Promoter memories and very subject to their personal preference.</p> <p>Also there are no information present elsewhere to know about the products, this may cause difficulties for customer to be informed</p>	<p>As a customer, I would like to receive new product information so that I am informed of new products that I might be interested in.</p> <p>As a promoter, I would like to send new product information to all customers so that promotion products can have better sales.</p> <p>As a storeman, I would like to have a copy of the promotional schedule ahead of time to plan for potential increase in stocks required for the goods.</p>

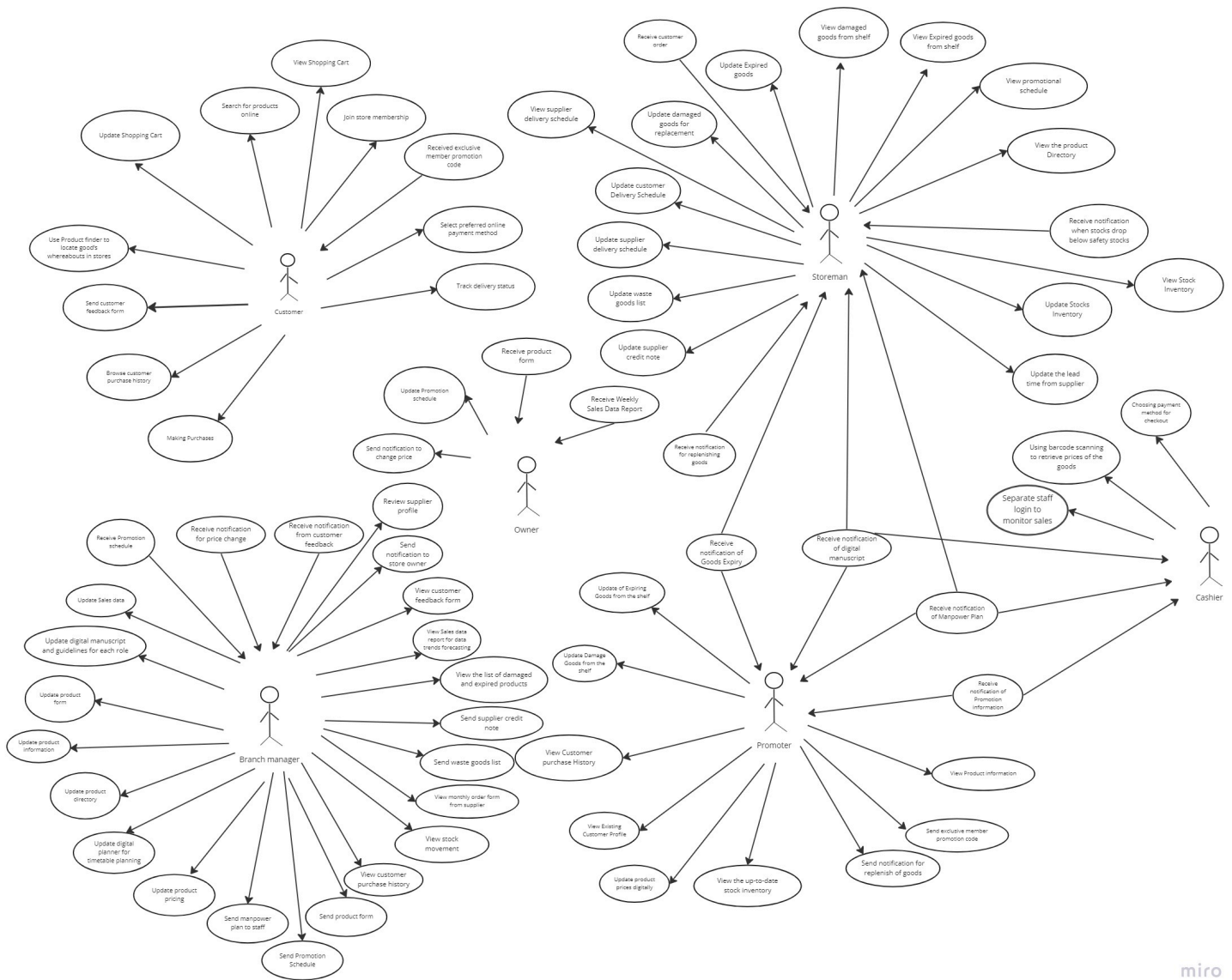
Information from Promoter and Branch Manager Persona	User Story
<p><b>3) Sales and Marketing (Product Information / Product directory)</b></p> <p>There is no product directory to help customers locate the goods or to inform the availability of goods to the customer. Everything is communicated via the promoter.</p>	<p>As a promoter, I would like to be able to refer to my product information so that I am able to handle customer questions with ease.</p> <p>As a branch manager, I would like to update the product information so that all promoters receive standardized product information.</p> <p>As a branch manager, I would like to have a digital product form so that I can send it to relevant staff to inform them of the changes all at once.</p> <p>As a customer, I would like to have a product finder so that I can locate the goods with great ease.</p> <p>As a storeman, I would like to have a copy of product directory so that I can help to restock the goods upon the request by promoter</p> <p>As a cashier, I would like to have a copy of the product directory so that I can return the goods when the customer changes their mind.</p>

Information from Promoter and Branch Manager Persona	User Story
<p><b><u>ADMINISTRATIVE TASKS:</u></b></p> <p>To allow for a clear definition of tasks and reduce any miscommunication. Less doing paperwork.</p> <p>Not easy to track and monitor where and when errors will appear or who makes the error.</p> <p>Owner's unhappiness or dissatisfaction in company's operations.</p> <p>Branch managers are happy to pick out popular goods after analyzing sales data, observing competitors' transactions and researching social media data.</p>	<p>As a branch manager, I would like to know new popular groceries trend info obtained from promotion or sales data weekly so that forecasting can be done to include the national buying trends.</p> <p>As a branch manager, I would like to have a digital manuscript for my staff so that I can align their working tasks across both shifts.</p> <p>As a branch manager, I would like a digital planner so that I can plan and publish the manpower planning to my staff.</p> <p>As a branch manager, I would like to have an analytical system where business performance can be input in and captured so that I can generate reports such as weekly sales results reports.</p> <p>As a branch manager, I would like to have a cashless system to reduce occurrence of discrepancy so that I don't need to report loss of sales to the owner..</p> <p>As a customer, I would prefer credit card transactions or phone transactions so that I don't have to bring a lot of cash around.</p>

### 5. Use Case Model

The Use Case Model provides a comprehensive description of the intended functionality of a new system. Each individual Use Case represents a self-contained unit of interaction between the system and its user.

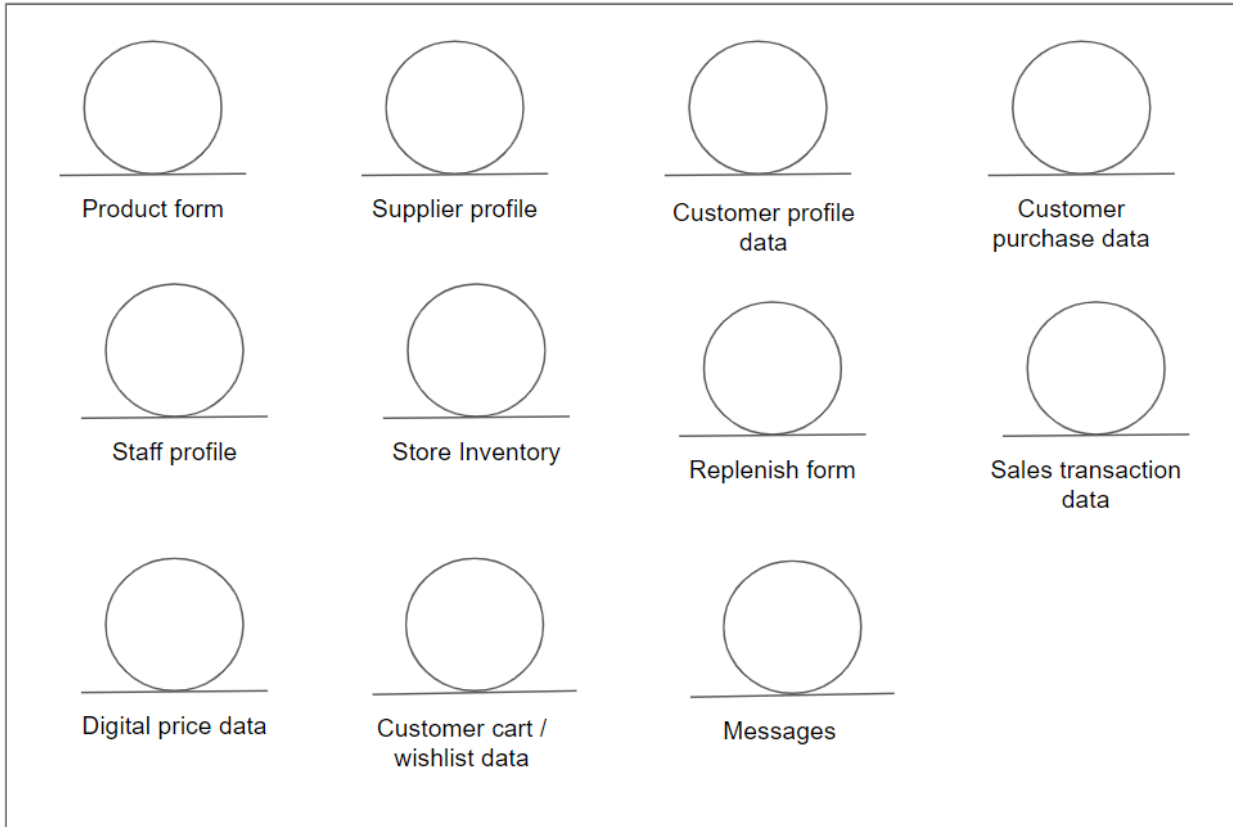
The Use Cases collectively describe the functionality that will be incorporated into the proposed system, which may include the functionality of other Use Cases. By breaking down the system's functionality into smaller, manageable components, the Use Case Model facilitates a clear and structured understanding of the system's intended behaviour and the manner in which users will interact with it.



miro

### 5.1 Domain Model:

Our Domain Model defines the various entities, attributes, and relationships within the domain system and serves as a basis for the development of our system's functional requirements and design. In this case, it represents the data from each entity contained within our system.



### Domain Model Description:

Domain Model	Description
Product form	<p>A copy of documents that is use to document summarized information to communicate instruction of Branch Manager (BM) to Promoter &amp; Cashier</p> <p>Including the prices of products, and the classification of the products (ie Fast selling, moderate selling or slow selling), the classification of the products will generate the location of each product on the shelf in the physical store.</p> <p>BM can edit the pricing of the products, and the previous pricing will</p>

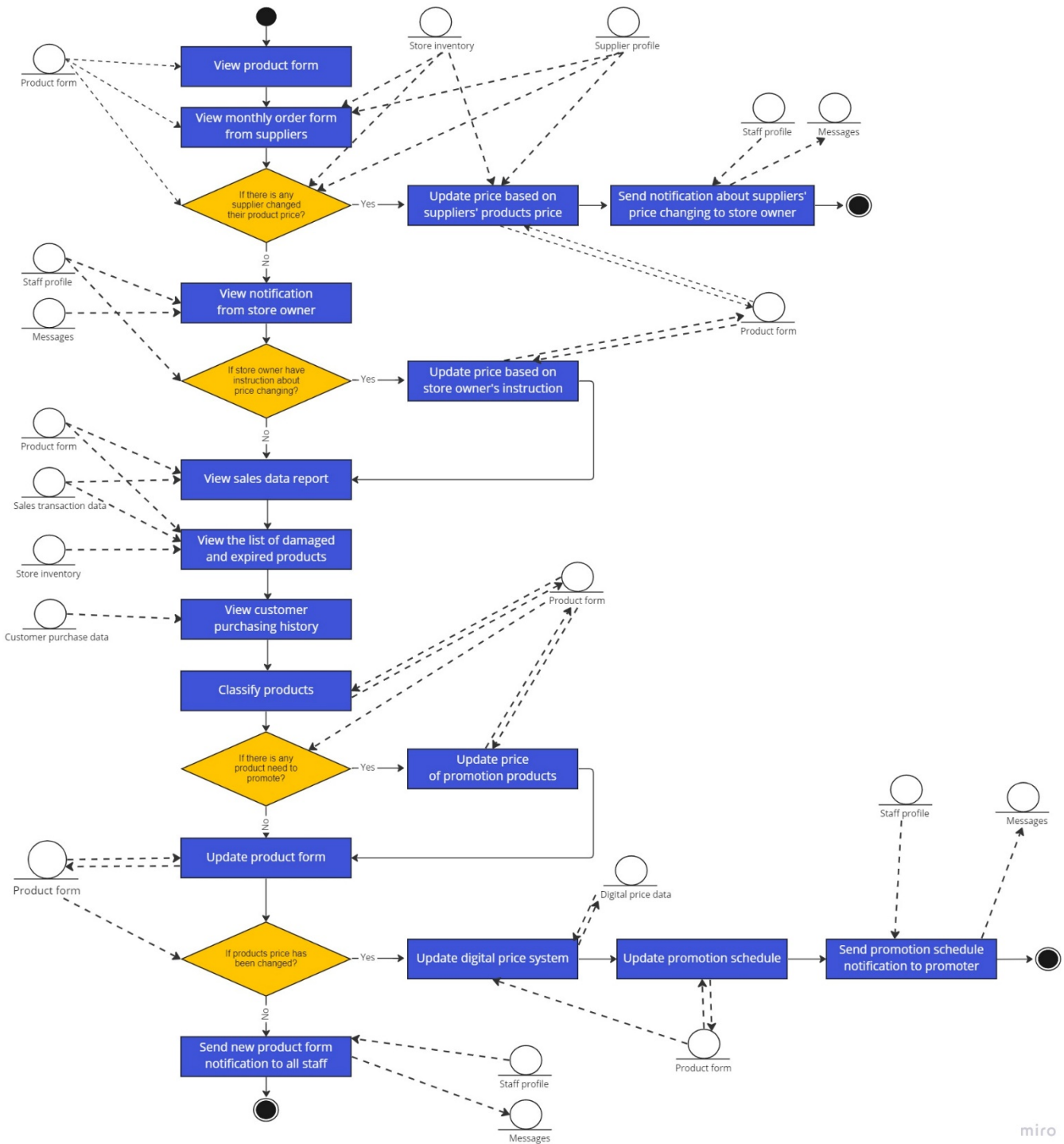
	be kept in the archived for reference and audit purpose
Customer profile data	<p>Customer Details (Name, Contact number, Email address, Billing Address)</p> <p><b>Note- delivery detail are in Customer purchase data</b></p> <p>Customer can view and update their particulars (once updated, the previous record will be overwritten)</p> <p>Customer profile data will only keep regular customers, Customers that have not purchased from GFF for the past 3 years will be archived.</p>
Customer purchase data	<p>This include the purchase history for each customer and also shows the pending order of the customer</p> <p>Include customer delivery information(example delivery contact , delivery address).</p>
Customer cart/wishlist data	<p>This information is usually a relational database and stored on a physical server.</p> <p>The data is stored in tables, with each table containing rows and columns. Each row represents a record, and each column represents a field in the record.</p> <p>The database stores all of the information about the items in the cart or wishlist, such as the item name, price, and quantity.</p>
Replenish Form	<p>The form use between the Promoter and Storeman</p> <p>It stores the information of the quantities of product to be replenish on the shelf in the physical store</p> <p>Also the reason for the replenishment</p> <p>Status of the replenishment</p> <p>And any other comments to be stated.</p>
Sales transaction data	<p>Shows the total sales up to date, can be split into monthly sales, daily sales and yearly sales.</p> <p>On top of that also keeps the record of the item and quantities sold</p> <p>The data is mainly view and updated by Branch manager</p>
Staff profile	<p>Contains the details of all the staff in the company</p> <p>Including job function, name, contact number, email</p> <p>For staff that has left the company for more than 3 years, profile will</p>

	be archived
Store inventory	<p>Document to track the stocks record, stocks in and out</p> <p>Also the stocks that are now on placement on the shelf</p> <p>Also the stocks that are coming in.</p> <p>Track the number of damaged products</p> <p>Track the number of expired products</p> <p>Include forecast goods</p>
Digital price data	<p>Digital price system is designed for helping digitalize the price tag.</p> <p>Each tag is place on the shelf, when the Branch Manager make a change in the prices in the Product form, the prices will be reflected on the digitized price tag</p>
Supplier profile	<p>Contains the details of all the approved supplier in the company</p> <p>Delivery supplier</p> <p>There will be a primary and secondary choice for Supplier for each product or service.</p> <p>These are the 2 suppliers that will pop up first when looking for supplier</p> <p>Primary and Secondary profile to be reviewed once every year or once the contract with the supplier ends (whichever is earlier)</p>
Messages	For internal staff to receive and send notification

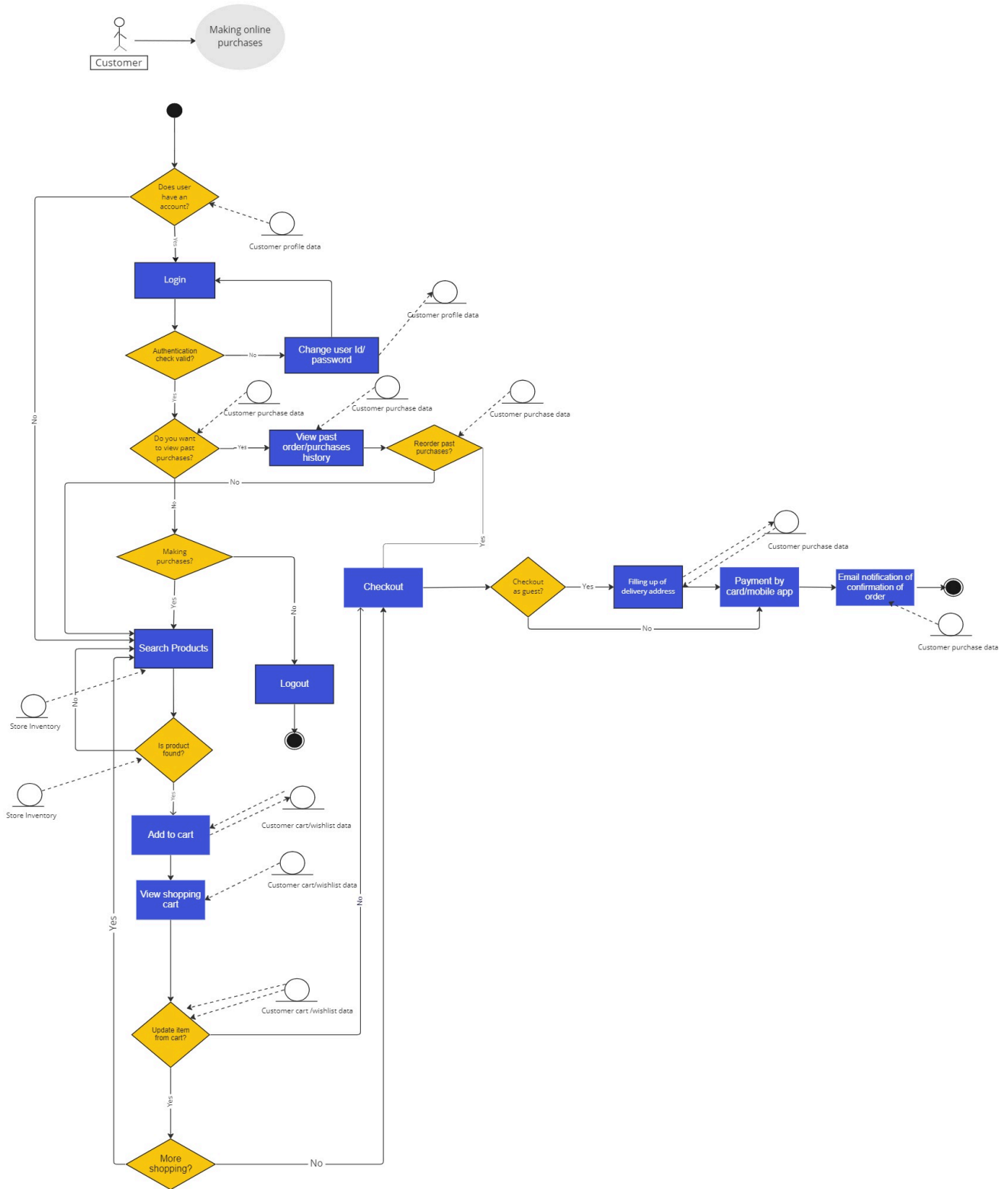
## 6. Activity Diagram

Our activity diagrams show a visual representation of the flow of activities in our system. It illustrates the dynamic aspects of our system and the various actions and decisions by each defined user that take place within a system, as well as the sequence in which they occur. They provide a clear and concise overview of the user activities involved.

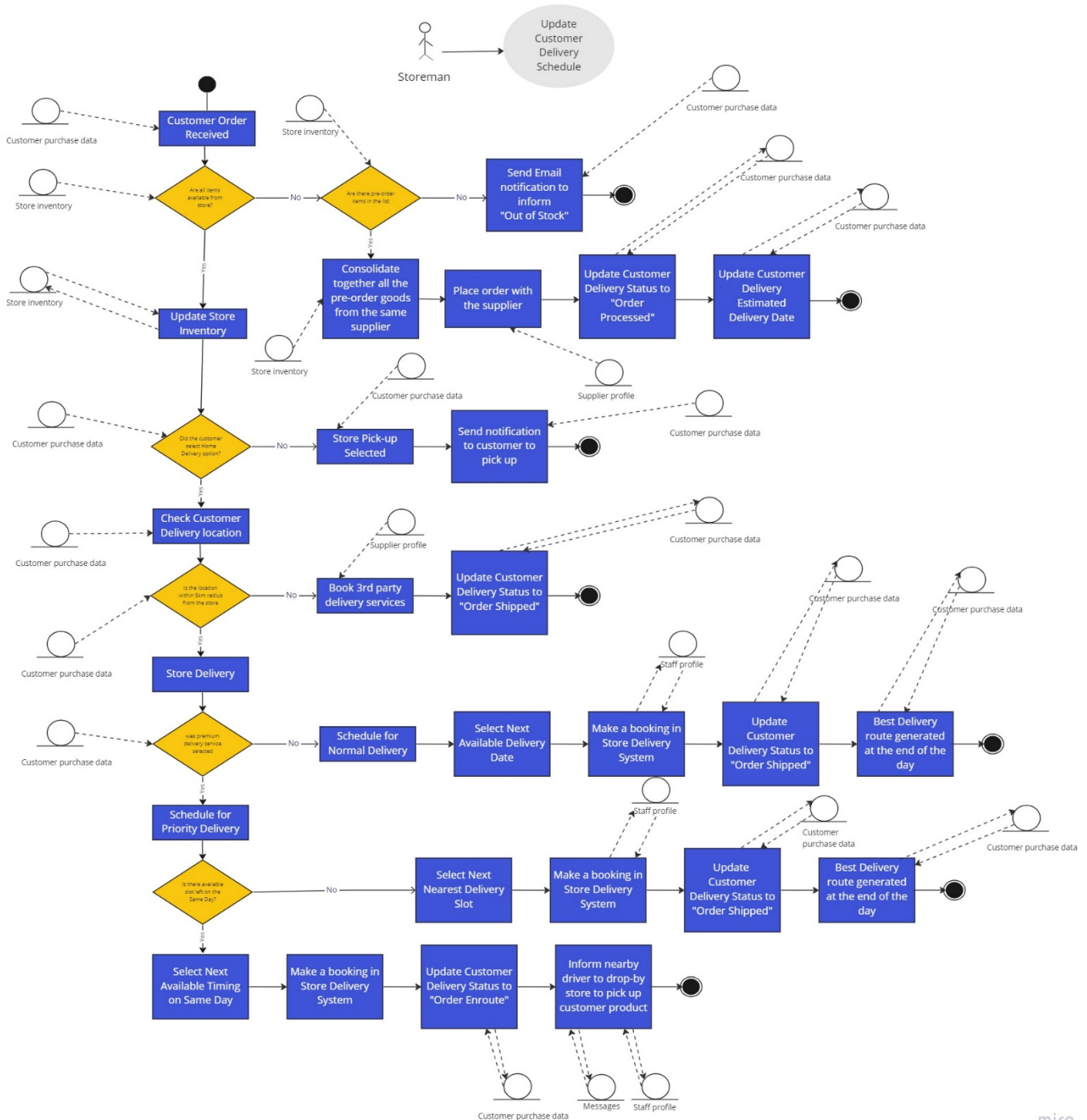
### 6.1 Branch Manager



6. Activity Diagram 6.2 Customer

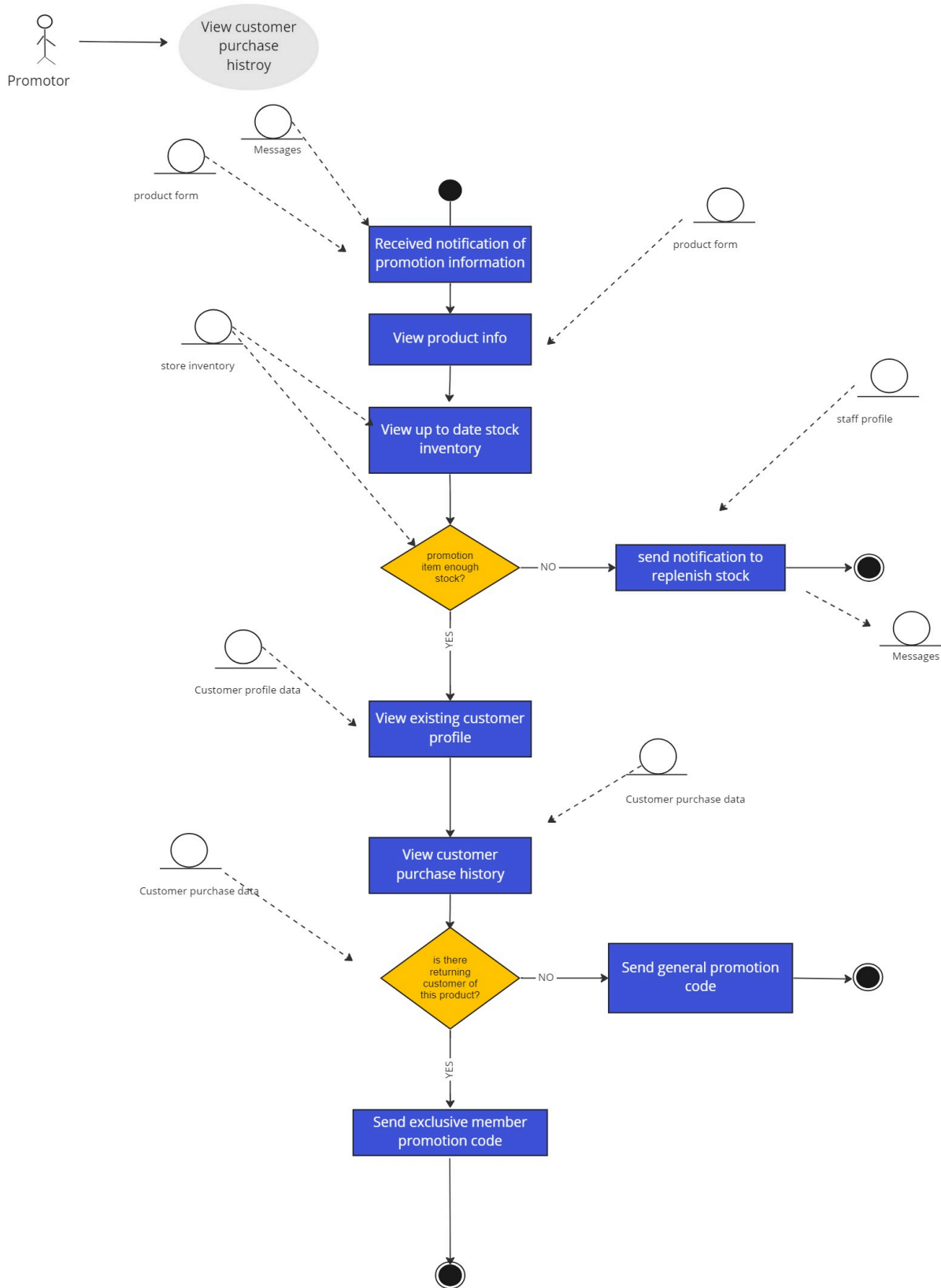


6. Activity Diagram 6.3 Store Man (Delivery)



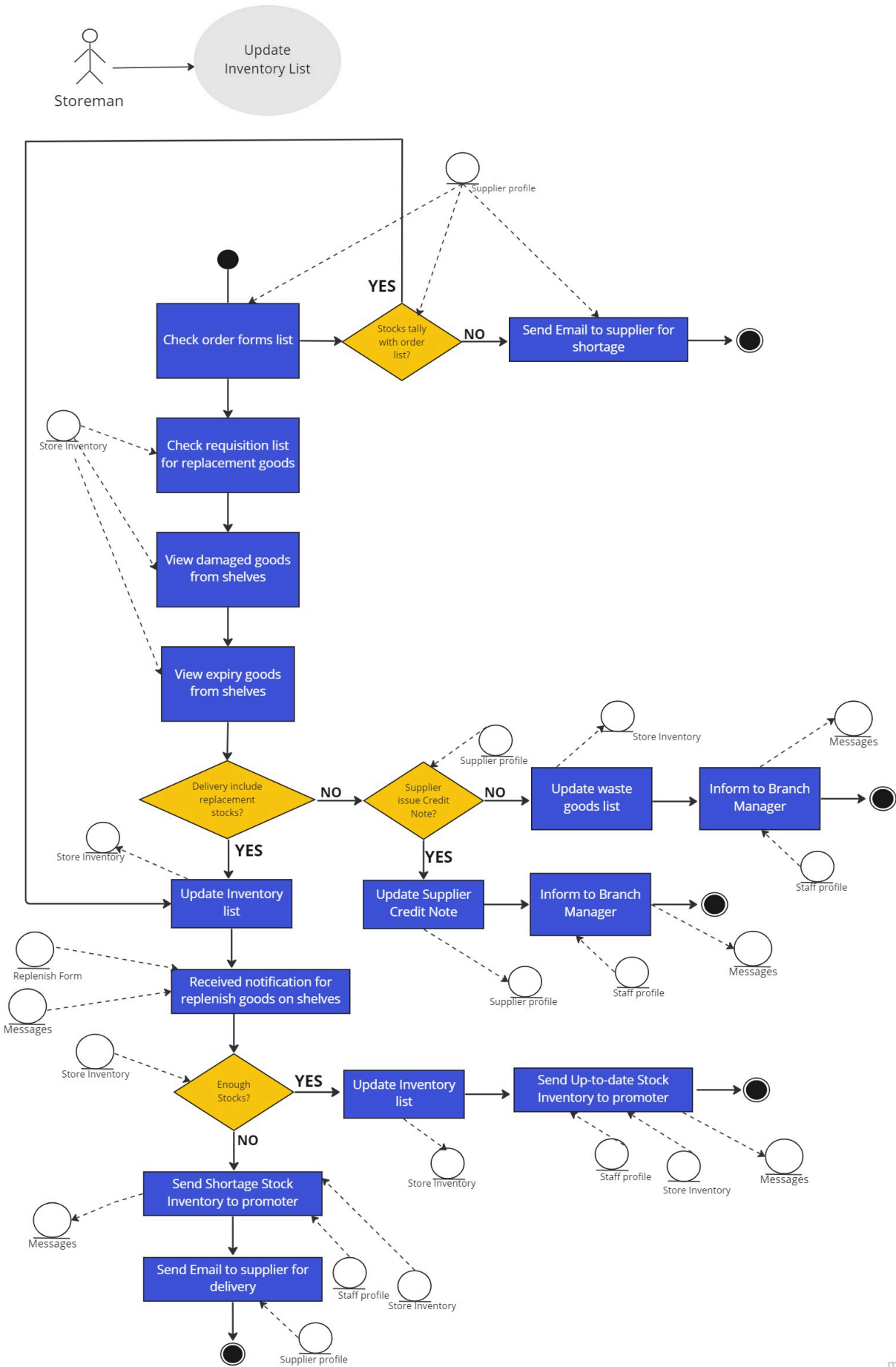
miro

6. Activity Diagram 6.4 Promoter



miro

6. Activity Diagram 6.5 Storeman

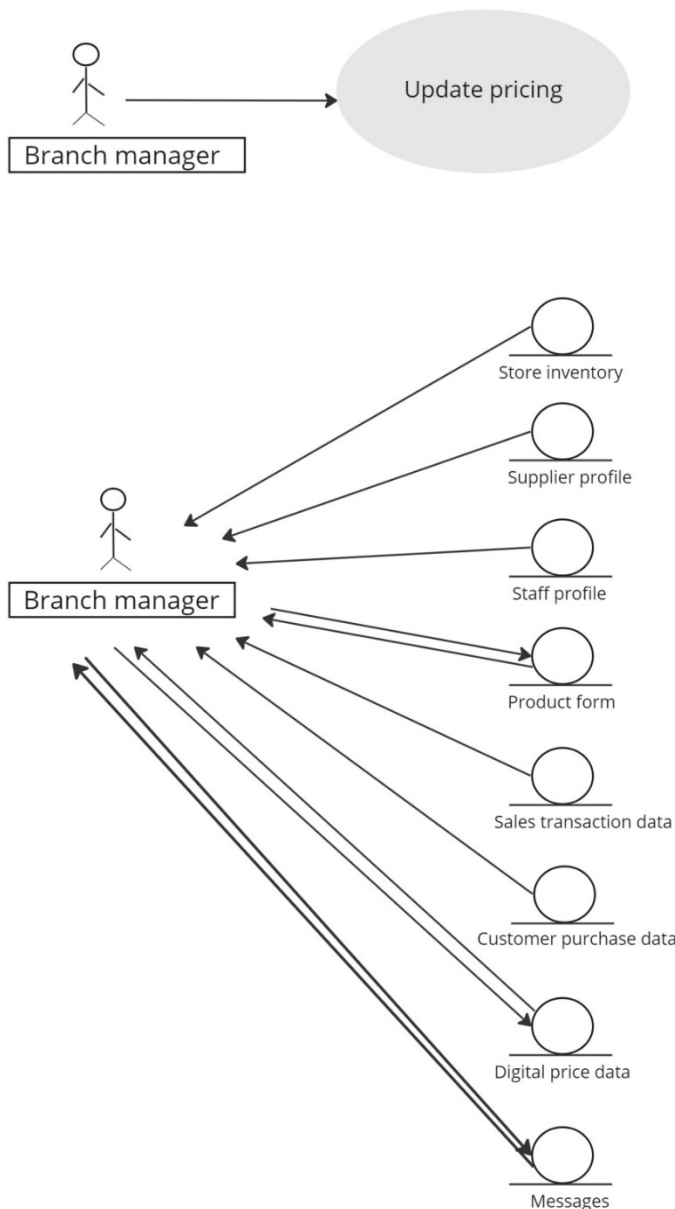


## 7. Class Diagram

A class diagram for GetFreshFood supermarket would include a class for each user role, with attributes and business entities specific to that role. The relationships between the classes would show how the user roles interact with each other and with the system as a whole.

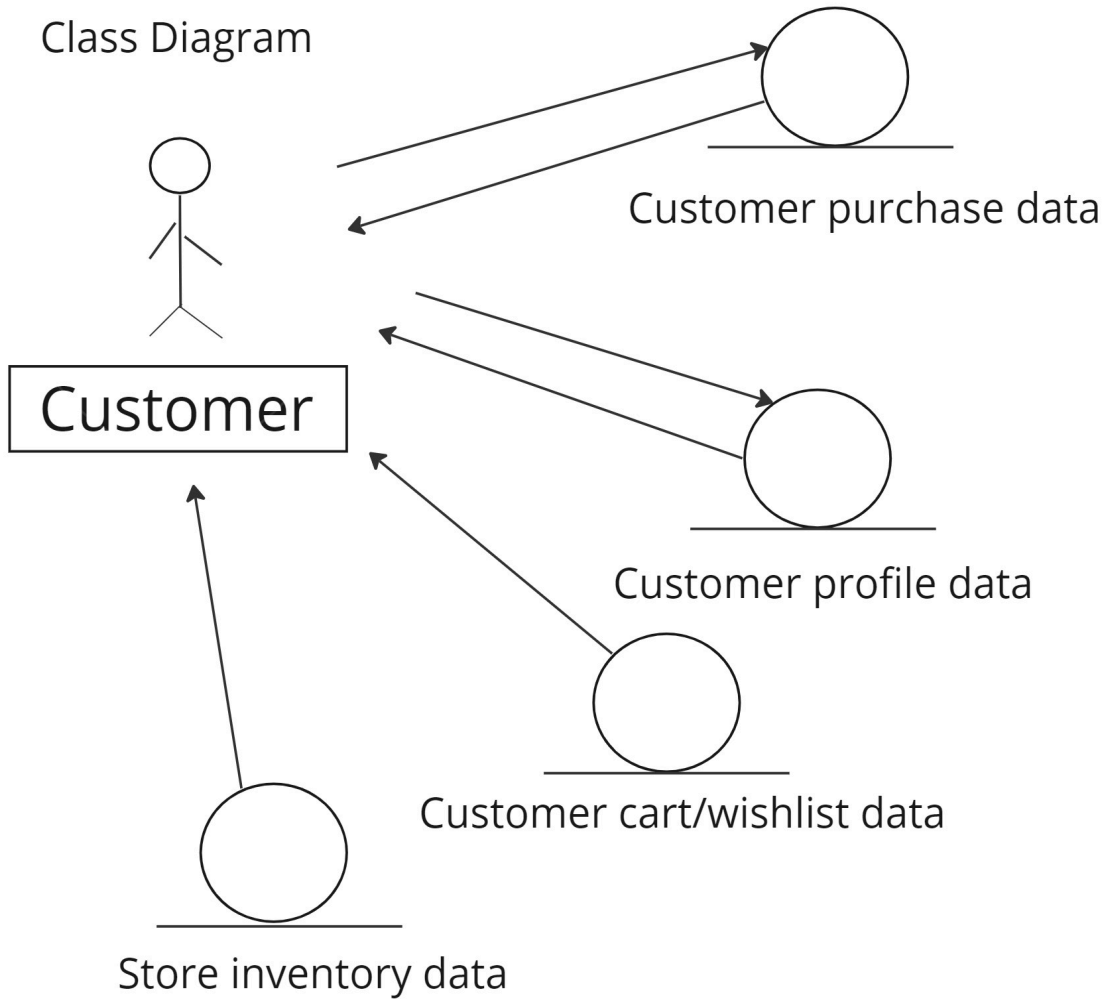
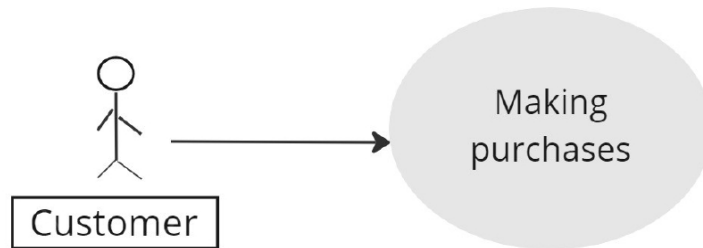
The user roles in GetFresh Food supermarket include the customers, employees, and the branch manager. Customers can use the online system to browse and purchase products, view their purchase history, and manage their personal information. Employees use the system to manage inventory, process transactions, check inventory and perform other tasks related to running the supermarket. The branch manager has additional permissions and responsibilities, such as managing employee schedules and overseeing the overall operations of the supermarket.

### 7.1 Branch Manager



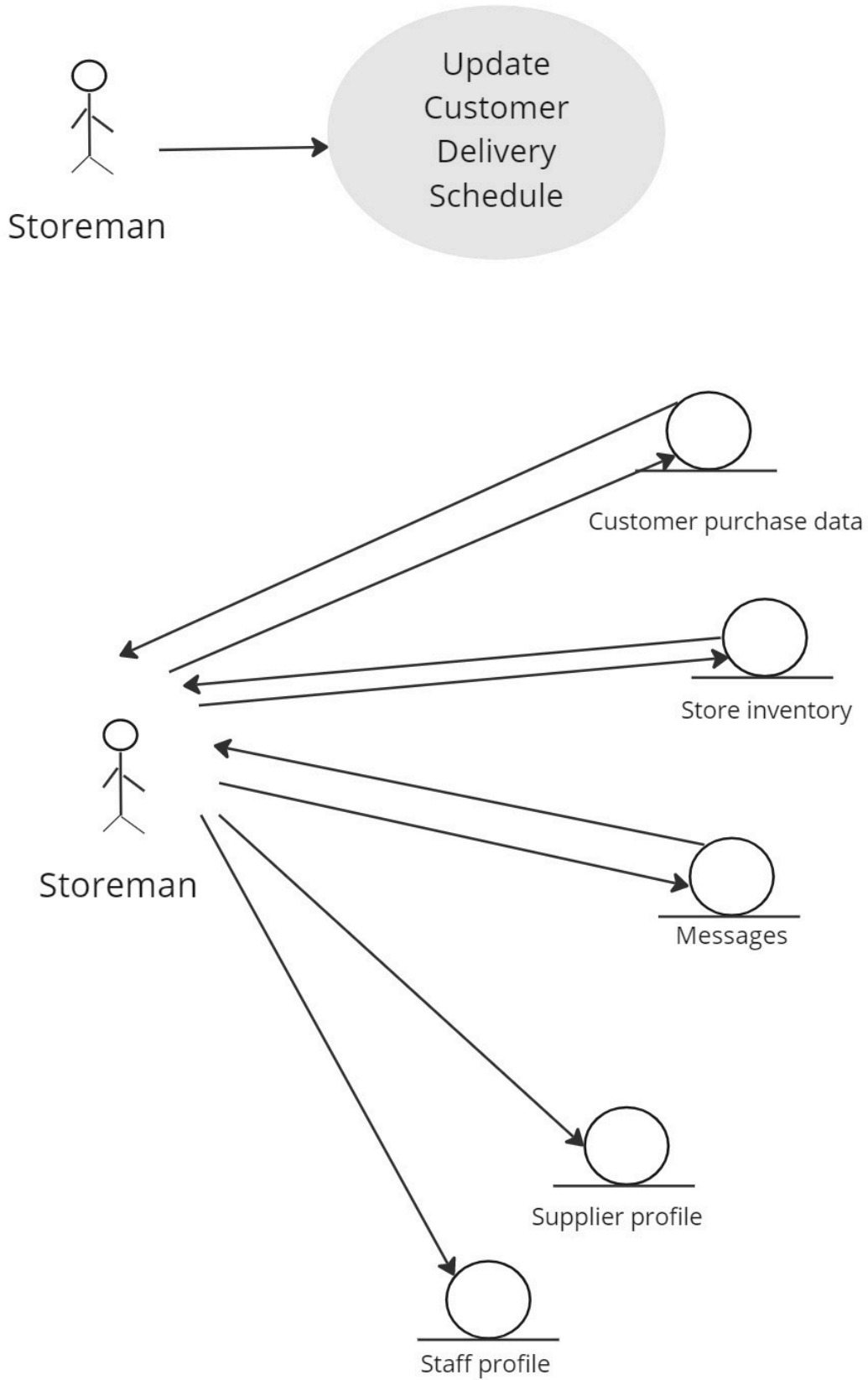
7. Class Diagram

7.2 Customer



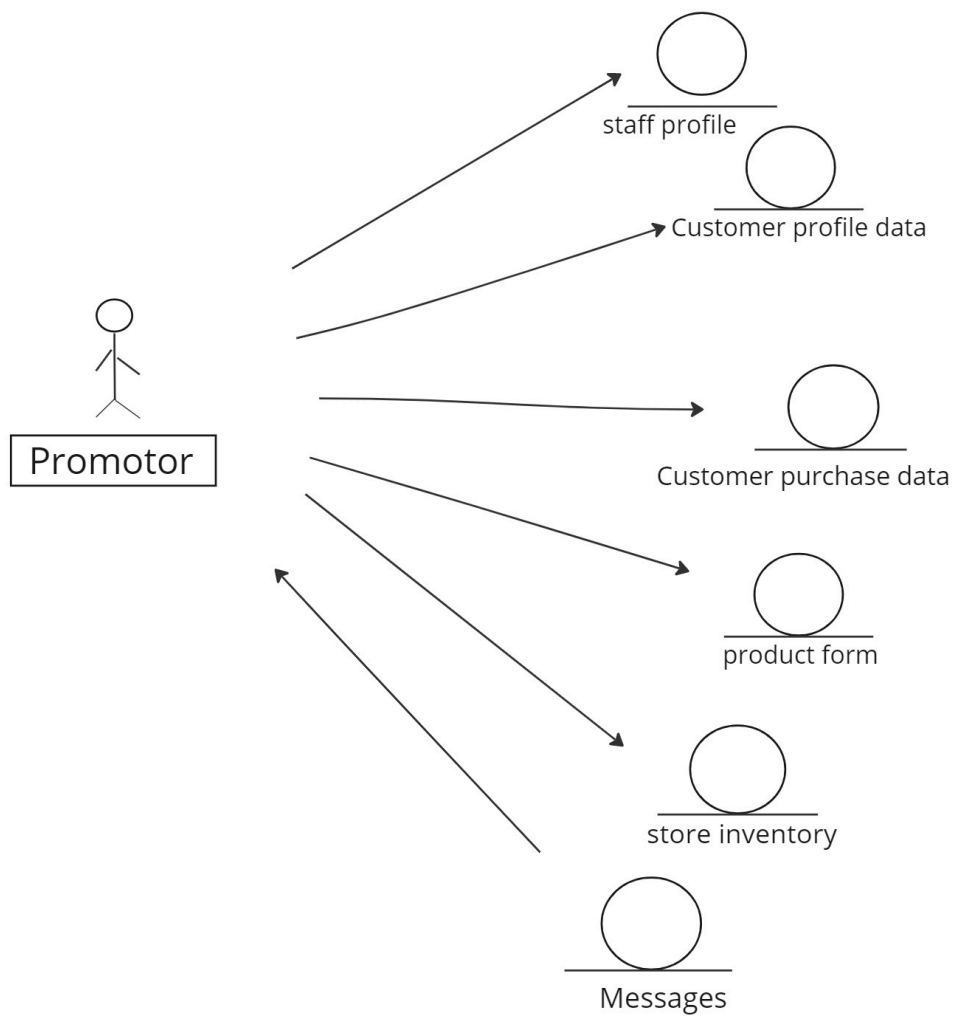
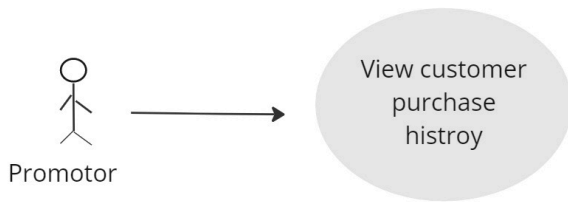
7. Class Diagram

7.3 Store Man (Delivery)



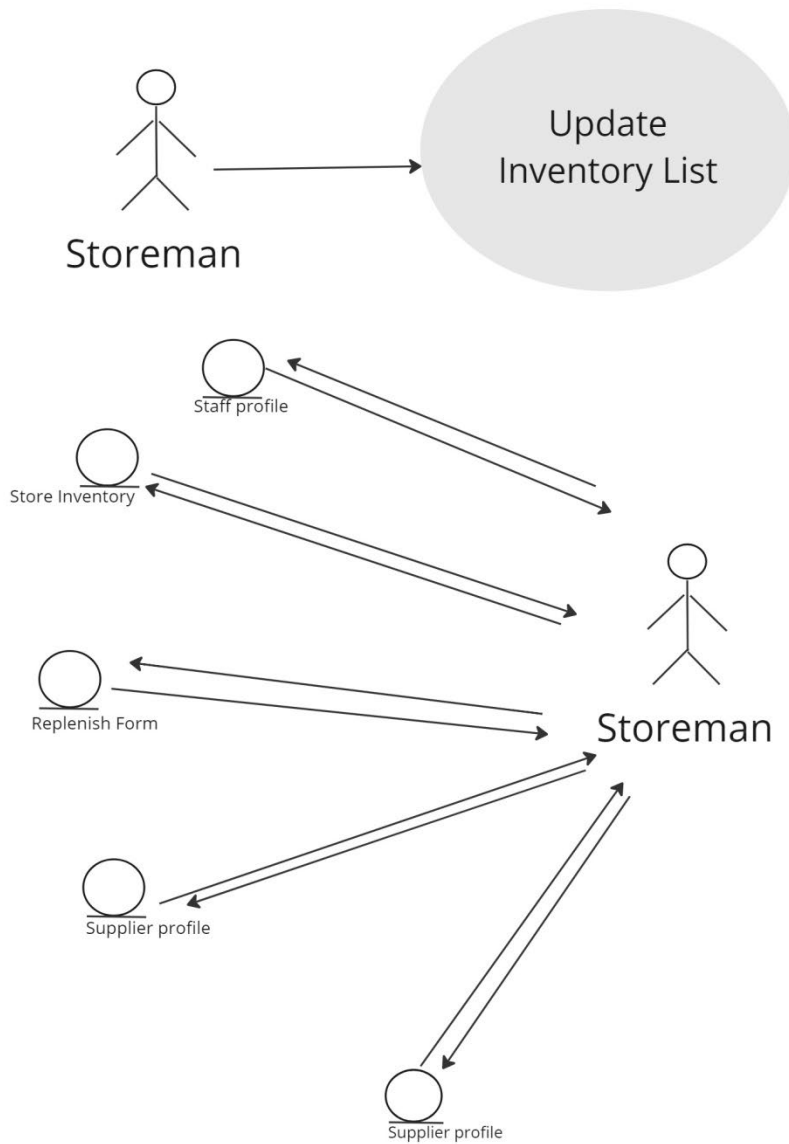
7. Class Diagram

7.4 Promoter



7. Class Diagram

7.5 Store Man



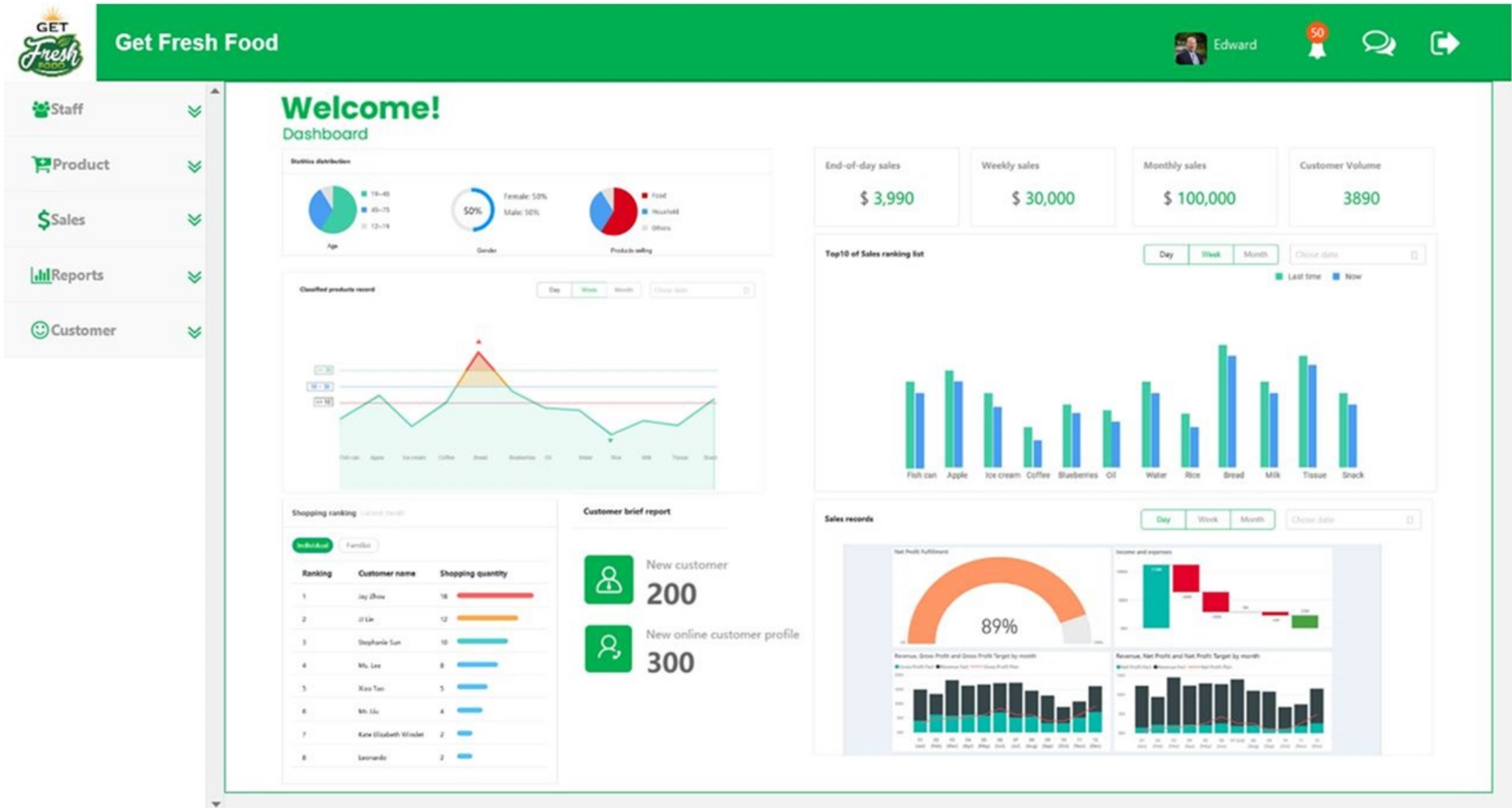
m

## 8. Screen/ Print-Out Design

Our screen designs in GetFreshFood are graphical representations of the various interfaces or screens that staff members interact with while working in the store or customers while browsing GFF online store. These designs are created with the aim of improving the efficiency and effectiveness of the staff or customer by making it easier for them to carry out their tasks or browsing the online website.



# Screens for Updating Price by Branch Manager



# 1. View product form

**Notifications**

- Price Changing (1)
- Promotion Activity (10)
- Store Movements (10)
- End of Day Sales (10)

**Notification**

**Confirm Log out**  
Do you really want to log out?

No Yes

**Messages**

- Boss (10)
- Promotion (10)
- Store (10)
- Sales (10)

**Product Form**

Filter

Tags: All **Price Changing Monitor** Expired Products New Order Sort by Sales Stock Quantity Collapse

Sort by classify Promotion Online Seles

Selected: **Price Changing Monitor** Remove All

Expired Date Chose Date Storage Date Chose Date Product Classification Promotion Status

Online Selling Supplier Price

Search

Send Message Set Tags Save

**Related Results**

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
<input type="checkbox"/>	1000001	Fish Can	\$3.5	35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	\$1 View	ABC Inc Edit Delete
<input type="checkbox"/>	1000002	Bread	\$2.5	50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	\$1.2 View	Sun Co. Edit Delete
<input type="checkbox"/>	1000003	Milk	\$3.8	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 View	Farm Co. Edit Delete
<input type="checkbox"/>	1000004	Pot	\$12	1/120	Slow Selling	N	Y	20/03/2023	16/01/2023	\$8 View	Life corp. Edit Delete
<input type="checkbox"/>	1000005	Detergents	\$6	2/80	Slow Selling	Y	Y	09/04/2023	16/01/2025	\$3.9 View	Clean Inc Edit Delete

Select All Batch Operations

1 2 3 4 5 ... 50

**Notification**

**Confirm Delete**  
Do you really want to delete this product?

No Yes

**Delete successfully**  
Product delete successfully

**Click Steps**  
**Point to Linked Pages**

## 2.1 View monthly order form

**GET Fresh Food**

Edward 50

**Product Form**

Filter

Tags: All **Price Changing Monitor** Expired Products New Order Sort by Sales Stock Quantity [Collapse](#)

Sort by classify Promotion Online Seles

Selected: **Price Changing Monitor** Remove All

Expired Date Chose Date

Storage Date Chose Date

Product Classification

Promotion Status

Online Selling

Search

Related Results

ID	Name	Current Price	St. qt	Storage Date	Supplier Price	Supplier	Manage
<input checked="" type="checkbox"/>	1000003	Milk	\$3.8	1	16/01/2023	\$2 View	Farm Co. Edit Delete
<input checked="" type="checkbox"/>	1000004	Pot	\$12	1	16/01/2023	\$8 View	Life corp. Edit Delete
<input checked="" type="checkbox"/>	1000005	Detergents	\$6	2/80	16/01/2023	\$3.9 View	Clean Inc Edit Delete

Send Message Set Tags Save

Select All  Batch Operations

1 2 3 4 5 ... 50

Tips:

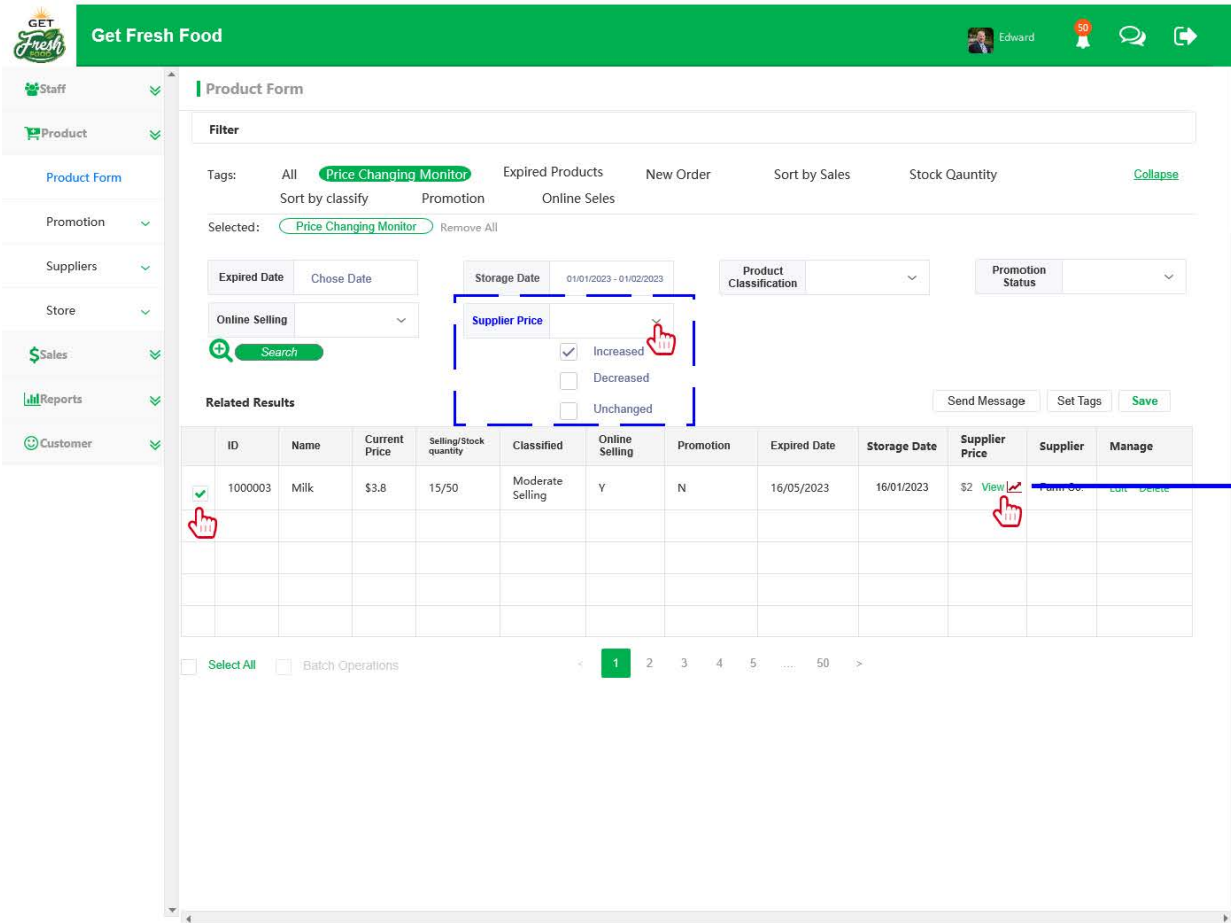
Only show those products which storage date within selected time slot

**Click Steps**

**Activity Steps**

## 2.2 Check suppliers' price changing

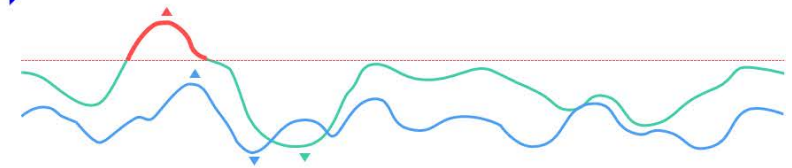
 **Click Steps**  
 **Activity Steps**  
 **Point to Linked Pages**




Tips:  
 click "View" to a Pop-up Report Page  
 If suppliers changed their products price, we will see a red icon(means now price increase) or green icon(means now price decrease).  
 price increase  price decrease

 Sale **85%**  Price **72%**

Supplier Price Changing Trend



01/01/2018 10/11/2018 15/03/2019 20/12/2019 05/06/2020 05/12/2020 05/06/2021 05/12/2021 15/03/2022 20/12/2022 08/01/2023

 Price Increase  
 Original Price: \$1.8  
 Updated Price:\$2

Data Analyzing:  
 This milk brand tend to change their product price frequently.  
 Eventhough it's a popular product at Singapore, but for us the sales data of this milk is not very high.

### 2.3 Update price based on suppliers' product price

GET Fresh Food

Product Form

Filter

Tags: All Price Changing Monitor Expired Products New Order Sort by Sales Stock Quantity

Sort by classify Promotion Online Seles

Selected: Price Changing Monitor Remove All

Expired Date Chose Date Storage Date 01/01/2023 - 01/02/2023 Product Classification Promotion Status

Online Selling Supplier Price Increased

Search

Related Results

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
1000003	Milk	\$3.8	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 View	Farm Co.	Edit

Tips:  
Based on suppliers price, click "Edit" to modify product price

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
1000003	Milk	\$4.2	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 View	Farm Co.	Editing...

Notification

**Confirm Edit**  
Do you really want to change it?

No Yes

**Edit successfully**  
Price change successfully

Click Steps

Activity Steps

Point to Linked Pages

## 2.4 Send notification about suppliers' price changing to store owner

The screenshot shows the 'Get Fresh Food' application interface. The top navigation bar is green and contains the user's name 'Edward', a notification bell with '50', and a chat icon. A left sidebar lists various categories like Staff, Product, Promotion, Suppliers, Store, Sales, Reports, and Customer. The main area is titled 'Product form' and includes a filter section with tags like 'Price Changing Monitor', 'Expired Products', and 'New Order'. Below the filter is a table of 'Related Results' with columns for ID, Name, Current Price, Selling/Stock quantity, Classified, Online Selling, Promotion, Expired Date, Storage Date, Supplier Price, Supplier, and Manage. A red hand icon points to the 'Send Message' button above the table, and a blue arrow points from this button to the 'New Message' form on the right.

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
1000003	Milk	\$4.2	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2	Farm Co.	Edit Delete

Tips:  
After changed price, click "Send Message" for sending a notification to store owner.

The 'New Message' form is shown with the following fields and options:

- Type: price changing
- Title: Suppliers' price changing report
- Send to: Boss
- Content: A large text area containing a pre-written message: "This is a message about price changing based on suppliers' product price. This message will be sent to store owner. If store owner read this message, he can directly login our system, or directly click his 'updated suppliers' price' button(Only him being authorised) to see the details."
- How to remind:  Message  Email  SMS
- Buttons: Save, Send, Preview, Delete

Click Steps  
 Point to Linked Pages

### 3. View notification from store owner

The screenshot shows the 'Get Fresh Food' application interface. The top navigation bar is green and contains the user's name 'Edward', a notification bell with '50', a chat icon, and a share icon. A red hand icon points to the notification bell. A blue arrow points from the notification bell to a 'Messages' panel on the right. The 'Messages' panel lists 'Boss (10)', 'Promotion (10)', 'Store (10)', and 'Sales (10)'. A red hand icon points to 'Promotion (10)'. A blue arrow points from 'Promotion (10)' to a detailed message view. The message view shows a search bar, a list of categories (Boss, MyBoss, Promotion, Store, Tom), and a message from 'Boss' stating 'Increase 5% for all products' price. A response from 'Edward' says 'Noted.' with a 'Reply' button. A red hand icon points to 'MyBoss' in the category list. A legend at the bottom right explains the annotations: a red hand icon for 'Click Steps' and a blue arrow for 'Point to Linked Pages'.

**Click Steps**  
**Point to Linked Pages**

4. Update price based on store owner's instruction

The screenshot shows the 'Get Fresh Food' application interface. The top navigation bar is green with the 'GET Fresh Food' logo and user profile 'Edward'. A left sidebar contains menu items: Staff, Product, Product Form, Promotion, Suppliers, Store, Sales, Reports, and Customer. The main content area is titled 'Product Form' and includes a filter section with tags like 'Price Changing Monitor', 'Expired Products', and 'New Order'. Below the filter is a 'Selected:' section with 'Price Changing Monitor' and a 'Remove All' link. There are several filter dropdowns: 'Expired Date', 'Storage Date', 'Product Classification', 'Promotion Status', 'Online Selling', and 'Supplier Price'. A search bar is present. The 'Related Results' section contains a table of products. The table has columns: ID, Name, Current Price, Selling/Stock quantity, Classified, Online Selling, Promotion, Expired Date, Storage Date, Supplier Price, Supplier, and Manage. The product 'Detergen' (ID 1000005) is highlighted with a blue dashed box around its 'Current Price' cell, which shows '\$6.3'. A red hand icon points to the 'Edit' link in the 'Manage' column for this product. A notification dialog box is open, titled 'Notification' with a lightning bolt icon, asking 'Confirm Edit' and 'Do you really want to change it?'. It has 'No' and 'Yes' buttons. A red hand icon points to the 'Yes' button. Below the notification, a success message says 'Edit successfully' and 'Price change successfully'. A tip box on the right says: 'Tips: Based on store owner's instruction, click "Edit" to modify product price(increase 5%)'. A legend at the bottom left explains the annotations: a red hand icon for 'Click Steps', a blue dashed box for 'Activity Steps', and a blue arrow for 'Point to Linked Pages'.

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
1000001	Fish Can	\$3.6	35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	\$1 <a href="#">View</a>	ABC Inc	<a href="#">Edit</a> <a href="#">Delete</a>
1000002	Bread	\$2.6	50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	\$1.2 <a href="#">View</a>	Sun Co.	<a href="#">Edit</a> <a href="#">Delete</a>
1000003	Milk	\$4.4	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 <a href="#">View</a>	Farm Co.	<a href="#">Edit</a> <a href="#">Delete</a>
1000004	Pot	\$12.6	1/120	Slow Selling	N	Y	20/03/2023	16/01/2023	\$8 <a href="#">View</a>	Life corp.	<a href="#">Edit</a> <a href="#">Delete</a>
1000005	Detergen	\$6.3	2/80	Slow Selling	Y	Y	09/04/2023	16/01/2025	\$3.9 <a href="#">View</a>	Clean Inc	<a href="#">Edit</a> <a href="#">Delete</a>

## 5.1 View sales data report

Edward 50

- Staff
- Product
- Product Form
- Promotion
- Suppliers
- Store
- Sales
- Reports
- Customer

### Product Form

Filter

Tags: All Price Changing Monitor Expired Products New Order Sort by Sales Stock Quantity [Collapse](#)

Sort by classify Promotion Online Seles

Selected: Price Changing Monitor Sort by Sales [Remove All](#)

Expired Date

Storage Date

Product Classification

Promotion Status

Online Selling

Supplier Price

Search

Send Message
Set Tags
Save

	ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
<input type="checkbox"/>	1000002	Bread	\$2.6	50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	\$1.2 <a href="#">View</a>	Sun Co.	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	1000001	Fish Can	\$3.6	35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	\$1 <a href="#">View</a>	ABC Inc	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	1000003	Milk	\$4.4	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 <a href="#">View</a>	Farm Co.	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	1000005	Detergents	\$6.3	2/80	Slow Selling	Y	Y	09/04/2023	16/01/2025	\$3.9 <a href="#">View</a>	Clean Inc	<a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	1000004	Pot	\$12.6	1/120	Slow Selling	N	Y	20/03/2023	16/01/2023	\$8 <a href="#">View</a>	Life corp.	<a href="#">Edit</a> <a href="#">Delete</a>

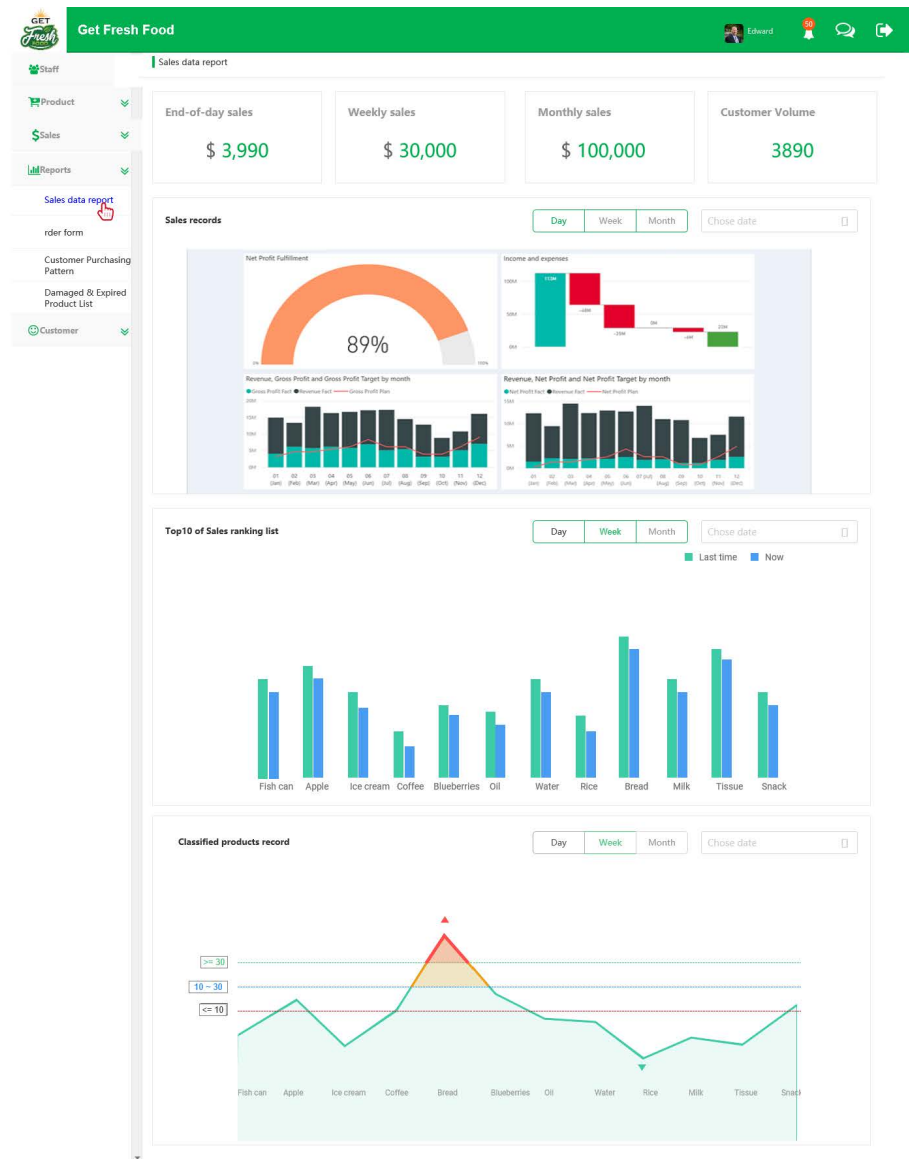
Select All
 Batch Operations

<
1
2 3 4 5 ... 50 >

**Click Steps**

**Activity Steps**

## 5.2 View sales data report



 **Click Steps**

## 6. View the list of damaged and expired products(2 ways both can)

### 6.1 View from product form

The screenshot shows the 'Get Fresh Food' application interface. The top navigation bar is green and contains the 'GET Fresh Food' logo, the user name 'Edward', and notification, chat, and share icons. A left sidebar contains navigation options: Staff, Product, Product Form (selected), Promotion, Suppliers, Store, Sales, Reports, and Customer. The main content area is titled 'Product form' and includes a 'Filter' section with tags for 'Price Changing Monitor' and 'Expired Products'. Below the filters are several input fields for 'Expired Date', 'Storage Date', 'Product Classification', 'Promotion Status', 'Online Selling', and 'Supplier Price'. A 'Search' button is highlighted with a red hand icon. The 'Related Results' section displays a table of products with columns for ID, Name, Current Price, Selling/Stock quantity, Classified, Online Selling, Promotion, Expired Date, Storage Date, Supplier Price, Supplier, and Manage. The 'Expired Date' column is highlighted with a blue dashed box. The table lists three products: Rice, Oil, and Blueberries, all marked with a sad face icon. At the bottom, there are 'Select All' and 'Batch Operations' checkboxes, and a pagination control showing page 1 of 50.

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
1000005	Rice	\$16	10/8	☹️	Y	N	16/02/2023	16/12/2022	\$11 <a href="#">View</a>	Sun Co.	<a href="#">Edit</a> <a href="#">Delete</a>
1000006	Oil	\$8.2	3/15	☹️	Y	N	18/02/2023	16/05/2022	\$5 <a href="#">View</a>	ABC Inc	<a href="#">Edit</a> <a href="#">Delete</a>
1000007	Blueberries	\$3.95	48/20	☹️	Y	N	20/02/2023	16/01/2023	\$2 <a href="#">View</a>	Farm Co.	<a href="#">Edit</a> <a href="#">Delete</a>

Tips:  
Add colorful expression for highlighting.  
Branch Manager should pay attention to those products marked with unhappy faces.

Click Steps  
 Activity Steps

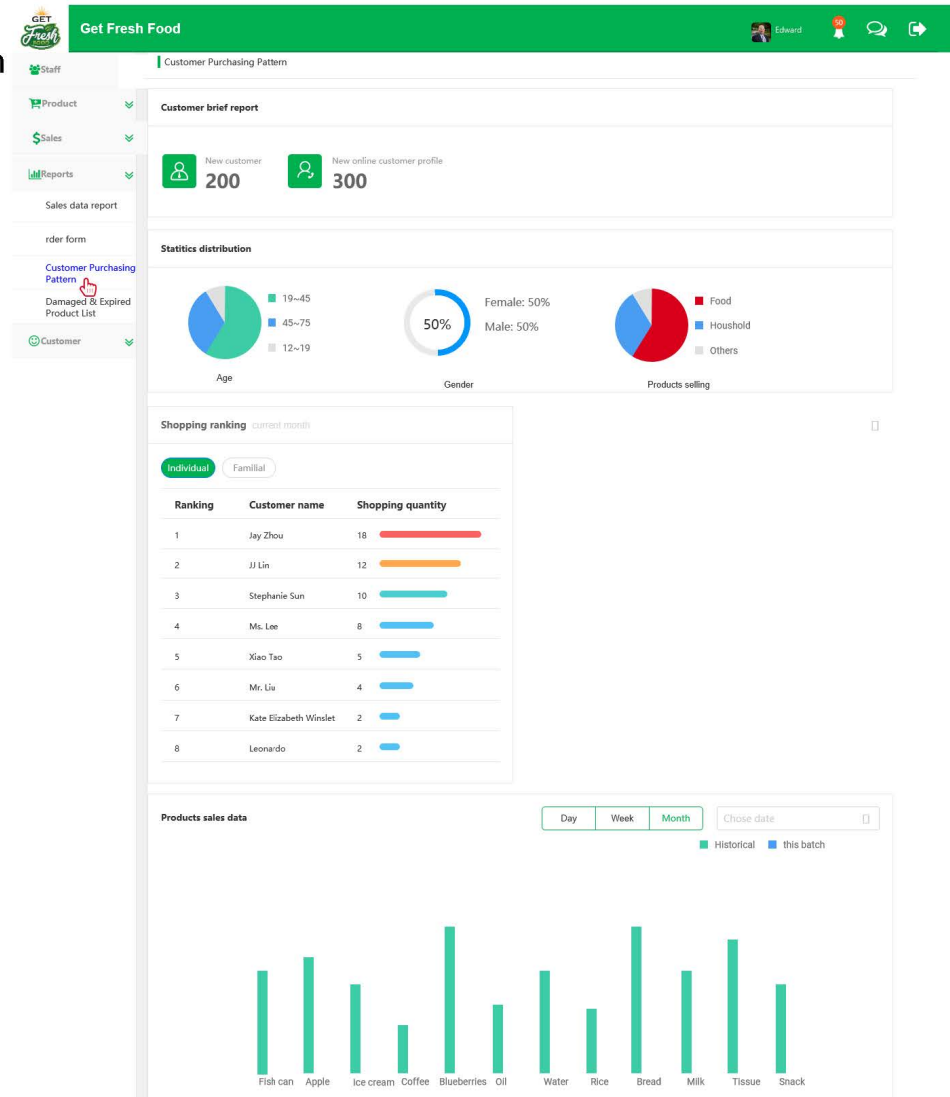
## 6. View the list of damaged and expired products

### 6.2 View from Reports

The screenshot shows the 'Get Fresh Food' dashboard. The main content area displays a table titled 'Damaged & Expired Product List'. The table has columns for ID, Name, Current Price, Selling/Stock quantity, Classified, Online Selling, Promotion, Expired Date, Storage Date, Supplier Price, Supplier, and Manage. Three products are listed: Rice (ID 1000005), Oil (ID 1000006), and Blueberries (ID 1000007). Each product has a 'View' link and 'Edit' and 'Delete' buttons. Below the table, there are checkboxes for 'Select All' and 'Batch Operations', and a pagination control showing page 1 of 50. Below the table is a bar chart titled 'Total volum of amaged & expired products'. The chart shows the volume of products for various categories: Fish can, Apple, Ice cream, Coffee, Blueberries, Oil, Water, Rice, Bread, Milk, Tissue, and Snack. The chart compares 'Historical' (green bars) and 'this batch' (blue bars) data. The 'Historical' bars are significantly higher than the 'this batch' bars for most categories. A 'Click Steps' button is located in the bottom right corner of the dashboard area.

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
1000005	Rice	\$16	10/8		Y	N	16/02/2023	16/12/2022	\$11	Sun Co.	Edit Delete
1000006	Oil	\$8.2	3/15		Y	N	18/02/2023	16/05/2022	\$5	ABC Inc	Edit Delete
1000007	Blueberries	\$3.95	48/20		Y	N	20/02/2023	16/01/2023	\$2	Farm Co.	Edit Delete

## 7. View customer purchasing pattern



 Click Steps

## 8. Classify products

GET Fresh Food

Product form

Filter

Tags: All Price Changing Monitor Expired Products New Order Sort by Sales Stock Quantity [Collapse](#)

Sort by classify Promotion Online Seles

Selected:

Expired Date Chose Date Storage Date Chose Date

Online Selling

Supplier Price

Product Classification

- Fast
- Moderate
- Slow
- unclassified

Search

Related Results

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage	
<input checked="" type="checkbox"/>	1000005	Rice	\$16	10/8	⊖	Y	N	16/02/2023	16/12/2022	\$11	View	Sun Co. <a href="#">Editing...</a>
<input checked="" type="checkbox"/>	1000006	Oil	\$8.2	3/15	⊖	Y	N	18/02/2023	16/05/2022	\$5	View	ABC Inc <a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	1000007	Bluberries	\$3.95	48/20	⊖	Y	N	20/02/2023	16/01/2023	\$2	View	Farm Co. <a href="#">Edit</a> <a href="#">Delete</a>

Select All Batch Operations

Tips:  
Marking unclassified products base on sales quantity.

>= 30	Fast selling
10 - 30	Moderate selling
<= 10	Slow selling

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage	
<input checked="" type="checkbox"/>	1000005	Rice	\$16	10/8	⊖	Y	N	16/02/2023	16/12/2022	\$11	View	Sun Co. <a href="#">Editing...</a>
<input type="checkbox"/>	1000006	Oil	\$8.2	3/15	⊖	Y	N	18/02/2023	16/05/2022	\$5	View	ABC Inc <a href="#">Edit</a> <a href="#">Delete</a>
<input type="checkbox"/>	1000007	Bluberries	\$3.95	48/20	⊖	Y	N	20/02/2023	16/01/2023	\$2	View	Farm Co. <a href="#">Edit</a> <a href="#">Delete</a>

Notification

**Confirm Edit**

Do you really want to change it?

No Yes

Edit successfully

Classify successfully

Click Steps

Activity Steps

Point to Linked Pages

### 9. Check if needing promotion & Update price of promotion products

Product form

Filter

Tags: All Price Changing Monitor Expired Products New Order Sort by Sales Stock Quantity Collapse

Sort by classify Promotion Online Seles

Selected:

Expired Date Chose Date Storage Date Chose Date Product Classification

Online Selling Supplier Price

Search

Send Message Set Tags Save

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
<input type="checkbox"/>	1000001	Fish Can	\$3.6	35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	\$1 View	ABC Inc Edit Delete
<input type="checkbox"/>	1000002	Bread	\$2.6	50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	\$1.2 View	Sun Co. Edit Delete
<input type="checkbox"/>	1000003	Milk	\$4.4	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 View	Farm Co. Edit Delete
<input checked="" type="checkbox"/>	1000005	Rice	\$16	10/8	Slow selling	Y	N	16/09/2023	16/12/2022	\$11 View	Sun Co. Edit Delete
<input type="checkbox"/>	1000006	Oil	\$8.2	3/15	Slow selling	Y	N	18/03/2023	16/05/2022	\$5 View	ABC Inc Edit Delete

Select All Batch Operations 1 2 3 4 5 ... 50

Tips:  
Set promotion statuses to "Yes".  
After the whole product form being changed, baranch manager will update promote schedule and send promotion notification to promoter, thus promoter can know there is a new plan.

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage
<input type="checkbox"/>	1000001	Fish Can	\$3.6	35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	\$1 View	ABC Inc Edit Delete
<input type="checkbox"/>	1000002	Bread	\$2.6	50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	\$1.2 View	Sun Co. Edit Delete
<input type="checkbox"/>	1000003	Milk	\$4.4	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2 View	Farm Co. Edit Delete
<input checked="" type="checkbox"/>	1000005	Rice	\$10.8	10/8	Slow selling	Y	Y	16/09/2023	16/12/2022	\$11 View	Sun Co. Editing...
<input type="checkbox"/>	1000006	Oil	\$8.2	3/15	Slow selling	Y	N	18/03/2023	16/05/2022	\$5 View	ABC Inc Edit Delete

**Notification**

**Confirm Edit**  
Do you really want to change it?

No Yes

**Edit successfully**  
Set to promote successfully

Click Steps

Activity Steps

Point to Linked Pages

## 10. Update product form

Tips:

- Select "Batch Operations" , update all promotion price.
- After this, click "Save" one time, and then click "Yes" when confirm notification pop up.
- Other price update action processings are also like this. Repeat this step.
- All update finished, click"Save" again, and then click "Yes" when confirm notification pop up. Now product form is updated.

ID	Name	Current Price	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier Price	Supplier	Manage		
<input type="checkbox"/>	1000001	Fish Can	\$3.6	35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	\$1	View	ABC Inc	Edit Delete
<input type="checkbox"/>	1000002	Bread	\$2.6	50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	\$1.2	View	Sun Co.	Edit Delete
<input checked="" type="checkbox"/>	1000003	Milk	\$4.4	15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	\$2	View	Farm Co.	Edit Delete
<input checked="" type="checkbox"/>	1000005	Rice	\$16	10/8	Slow selling	Y	N	16/09/2023	16/12/2022	\$11	View	Sun Co.	Edit Delete
<input checked="" type="checkbox"/>	1000006	Oil	\$8.2	3/15	Slow selling	Y	N	18/03/2023	16/05/2022	\$5	View	ABC Inc	Edit Delete

**Notification**

**Confirm Edit**  
Do you really want to save it?

**Edit successfully**  
Save successfully

Click Steps

Activity Steps

Point to Linked Pages

### 11. Update digital price system

**GET Fresh Food**

Digital price system

Buttons: Read only, Refresh, Roll back, Save

Update History: Chose Date, Product categories

Search

ID	Name	Current Price	Photos	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier
1000001	Fish Can	\$3.6		35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	ABC Inc
1000002	Bread	\$2.6		50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	Sun Co.
1000003	Milk	\$4.4		15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	Farm Co.
1000005	Rice	\$16		10/8	Slow selling	Y	N	16/09/2023	16/12/2022	Sun Co.
1000006	Oil	\$8.2		3/15	Slow selling	Y	N	18/03/2023	16/05/2022	ABC Inc

Notification: Confirm Edit. Do you really want to save it? [No] [Yes]

Notification: Edit successfully. Save successfully.

Other staff view page:

**GET Fresh Food**

Buttons: Read only, Product categories, Search

ID	Name	Current Price	Photos	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier
1000001	Fish Can	\$3.6		35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	ABC Inc
1000002	Bread	\$2.6		50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	Sun Co.
1000003	Milk	\$4.4		15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	Farm Co.
1000005	Rice	\$16		10/8	Slow selling	Y	N	16/09/2023	16/12/2022	Sun Co.
1000006	Oil	\$8.2		3/15	Slow selling	Y	N	18/03/2023	16/05/2022	ABC Inc

Legend:

- Click Steps (Hand icon)
- Activity Steps (Dashed box)
- Point to Linked Pages (Blue arrow)

Tips:

- "Read only" for read price avoiding misaddress.
- "Refresh" for updating digital price after product form being changed.
- "Roll back" for return previous updating version.
- "Save" for save price after refresh or roll back.

Cannot view suppliers' price and other analysing info. Other staff only can read digital price. After branch manager click "Save", all staff will received a notification about price updating.

## 12. Update promotion schedule

Branch manager view page:

ID	Name	Current Price	Photos	Selling/stock quantity	Classified	Online Selling	Promotion status	Promotion start	Promotion end	Supplier
1000001	Fish Can	\$3.6		35/200	Fast Selling	Y	Off			ABC Inc
1000002	Bread	\$2.6		50/150	Fast Selling	Y	Off	20/07/2022	16/12/2022	Sun Co.
1000003	Milk	\$4.4		15/50	Moderate Selling	Y	On	16/03/2023	16/04/2023	Farm Co.
1000005	Rice	\$16		10/8	Slow selling	Y	On	16/03/2023	16/5/2022	Sun Co.
1000006	Oil	\$8.2		3/15	Slow selling	Y	On	18/03/2023	16/05/2022	ABC Inc

Tips:

- "Read only" for read schedule avoiding misaddress.
- "Refresh" for updating Promotion schedule.
- "Roll back" for return prevolus updating version.
- "Save" for save schedule after refresh or roll back.

**Promoter only can read promotion shcedule.**  
After branch manager click "Save", promoter will recieved a notification about promotion schedule updating.

Promoter view page:

ID	Name	Current Price	Photos	Selling/stock quantity	Classified	Online Selling	Promotion status	Promotion start	Promotion end	Supplier
1000001	Fish Can	\$3.6		35/200	Fast Selling	Y	Off			ABC Inc
1000002	Bread	\$2.6		50/150	Fast Selling	Y	Off	20/07/2022	16/12/2022	Sun Co.
1000003	Milk	\$4.4		15/50	Moderate Selling	Y	On	16/03/2023	16/04/2023	Farm Co.
1000005	Rice	\$16		10/8	Slow selling	Y	On	16/03/2023	16/5/2022	Sun Co.
1000006	Oil	\$8.2		3/15	Slow selling	Y	On	18/03/2023	16/05/2022	ABC Inc

Click Steps

Point to Linked Pages

### 13. Send promotion schedule notification to promoter

The screenshot shows the 'Get Fresh Food' application interface. On the left is a navigation menu with categories like Staff, Product, Promotion, etc. The main area is titled 'Promotion schedule' and contains a table of 'Related Results'. A blue arrow points from the 'Send Message' button above the table to the 'New Message' dialog box on the right.

ID	Name	Current Price	Photos	Selling/Stock quantity	Classified	Online Selling	Promotion status	Promotion start	Promotion end	Supplier
1000001	Fish Can	\$3.6		35/200	Fast Selling	Y				ABC Inc.
1000002	Bread	\$2.6		50/150	Fast Selling	Y	Off	20/07/2022	16/12/2022	Sun Co.
1000003	Milk	\$4.4		15/50	Moderate Selling	Y	On	16/03/2023	16/04/2023	Farm Co.
1000005	Rice	\$16		10/8	Slow selling	Y	On	16/03/2023	16/5/2022	Sun Co.
1000006	Oil	\$8.2		3/15	Slow selling	Y	On	18/03/2023	16/05/2022	ABC Inc.

The 'New Message' dialog box contains the following fields and options:

- Type: new promotion schedule
- Title: Updated promotion schedule for next month
- Send to: Jennifer; Other promoters
- Content: This is a message about new promotion schedule. This message will be sent to promoter. If promoter read this message, she/he can directly login our system, or directly click his "promotion schedule" button (Only staff being authorised) to see the details.
- How to remind:  Message  Email  SMS
- Buttons: Save, Send, Preview, Delete

Click Steps  
 Point to Linked Pages

### 14. Send new product form notification to all staff

The screenshot shows the 'Get Fresh Food' application interface. The main content area displays a table of product information under the heading 'Digital price system'. The table includes columns for ID, Name, Current Price, Photos, Selling/Stock quantity, Classified, Online Selling, Promotion, Expired Date, Storage Date, and Supplier. Below the table are pagination controls and a 'Select All' checkbox.

ID	Name	Current Price	Photos	Selling/Stock quantity	Classified	Online Selling	Promotion	Expired Date	Storage Date	Supplier
1000001	Fish Can	\$3.6		35/200	Fast Selling	Y	N	18/08/2024	16/05/2022	ABC Inc
1000002	Bread	\$2.6		50/150	Fast Selling	Y	N	20/07/2023	16/12/2022	Sun Co.
1000003	Milk	\$4.4		15/50	Moderate Selling	Y	N	16/05/2023	16/01/2023	Farm Co.
1000005	Rice	\$16		10/8	Slow selling	Y	N	16/09/2023	16/12/2022	Sun Co.
1000006	Oil	\$8.2		3/15	Slow selling	Y	N	18/03/2023	16/05/2022	ABC Inc

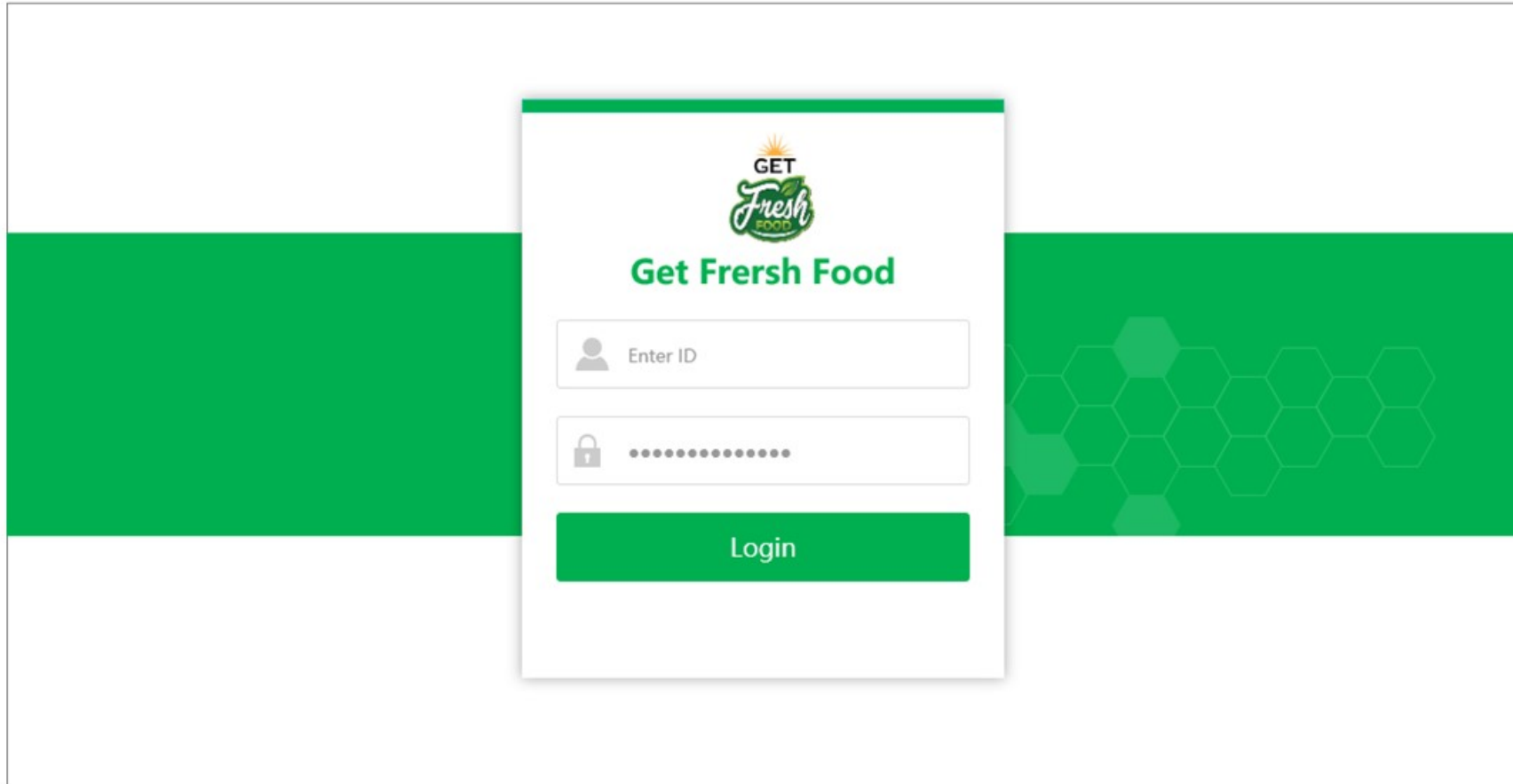
On the right side of the interface, a 'Messages' panel is open, showing a list of messages: Boss (10), Promotion (10), Store (10), and Sales (10). A blue arrow points from the 'Send Message' button in the product list to the 'Messages' panel. Below the message list, a group chat window is visible for 'Get Fresh Food' with 32 members. The chat history shows a message from Edward: 'A new product form has been updated. Please read as soon as possible. Thanks.' and a response from Jennifer: 'Noted.' A 'Reply' button is at the bottom of the chat window.

Click Steps  
 Point to Linked Pages



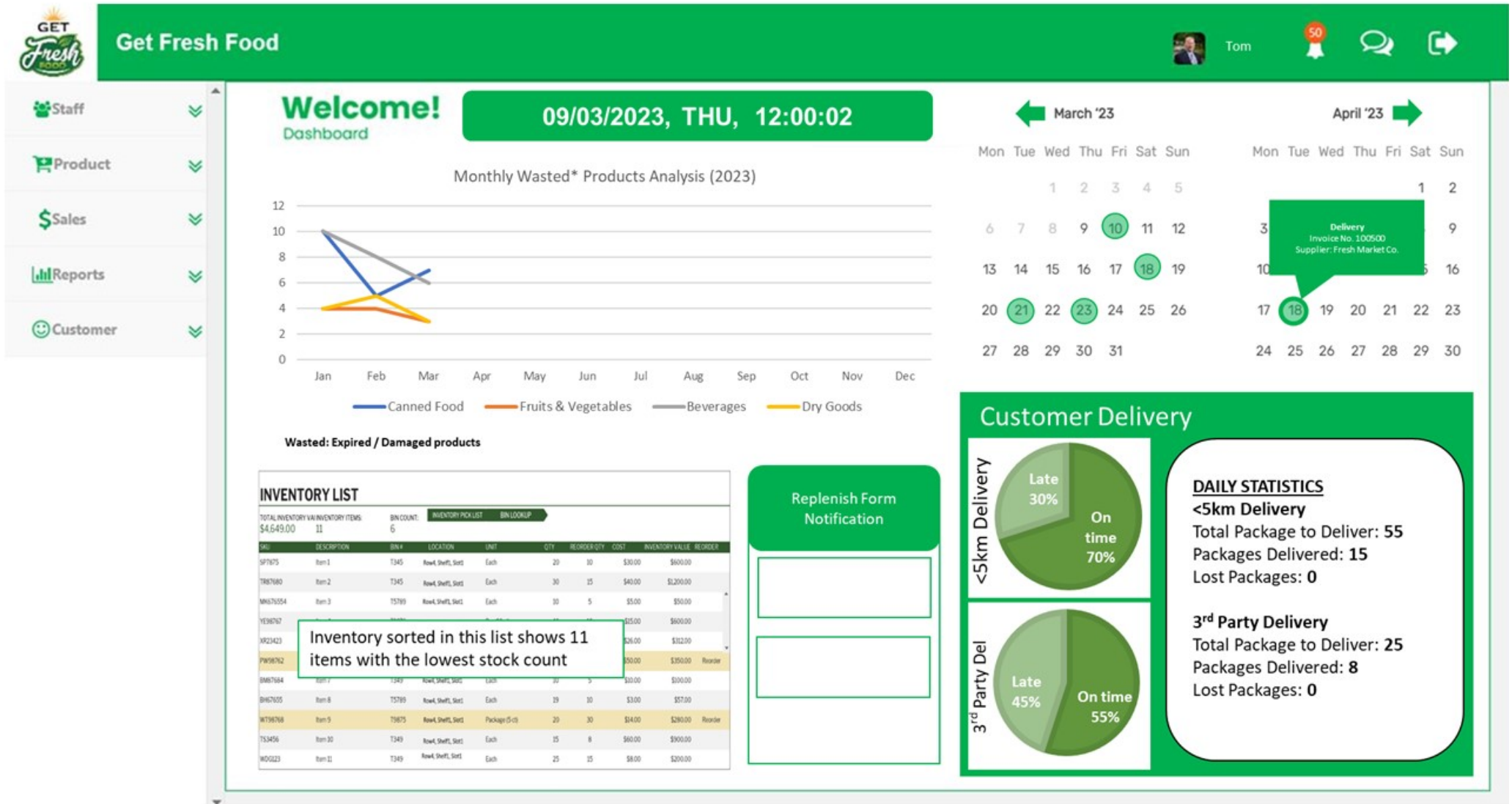
# Storeman Screen

## 1.1 Log In

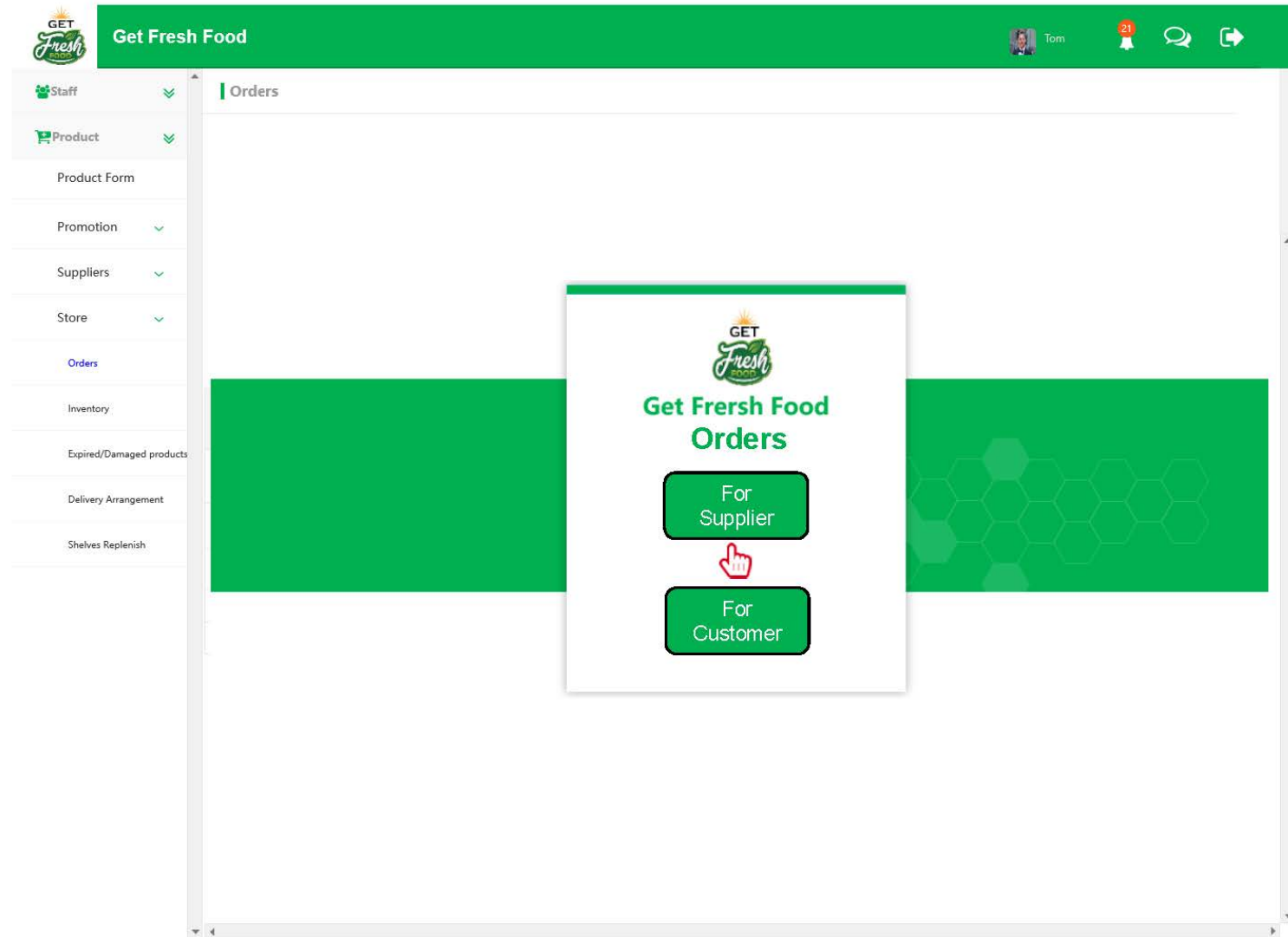


The screenshot displays a login form for 'Get Fresh Food'. The form is centered on a white background with a green header and footer. The header features the 'GET Fresh FOOD' logo. Below the logo, the text 'Get Fresh Food' is displayed in green. The form contains two input fields: one for 'Enter ID' with a person icon and one for a password with a lock icon and a series of dots. A green 'Login' button is positioned below the input fields. The background of the form area is decorated with a green hexagonal pattern.

## 1.2 Dashboard



## 2.1 View Order



## 2.2 View Order

**Get Fresh Food**

Tom

21

Staff

Product

Product Form

Promotion

Suppliers

Store

Orders

Inventory

Expired/Damaged products

Delivery Arrangement

Shelves Replenish

**Orders (Supplier)**

Products Categories

- Can Food
- Fresh Food
- Bread
- Dairy
- .....

Select Suppliers

- Fresh Market Co.
- Life corp.
- Clean Inc
- Natural Inc
- .....

Send Message Download

	#invoice No	Supplier	Sub Total	Order Date	Delivery Date
<input checked="" type="checkbox"/>	1000003	Fresh Market Co. <a href="#">View</a>	\$1385.10	12/02	15/02
<input checked="" type="checkbox"/>	1000100	Fresh Market Co. <a href="#">View</a>	\$4566.39	21/02	25/02
<input checked="" type="checkbox"/>	1000105	Fresh Market Co. <a href="#">View</a>	\$3456.78	26/02	01/03
	.....	.....	.....	.....	.....

Select All

< 1 2 3 4 5 ... 50 >

### 3.1 View delivery order form

The screenshot shows a web application interface for 'Get Fresh Food'. The top navigation bar is green and contains the logo, the text 'Get Fresh Food', and user information for 'Tom'. A left sidebar lists various menu items like Staff, Product, Promotion, Suppliers, Store, Orders, Inventory, etc. The main content area is titled 'Orders (Supplier)' and features a table of 'Related Results' with columns for '#Invoice No' and 'Supplier'. A 'View' link is highlighted with a red hand cursor on the first row. An overlay window displays a detailed 'Purchase Order' form with a table of items, delivery date, and pallets.

City	Item #	Description	Units	Price	Sub	
	140	Milk		0.60	85.00	
	9	Cheese		0.95	8.30	
	174	Yogurt		0.90	0.90	
	3255	Butter		9.90	198.50	
	400	Sour Cream		0.90	67.50	
	100	Creamy Milk		0.90	144.00	
					<b>Total</b>	<b>\$1383.00</b>

### 3.2 Send email to supplier about shortage in delivery

The screenshot shows a web application interface for 'Get Fresh Food'. The top navigation bar is green and contains the logo, the text 'Get Fresh Food', and user profile information for 'Tom'. A left sidebar lists various menu items like Staff, Product, Promotion, Suppliers, Store, Orders, Inventory, etc. The main content area is titled 'Orders' and includes filters for 'Products Categories' and 'Select Suppliers'. A 'Related Results' table is partially visible. A modal window for composing an email is open, with a red hand cursor pointing to the 'Send Message' button in the background. The email content is as follows:

Shortage in DO 10103GFF  
fermfresh.sales@co.sg

Shortage in DO 10103GFF

Dear *Daniel*,

Thank you for promptly delivering on 01 March. But items delivered are not tally with DO form. We still need the full quantity ordered and shall be glad if you will arrange to deliver the shortage as soon as possible. I do list down the shortage items to let you find out easily.

1. #####\$\$\$ ----- 5 Packets
2. %%%^&&& ----- 2 dzns
3. %%%^&&& ----- 20 cans
4. %%%^&&& ----- 12 bottles
5. %%%^&&& ----- 3packts
6. #####\$\$\$ ----- 5 Packets

The email composition window includes a rich text editor toolbar with options for font style (Sans Serif), bold, italic, underline, text color, background color, bulleted list, numbered list, link, unlink, quote, and insert. A 'Send' button is located at the bottom left of the window, with a red hand cursor pointing to it.

### 3.3 Send requisition form to replenish damaged and expired products

The screenshot shows the 'Get Fresh Food' application interface. On the left is a navigation menu with options like Staff, Product, Promotion, Suppliers, Store, Orders, Inventory, Expired/Damaged products, Delivery Arrangement, and Shelves Replenish. The main area is titled 'Orders' and includes filters for 'Products Categories' and 'Select Suppliers'. A 'Related Results' section displays a requisition form for 'RQ\_10021 GFF'.

The requisition form is titled 'Requisition Form RQ\_10021 GFF' and is addressed to 'fermfresh.sales@co.sg'. It contains a table with the following data:

No	Product ID	Item Description	Damage Qty	Expired Qty	Remarks
1	CH01223456 846058987	Fresh eggs (12pc)		28 days	
2	CH01223456 84605898	Pottery Pasar Chicken (600g)			
3	CH01223456 84605898	Ayam Brand Tuna 200g			
4	CH01223456 84605898		3		
5	CH01223456 84605898		30		
6	CH01223456 84605898			10	
7	CH01223456 84605898		20		

At the bottom of the form, there is a 'Send' button highlighted with a red box. Above the form, there are 'Send Message' and 'Download' buttons. The interface also shows a user profile for 'Tom' and a notification badge with the number '21'.

### 4 View & update inventory

**Inventory**

Row:  Row1  Row2  Row3  Row4  .....  
 Shelf:  Shelf1  Shelf2  Shelf3  Shelf4  .....  
 Slot:  Slot1  Slot2  Slot3  Slot4  .....

Related Results Send Message Download

**INVENTORY LIST**

TOTAL INVENTORY VAL: \$4,649.00  
 INVENTORY ITEMS: 11  
 BIN COUNT: 6

SKU	DESCRIPTION	BIN #	LOCATION	UNIT	QTY	REORDER QTY	COST	INVENTORY VALUE	REORDER
<input type="checkbox"/> SP7875	Item 1	T345	Row4, Shelf1, Slot1	Each	20	10	\$30.00	\$600.00	
<input type="checkbox"/> TR87680	Item 2	T345	Row4, Shelf1, Slot1	Each	30	15	\$40.00	\$1,200.00	
<input type="checkbox"/> MK676554	Item 3	T5789	Row4, Shelf1, Slot1	Each	10	5	\$5.00	\$50.00	
<input type="checkbox"/> YE98767	Item 4	T9876	Row4, Shelf1, Slot1	Box (10 ct)	40	10	\$15.00	\$600.00	
<input type="checkbox"/> XR23423	Item 5	T098	Row4, Shelf1, Slot1	Each	12	10	\$26.00	\$312.00	
<input type="checkbox"/> PW98762	Item 6	T345	Row4, Shelf1, Slot1	Each	7	10	\$50.00	\$350.00	Reorder
<input type="checkbox"/> BM87684	Item 7	T349	Row4, Shelf1, Slot1	Each	10	5	\$10.00	\$100.00	
<input type="checkbox"/> BH67655	Item 8	T5789	Row4, Shelf1, Slot1	Each	19	10	\$3.00	\$57.00	
<input type="checkbox"/> WT98768	Item 9	T9875	Row4, Shelf1, Slot1	Package (5 ct)	20	30	\$14.00	\$280.00	Reorder
<input type="checkbox"/> TS3456	Item 10	T349	Row4, Shelf1, Slot1	Each	15	8	\$60.00	\$900.00	
<input type="checkbox"/> WDG123	Item 11	T349	Row4, Shelf1, Slot1	Each	25	15	\$8.00	\$200.00	

Select All  Add new line  Edit

1 2 3 4 5 ... 50 >

5 View & update expired and damaged products

The screenshot shows the 'Get Fresh Food' application interface. At the top, there is a green header with the logo and the text 'Get Fresh Food'. On the right side of the header, there is a user profile 'Tom', a notification bell with '21', and icons for chat and share. A left sidebar contains navigation options: Staff, Product, Product Form, Promotion, Suppliers, Store, Orders, Inventory, Expired Damaged products (highlighted), Credit Note, Waste Products, Delivery Arrangement, and Shelves Replenish. The main content area is titled 'Expired Damaged Products' and features three filter dropdowns: 'Row' (with a red hand cursor pointing to 'Row4'), 'Shelf' (with 'Shelf1' selected), and 'Slot' (with 'Slot1' selected). Below these filters are three columns of checkboxes for 'Row', 'Shelf', and 'Slot'. A 'Related Results' section includes 'Send Message' and 'Download' buttons. The main data table is titled 'Expired and Damaged Products' and has tabs for 'INVENTORY PICK LIST' and 'BIN LOOKUP'. The table columns are SKU, DESCRIPTION, BIN #, UNIT, QTY, Supplier, and Damaged / Expired. The table contains 11 rows of product data, with rows 6 and 9 highlighted in yellow. At the bottom, there are controls for 'Select All', 'Add new line', 'Edit', and a pagination bar showing page 1 of 50.

SKU	DESCRIPTION	BIN #	UNIT	QTY	Supplier	Damaged / Expired
SP7875	Item 1	T345	Each	12	White Tea	Damaged
TR87680	Item 2	T345	Each	10	Fresh.co	Damaged
MK676554	Item 3	T5789	Each	11	Pasar	Expired
YE98767	Item 4	T9876	Box (10 ct)	8	Nutrella	Damaged
XR23423	Item 5	T098	Each	9	Happy Cow	Expired
PW98762	Item 6	T345	Each	2	Fern Fresh	Damaged
BM87684	Item 7	T349	Each	10	Xai Xai	Damaged
BH67655	Item 8	T5789	Each	6	Tri Shaw	Expired
WT98768	Item 9	T9875	Package (5 ct)	7	Home Ready	Damaged
TS3456	Item 10	T349	Each	2	Special	Expired
WDG123	Item 11	T349	Each	3	Golden Umbrella	Expired

## 6 View credit note

The screenshot shows the 'Get Fresh Food' application interface. The main content area displays a 'Credit Note' section with a table of 'Related Results'. A modal window is open, showing a detailed view of a credit note.

**Related Results Table:**

	#Invoice No	Supplier
<input checked="" type="checkbox"/>	1000003	Fresh Market Co. <a href="#">View</a>
<input checked="" type="checkbox"/>	1000100	Fresh Market Co. <a href="#">View</a>
<input checked="" type="checkbox"/>	1000105	Fresh Market Co. <a href="#">View</a>
	.....	.....

**CREDIT NOTE Modal Details:**

**CREDIT NOTE**      CREDIT NOTE #      US-07  
 CREDIT NOTE DATE      11/02/2019  
 P.O.#      23120019  
 DUE DATE      26/02/2019

FROM: East Repair Inc.      1912 Harvest Lane, New York, NY 12210  
 CUSTOMER: Get Fresh Food      2 Court Square, New York, NY 12210  
 SHIP TO: John Smith      3787 Pineview Drive, Cambridge, MA 02139  
 CREDIT NOTE TOTAL: **\$154.06**

DESCRIPTION	UNIT PRICE	QTY	AMOUNT
Song He Jasmine Rice	100.00	1	100.00
Nature Oil (Soya)	15.00	2	30.00
Little Spice	5.00	3	15.00
SUBTOTAL			145.00
Sales Tax 6.25%			9.06
TOTAL			<b>\$154.06</b>

TERMS & CONDITIONS:  
 Payment is due within 15 days.  
 Please make checks payable to: East Repair Inc.

7 View waste products

**GET Fresh Food**

Tom 21

**Waste Products**

Staff Product

Product Form Promotion Suppliers Store Orders Inventory Expired Damaged products Credit Note Waste Products Delivery Arrangement Shelves Replenish

Row Shelf Slot

Row1 Row2 Row3 Row4

Shelf1 Shelf2 Shelf3 Shelf4

Slot1 Slot2 Slot3 Slot4

Send Message Download

**Waste Products**

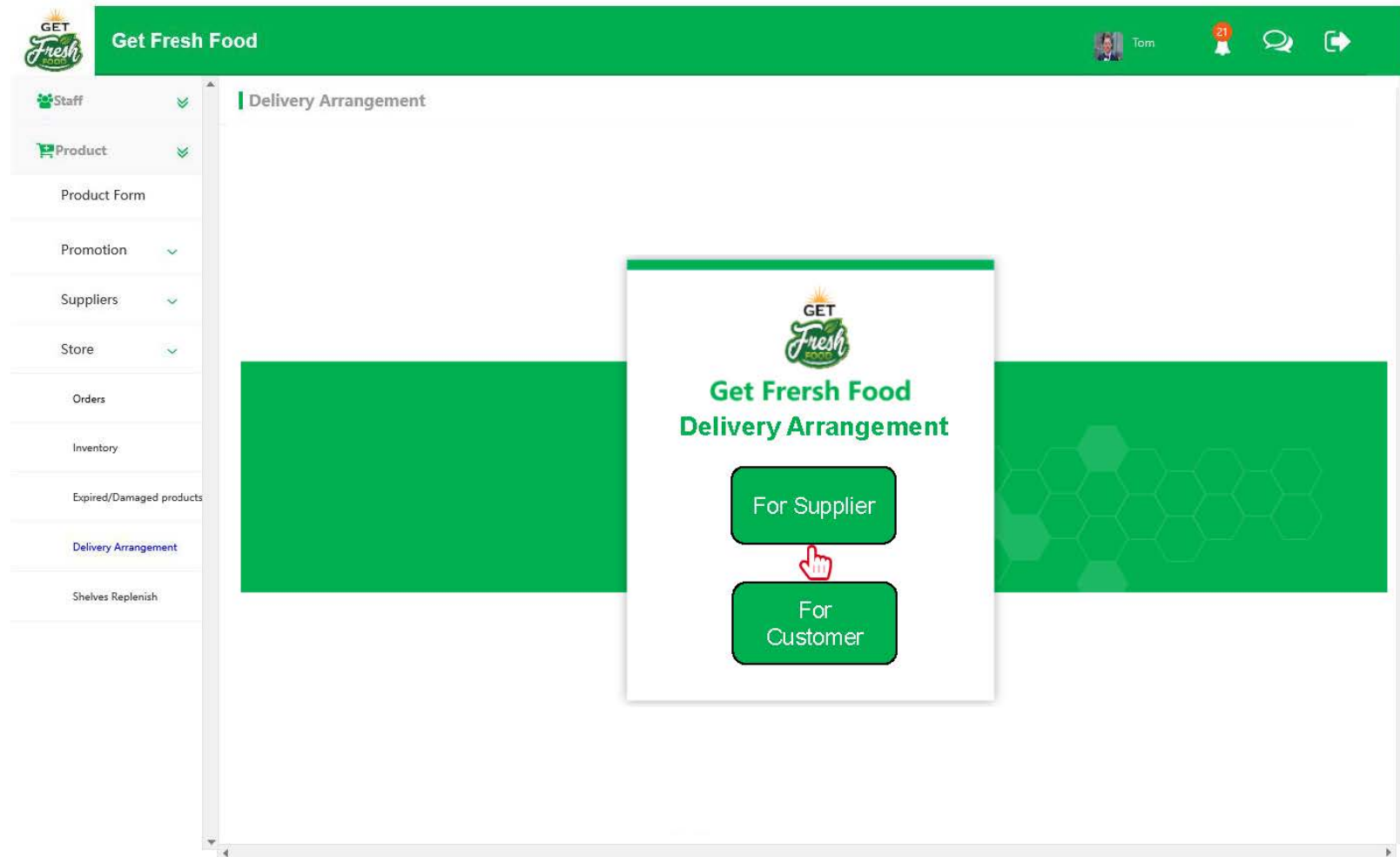
INVENTORY PICK LIST BIN LOOKUP

SKU	DESCRIPTION	BIN #	UNIT	QTY	Supplier	Damaged / Expired
<input type="checkbox"/> SP7875	Item 1	T345	Each	12	White Tea	Damaged
<input type="checkbox"/> TR87680	Item 2	T345	Each	10	Fresh.co	Damaged
<input type="checkbox"/> MK676554	Item 3	T5789	Each	11	Pasar	Expired
<input type="checkbox"/> YE98767	Item 4	T9876	Box (10 ct)	8	Nutrella	Damaged
<input type="checkbox"/> XR23423	Item 5	T098	Each	9	Happy Cow	Expired
<input type="checkbox"/> PW98762	Item 6	T345	Each	2	Ferm Fresh	Damaged
<input type="checkbox"/> BM87684	Item 7	T349	Each	10	Xai Xai	Damaged
<input type="checkbox"/> BH67655	Item 8	T5789	Each	6	Tri Shaw	Expired
<input type="checkbox"/> WT98768	Item 9	T9875	Package (5 ct)	7	Home Ready	Damaged
<input type="checkbox"/> TS3456	Item 10	T349	Each	2	Special	Expired
<input type="checkbox"/> WDG123	Item 11	T349	Each	3	Golden Umbrella	Expired

Select All Add new line Edit

1 2 3 4 5 ... 50 >

## 8 Update delivery arrangement



## 8 Update deliver arrangement

**Get Fresh Food**

Delivery Arrangement (Supplier)

Products Categories | Select Suppliers | Order Date | Delivery Date

Time	Monday	Tuesday	Wednesday	Thursday	Friday
8:00 - 9:00	80-242 A BH 150		80-242 A BH 150		
9:00 - 10:00					
10:00 - 11:00		80-235 A WEH 5310		80-235 A WEH 5310	
11:00 - 12:00					
12:00 - 1:00					
1:00 - 2:00					
2:00 - 3:00		79-449 A SH 212		79-449 A SH 212	
3:00 - 4:00	79-338 A DH 1217	79-334 A PH 226C	79-338 A DH 1217	79-334 A PH 226C	
4:00 - 5:00					
5:00 - 6:00					

Search keywords

- Pasar 9.0 units
- Marsh 9.0 units
- Sakura 12.0 units
- Royal Thai 9.0 units
- Dynamo 9.0 units

total: 48.0 units

1 2 3 4 5 ... 50

9 View and update shelves replenish

**Shelves Replenish**

Display Row:  Row1  Row2  Row3  Row4  .....

Display Shelf:  Shelf1  Shelf2  Shelf3  Shelf4  .....

Promoter ID:  S002093  S002094  S002095  S002096  .....

**Related Results**

No	Inventory ID	Item Description	Damage Qty	Expired Qty	Order Qty	Approve	Remarks
1	CN01223456 846058987	Fresh eggs (12pcs)			30	✓	
2	CN01223456 84605898	Poltary Pasar Chichen (600g)			10	✓	
3	CN01223456 84605898	Ayam Brand Tuna 200g			30	✗	Need to wait next week delivery
4	CN01223456 84605898		3			✓	
5	CN01223456 84605898		30			✗	Supplier OOS
6	CN01223456 84605898			10		✓	
7	CN01223456 84605898		20			✓	

Page 1 of 50



# Booking / Updating / Optimising Delivery Trip Screen

Email Template (for Customer)  
for  
Out-of-stock products

UPDATES: (Order# GFF1234)

 **Cheng Jun Long**  
To:  Cheng Jun Long

Dear *Username*,

Good Day!

The following item(s) that were checked out from your cart is currently out of stock:

1. *###\*\*\$\$* ----- *5 Pcs*
2. *%%^^&&* ----- *2 Pcs*

We apologize for the inconvenience caused.  
We will be expecting to receive the restocks on *DD/MM/YYYY*.  
Our Finance team will be contacting you for the refund separately.  
Should you have any questions, please feel free to [contact us](#)

We will therefore proceed to deliver the rest of the items that were checked out from your cart.

You can track the delivery update in the link below:-  
<https://getfreshfood.com/deliverystatus/AAQkADg1MDZIZWM3LTkxNDUtNDg>

Thank you for your kind understanding.

Yours Sincerely,  
*Operations Team*

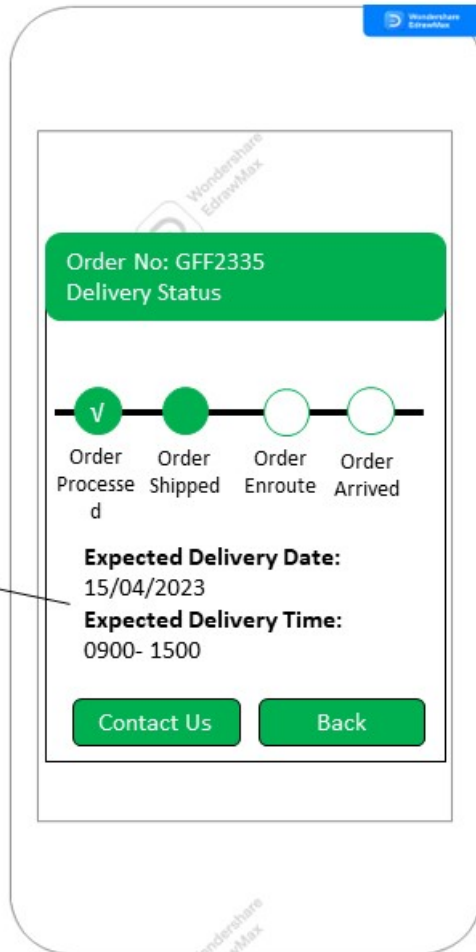
 Reply

 Forward

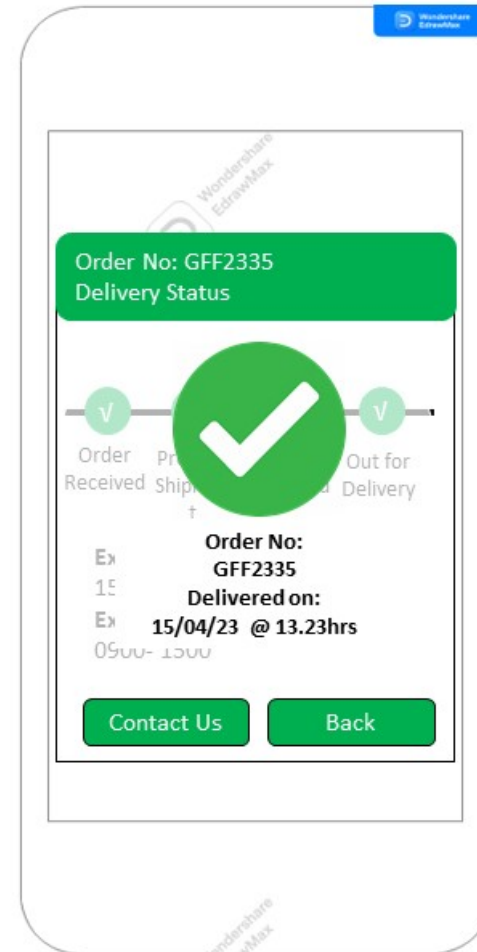
Customer screen to track their order status

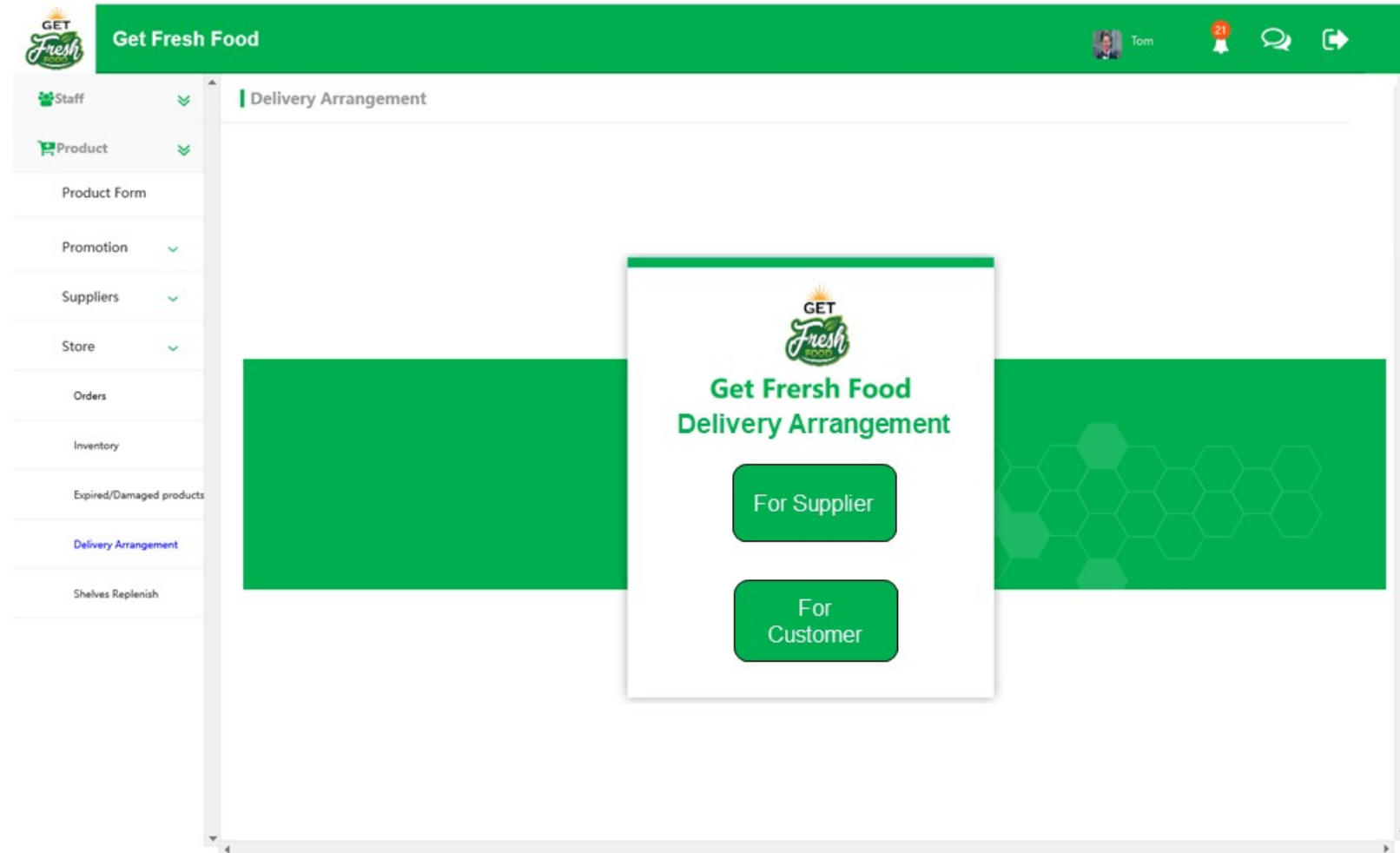
Expected Delivery Date will be updated according to the progress of delivery

This can be updated real time from the Store Delivery System



Customer screen when order has been Delivered





**GET Fresh Food**

Tom

**Delivery Arrangement (Customer)**

Order No.: **GFF2335** Retrieve

Delivery Address: **Star Vista Singapore XXXXXX**

Preferred Delivery Date: **15/04/2023**

Preferred Delivery Time: **0900 - 1500**

Customer Contact Details:  
**Name: Alan Tan**  
**H/P: 9345 7890**  
**Email: tom.t@gmail.com**

See Planned Route

Annotations:

- Storeman key in the Order No and click on "Retrieve" Customer delivery info will auto-populate below
- Storeman screen to check delivery schedule
- Should the address be > 5km within store radius, a message will pop up
- Click on this to see the planned schedule for this order

**Get Fresh Food**

Tom

21

Staff

Product

Product Form

Promotion

Suppliers

Store

Orders

Inventory

Expired/Damaged products

Delivery Arrangement

Shelves Replenish

**Delivery Arrangement (Customer)**

Date of Trip: 15/04/2023

Driver Details: John Tan  
H/P: 9234 5678

Start: GetFreshFoods

1st: SIT@Dover (Order No: GFF2556)

Next: Star Vista (Order No: GFF2335)

End: Utown Residence (Order No: GFF3557)

Edit Plan

Est. Time Elapsed: 2h 54mins

Back

Date of Delivery Displayed

Deliveryman details Displayed

Click on the order no to view the Customer details of the order

Order No: GFF2335  
Customer: Alan Tan  
Contact: 9345 7890  
Delivery Schedule: 15/04/2023  
Delivery Time: 0900-1500  
Delivery Status: Pending

All the trips for the day displayed here

Click on Edit Plan to manually change the planned route  
**NOTE: Route Edit is only available 24hours prior to the Day of Delivery**

The screenshot displays the 'Get Fresh Food' application interface. The top navigation bar is green and contains the 'GET Fresh Food' logo, a user profile for 'Tom', and notification, chat, and share icons. A left sidebar menu lists various system functions: Staff, Product, Product Form, Promotion, Suppliers, Store, Orders, Inventory, Expired/Damaged products, Delivery Arrangement (highlighted), and Shelves Replenish. The main content area is titled 'Delivery Arrangement (Customer)' and features a map of Singapore with a 5km radius circle centered on the delivery address. The form includes the following fields and annotations:

- Order No.:** GFF2336 (with a 'Retrieve' button)
- Delivery Address:** Junction 8, Singapore 579837
- Preferred Delivery Date:** 15/04/2023
- Preferred Delivery Time:** 0900 - 1500
- Customer Contact Details:** Name: Alan Teng, H/P: 9345 0987, Email: tom.t@gmail.com

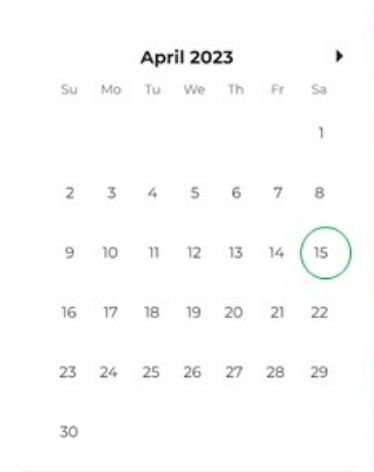
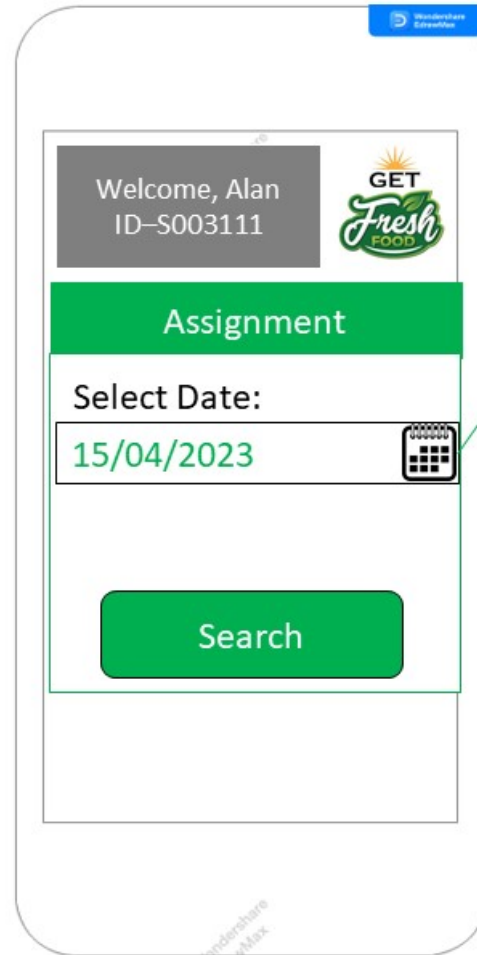
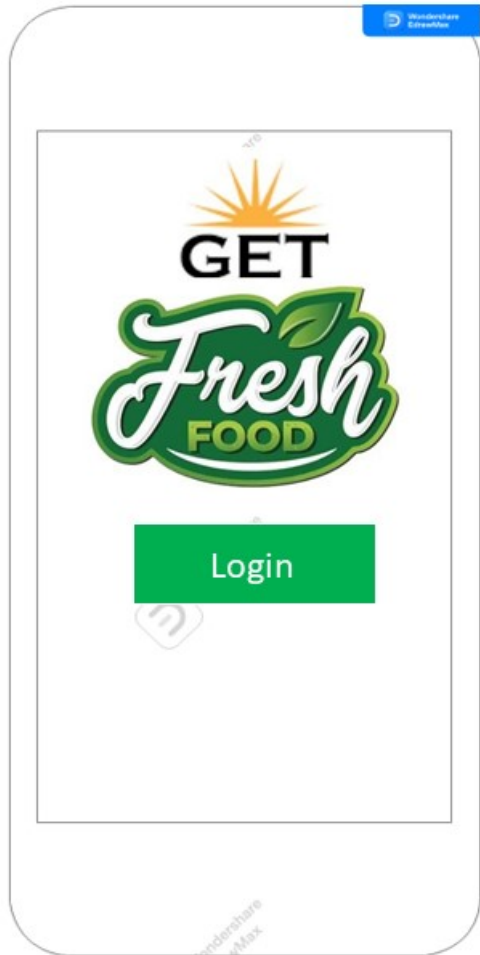
Annotations on the right side of the map provide context for the system's logic:

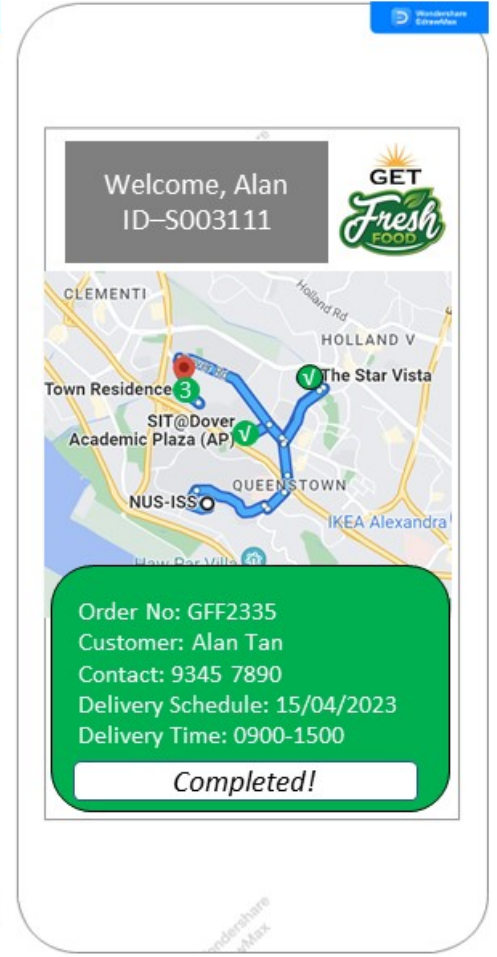
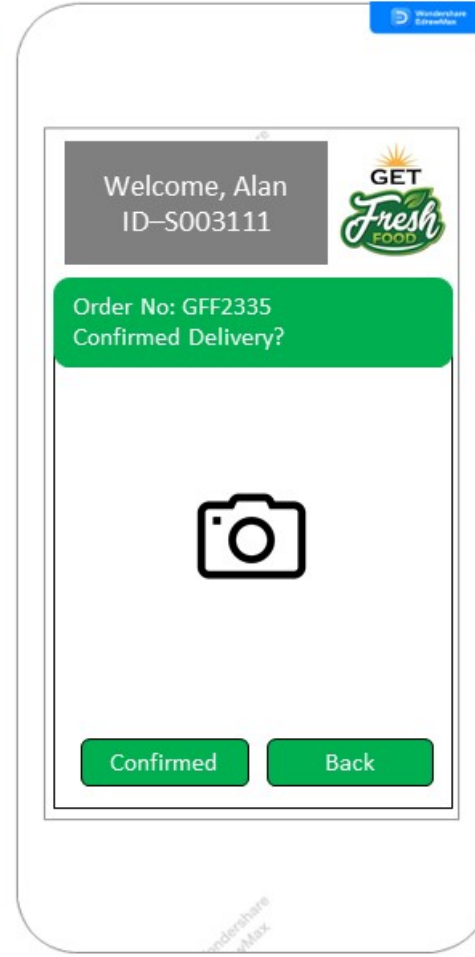
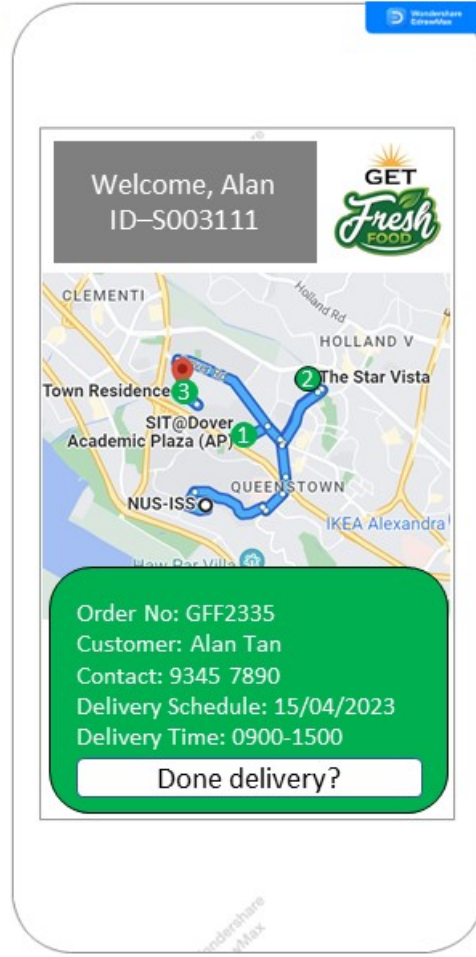
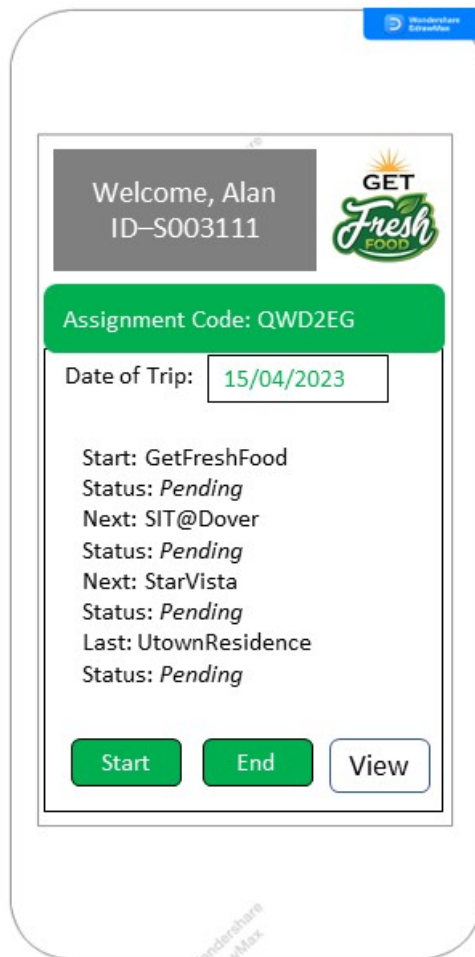
- 'Should the Delivery address > 5km Store radius' (referring to the 5km radius circle on the map)
- 'System will automatically make a booking with 3rd party Delivery Service' (referring to the 'Contact 3rd Party' button)
- 'Should storeman has any queries, he/she can click on the Contact 3rd Party.' (referring to the 'Contact 3rd Party' button)

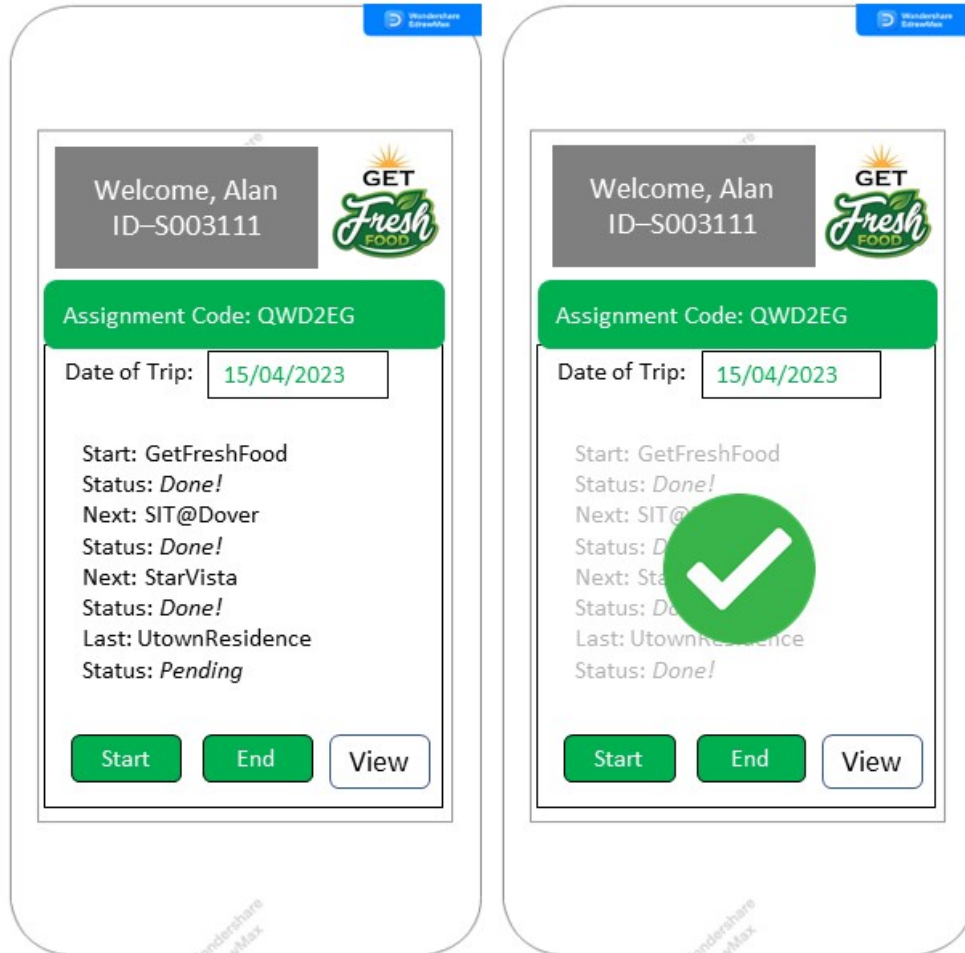
A central green callout box contains the following text:

Order No: GFF2336  
Delivery Address > 5km radius  
Order delivery information has been sent to 3rd party Delivery service  
Contact 3rd Party

Mobile Screen for Deliveryman (Alan Tan)



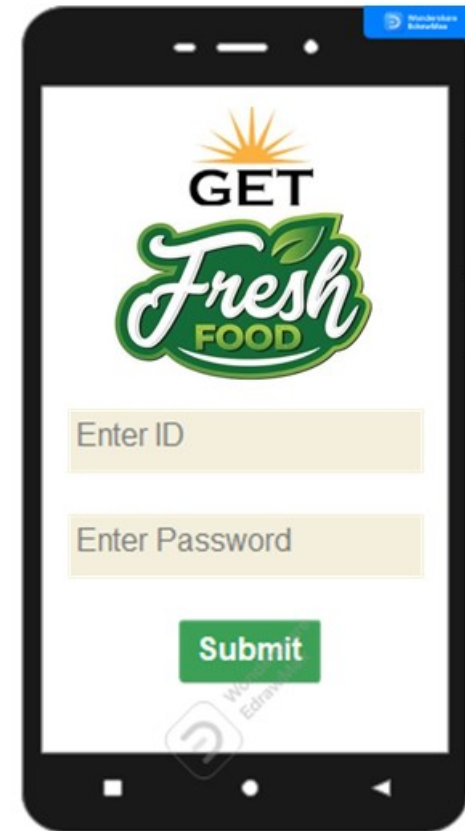
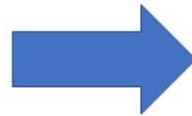
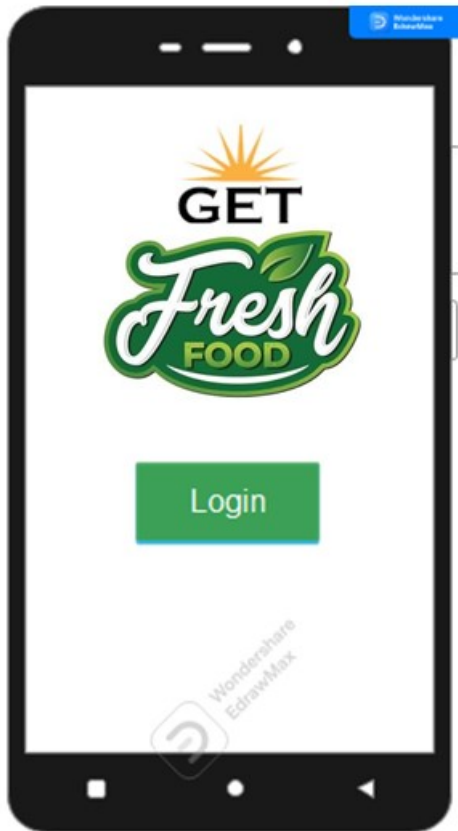




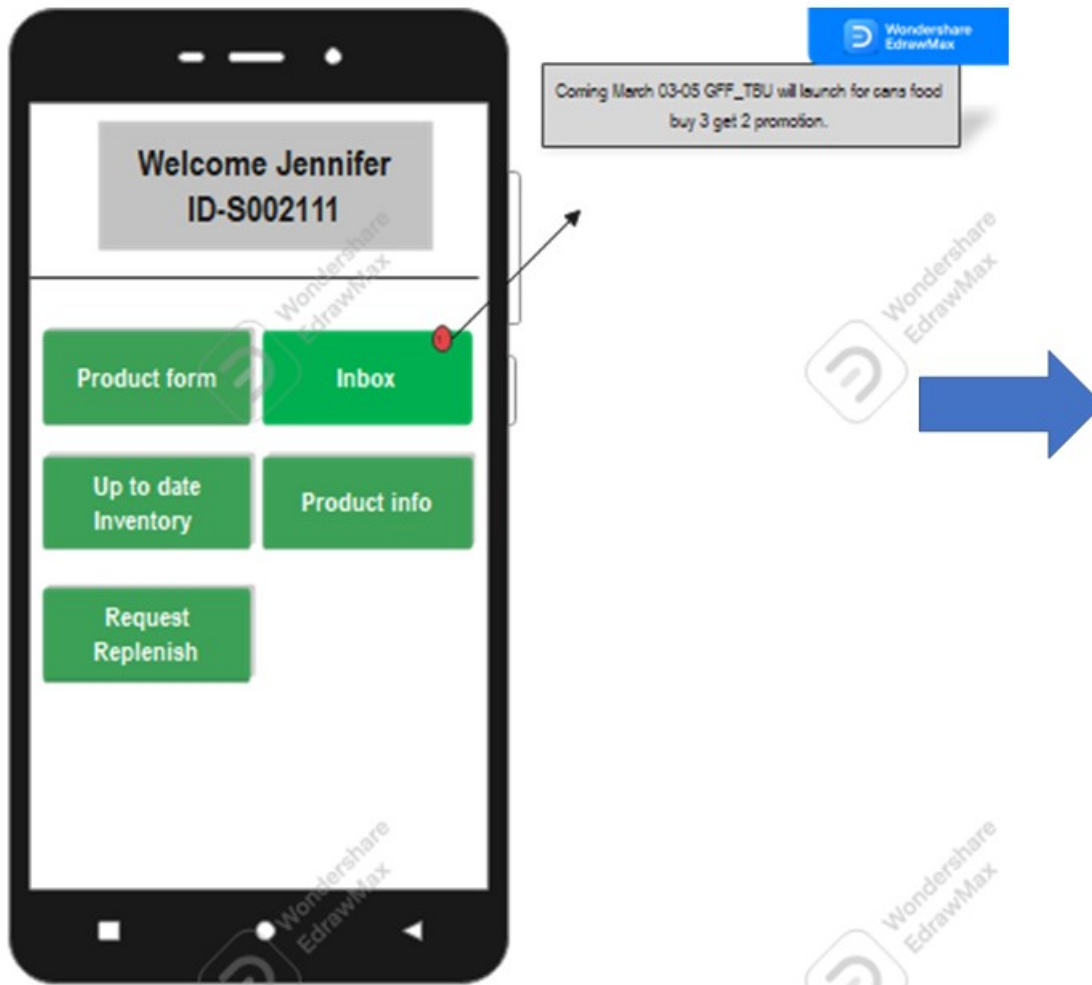


# Promoter Screen

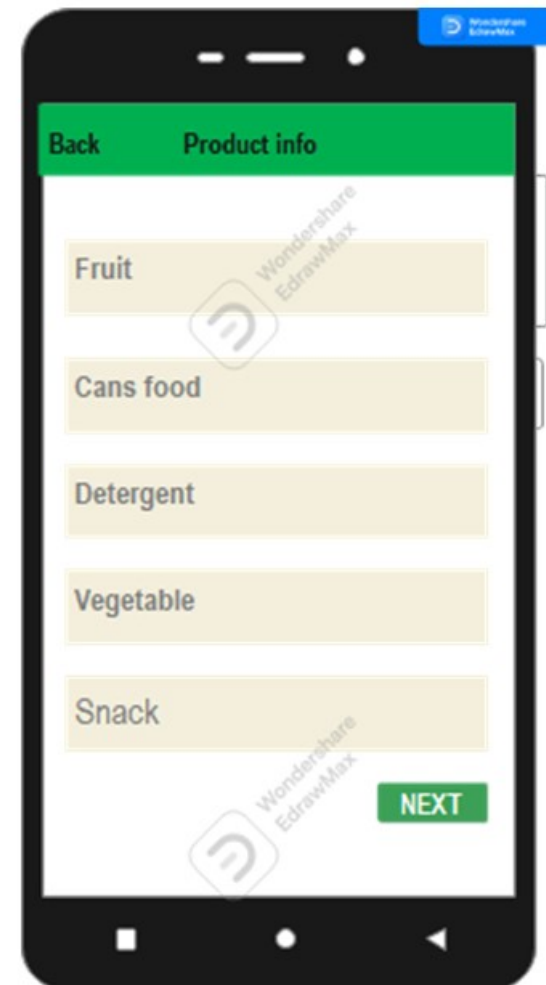
## 1. Log in



## 2. View promotion notification

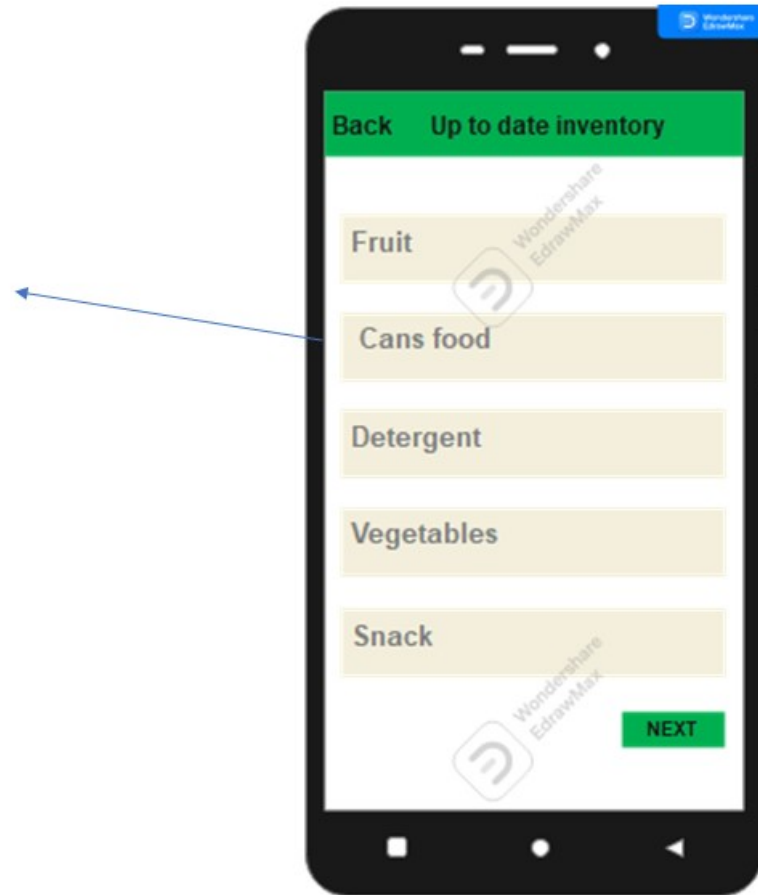


## 3. View Product info

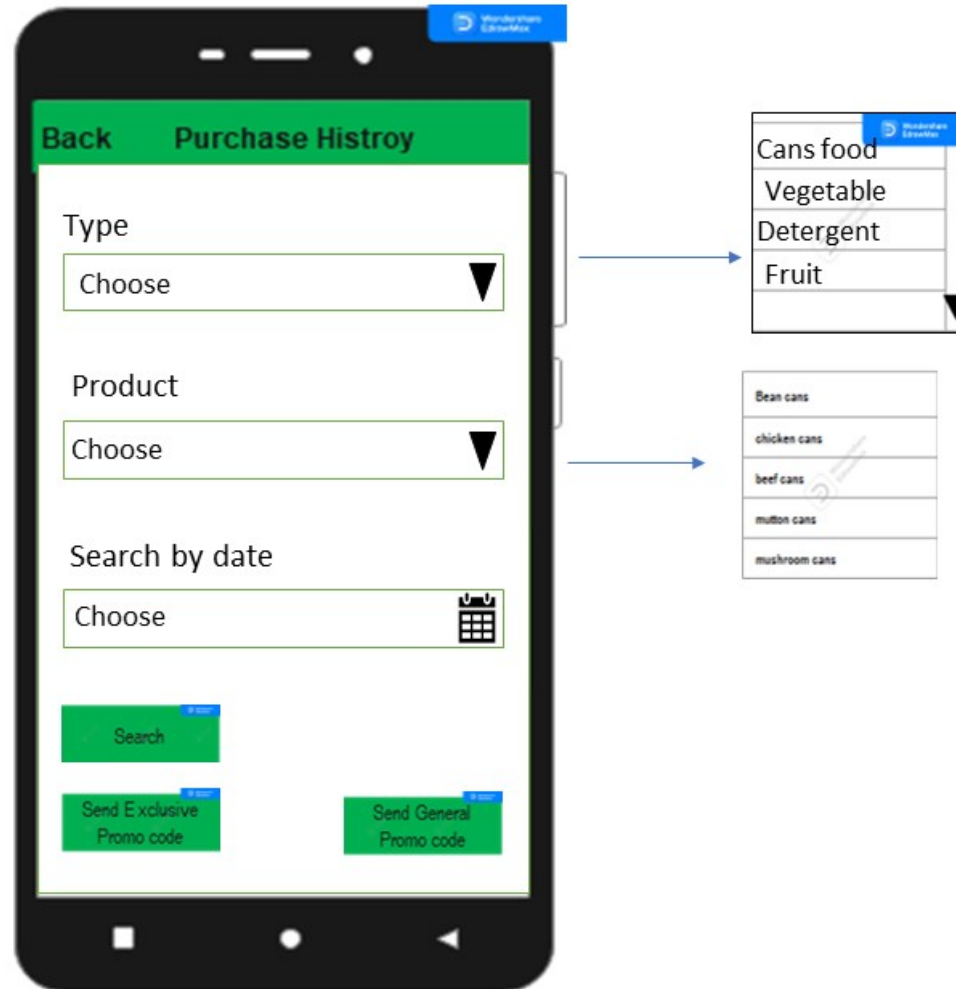


#### 4. View up to date inventory

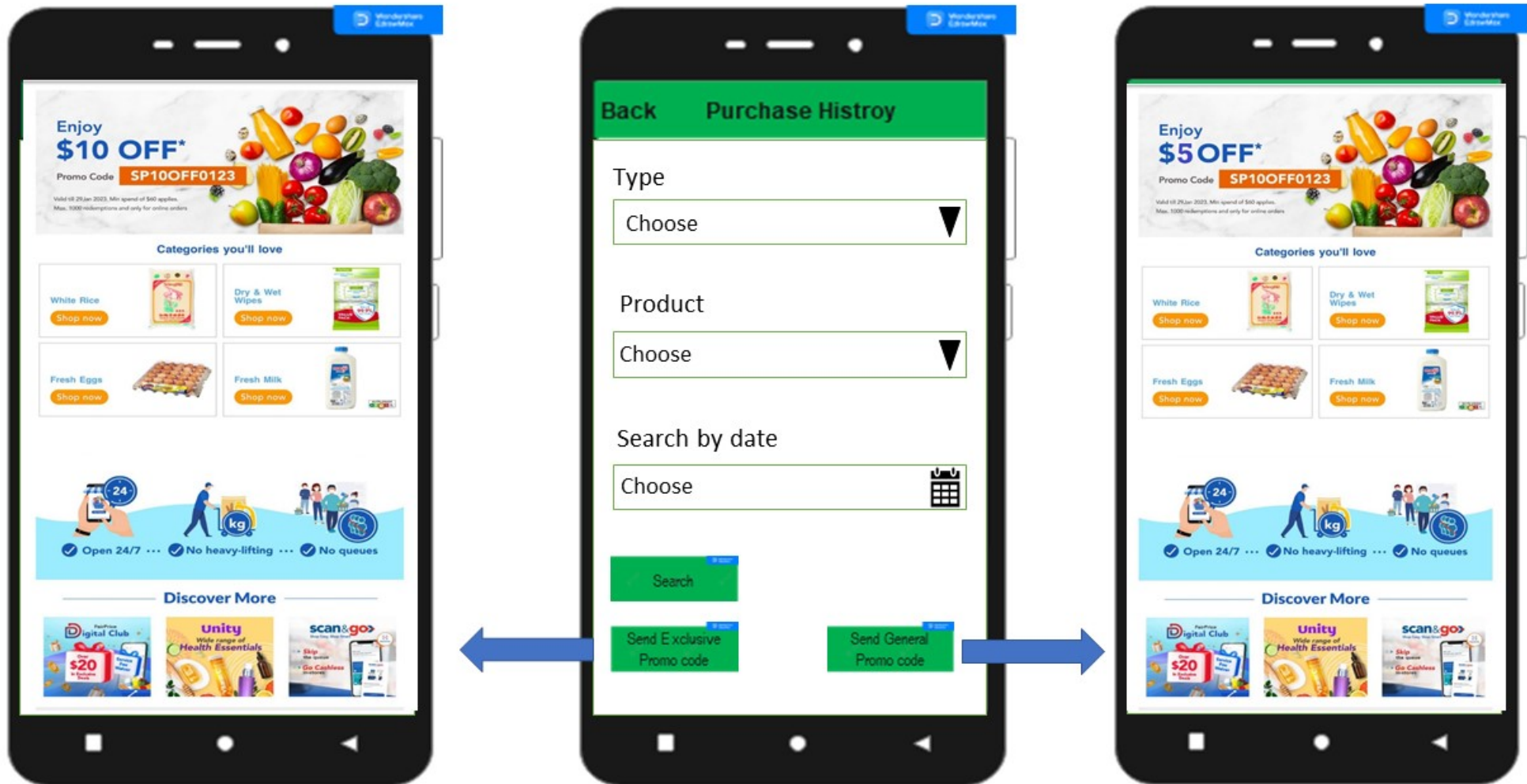
Bean cans	
chicken cans	100
beef cans	68
mutton cans	70
mushroom cans	30



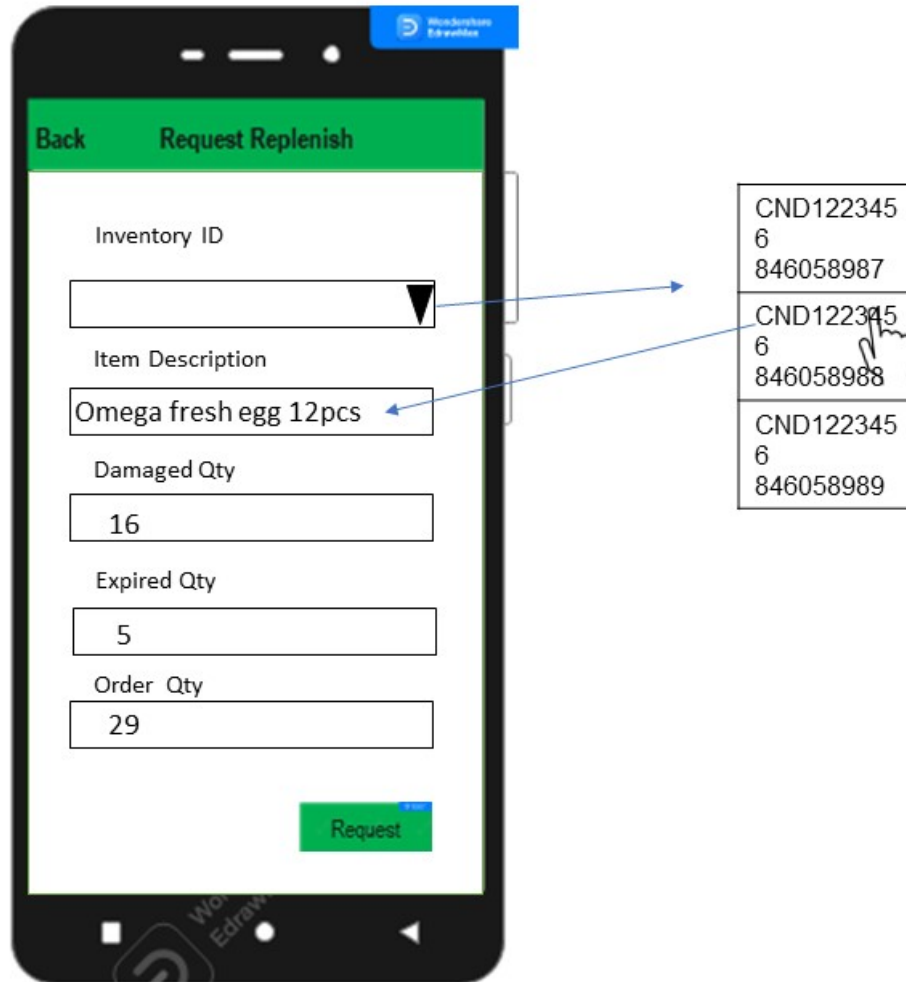
5. Search purchase history of customer



### 6. Send Promocode to customer based on purchase history

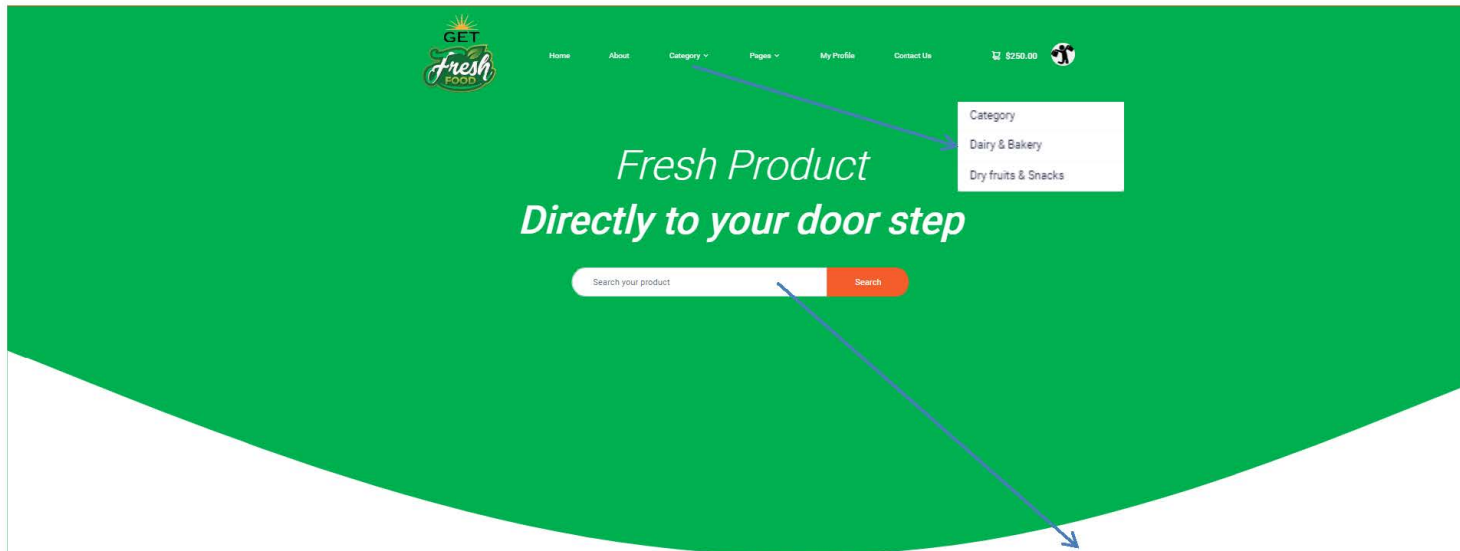


### 7.Sent Replenish form to store man

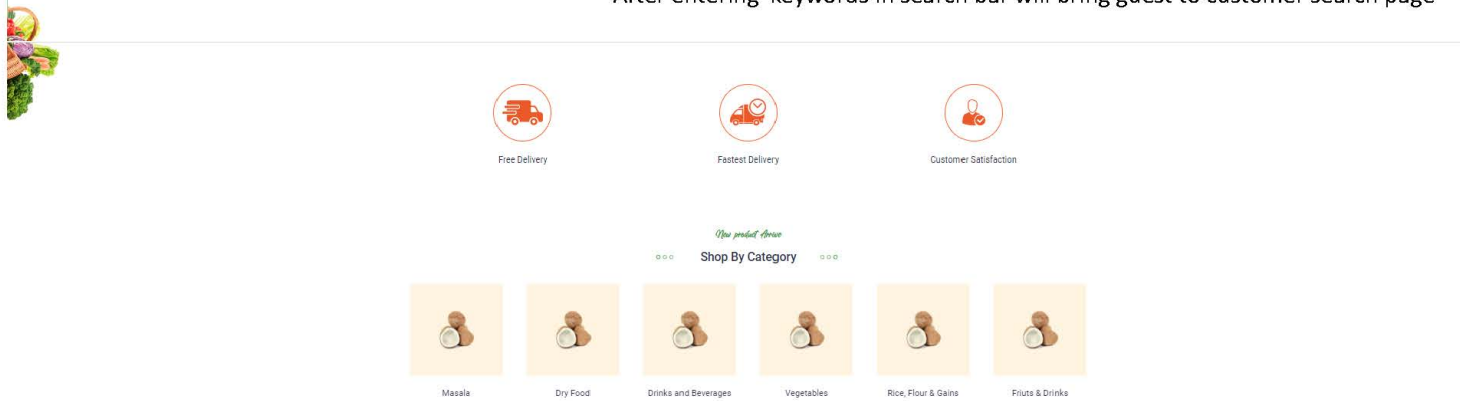




# Customer Screen



After entering keywords in search bar will bring guest to customer search page



## Customer Login



[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾

[My Profile](#)

[Contact Us](#)

 \$25.00



## Sign In



[Forget Password?](#)

Sign In

If Already have account? [Create Account](#)

## Customer Registration



[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾

[My Profile](#)

[Contact Us](#)

 \$250.00



### Sign Up



If Already have account? [Sign In Now](#)

### Customer Login

The Customer Login screen features a green background with the 'GET Fresh FOOD' logo at the top center. Below the logo is a white login form with two input fields: 'Enter Username' and 'Enter Password'. A 'Forgot Password?' link is positioned to the right of the password field. An orange 'Sign In' button is centered below the form. At the bottom of the form, there is a link: 'If already have account? Create Account'. A blue 'WonderShare EdrawMax' watermark is visible in the top right corner of the screen.

### Customer Registration

The Customer Registration screen features a green background with the 'GET Fresh FOOD' logo at the top center. Below the logo is a white registration form with four input fields: 'Full Name', 'Enter Your Email', 'Enter Mobile Number', and 'Enter Password'. An orange 'Sign Up' button is centered below the form. At the bottom of the form, there is a link: 'If already have account? Sign In Now'. A blue 'WonderShare EdrawMax' watermark is visible in the top right corner of the screen.

### Customer search( List View)

**GET Fresh FOOD**

Home About Category Pages My Profile Contact Us \$250.00

Short by latest  
10  
25  
50  
All

Your Search Result Here  
Showing result 1-22 of 22 result

Rating based on other customers

View as List View as Grid


Categories

- > Dairy & bakery 3
- > Vegetables 2
- > Fast Food 3
- > Food & Drinks 4
- > Fresh Chicken 1
- > Special Diet 12


Product Name	Price	Rating	Action
Breakfast Meal Snacks Soya Milk	\$10.00	★★★★☆	→ Add To Cart
Breakfast Meal Snacks Goats Milk	\$10.00	★★★★☆	→ Add To Cart
Breakfast Meal Snacks Meiji Deluxe Fresh Milk	\$10.00	★★★★☆	→ Add To Cart
Breakfast Meal Snacks Cow Milk	\$10.00	★★★★☆	→ Add To Cart

Store purchase  
Check in-store stock

## Customer search (Grid View)



[Home](#)
[About](#)
[Category ▾](#)
[Pages ▾](#)
[My Profile](#)
[Contact Us](#)

🛒 \$250.00



---

### Dairy & Bakery

Showing result 1-22 of 22 result

Short by latest ▾

🛒 [View as Grid](#)




Breakfast Meal Snacks  
**Pasta**  
\$10.00

→ [Add To Cart](#)

★★★★★

📍 [Store purchase](#)  
[Check in-store stock](#)



Breakfast Meal Snacks  
**Goats Milk**  
\$10.00

→ [Add To Cart](#)

★★★★★

📍 [Store purchase](#)

#### Categories

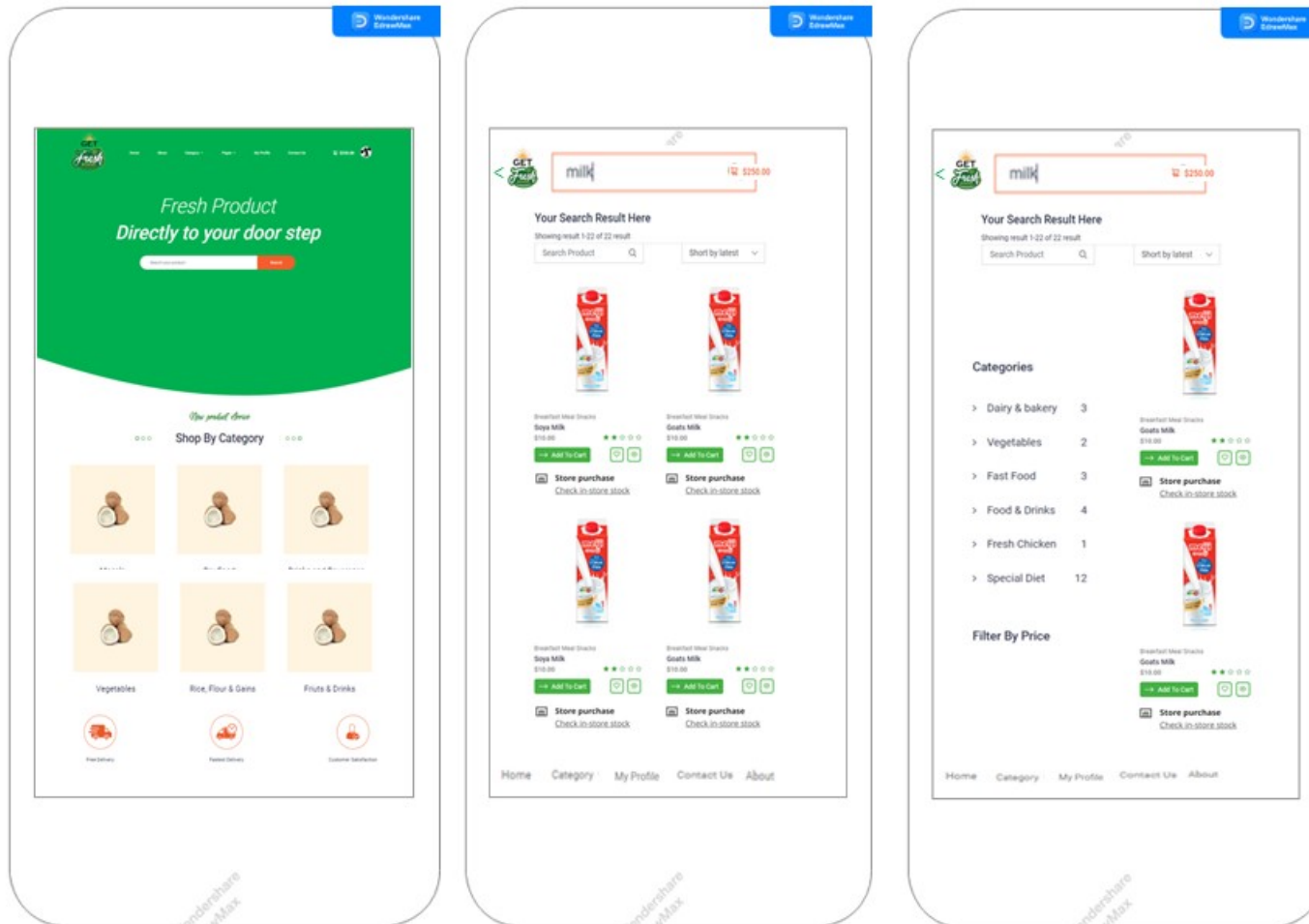
- > Dairy & bakery 3
- > Vegetables 2
- > Fast Food 3
- > Food & Drinks 4
- > Fresh Chicken 1
- > Special Diet 12

#### Filter By Price

🎛️ [Filter](#) Price: 0-29

↙ [Filter by price search](#)

### Customer search( List View)





## Customer product finder

[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾

[My Profile](#)

[Contact Us](#)

\$250.00



### Check stock in other stores



Use my current location



#### [Jurong East GetFreshFood](#)

239 Jurong East St 24, #01-106, Singapore 600249

✓ Available at this store

[Set as my store](#)



#### [Tampines GetFreshFood](#)

16 Tampines Walk, #B1-01 Our Tampines Hub,  
Singapore 528523

✗ Out of Stock

[Set as my store](#)



#### [Punggol GetFreshFood](#)




86 Punggol Central, #B2-32, Singapore 828761

✓ Available at this store

[Set as my store](#)

### Customer shopping cart

### Shopping Cart

Product	Price	Quantity	Total
 <p>Chips Size: 30c.m</p>	\$5.00	- 1 +	\$5.00
 <p>Chips Size: 30c.m</p>	\$5.00	- 2 +	\$10.00
 <p>Chips Size: 30c.m</p>	\$5.00	- 1 +	\$5.00

Keep for Later

Save to favorites

Keep for Later

Keep for Later

Have a promocode



Enter Spacial Note

Order summery

Sub Total	\$20.00
GST	\$1.60
<b>Total Price</b>	<b>\$21.60</b>



< Countinue shopping

Clicking on update quantity will calculate the total price

Customer guest checkout

**Checkout Shopping Cart**

Already have account, login? [Login to profile if have an account](#)

**Contact information**

Email

**Shipping Address**

First Name  Last Name

Home(Optional)

Address

Apartment, road, Area

Singapore

Select your shipping option:

**Click & Collect**

**Collect it today from 5:10pm!**  
2 hours Click & Collect (Available for orders placed before 7:30pm) Free

**Collect it from Sun, 12 March**  
Standard Click & Collect Free

**Get it delivered**

**Standard \$0.00** (next day delivery, subject to driver's availability) (9am to 3pm, 3pm to 9pm)

Premium +\$5.00 (same day delivery, order placed before 5pm, subject to driver's availability)

**Payment:-**

Debit Card

Credit Card

QR code mobile payment

Keep me up to date on news and offers

I have read and agree to the website [term & condition](#)

Place Order

**Add New Payment Method** x

Card Number  MM/YY  CVV

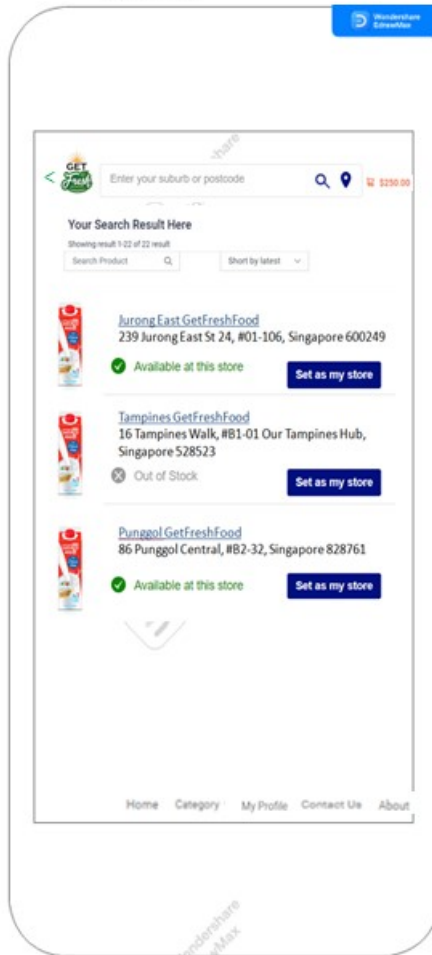
Cardholder Name

Set as default

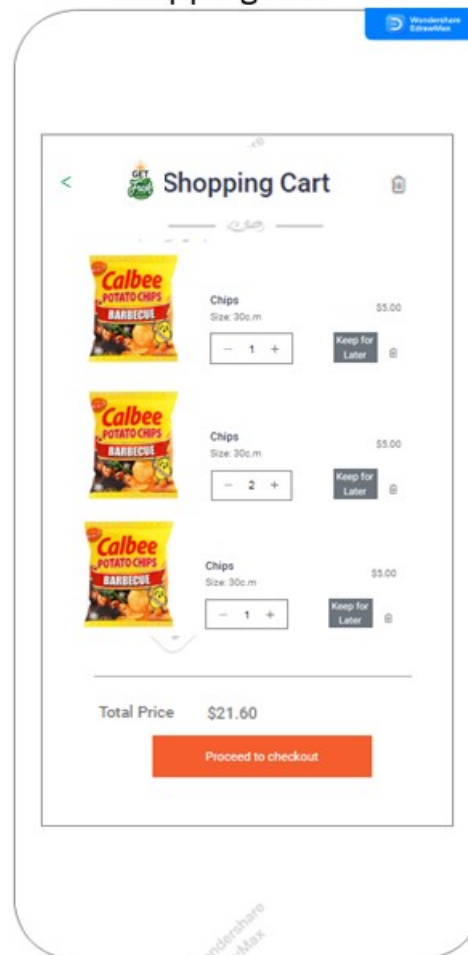
Save

Sub Total	\$150.00
Tax	\$25.00

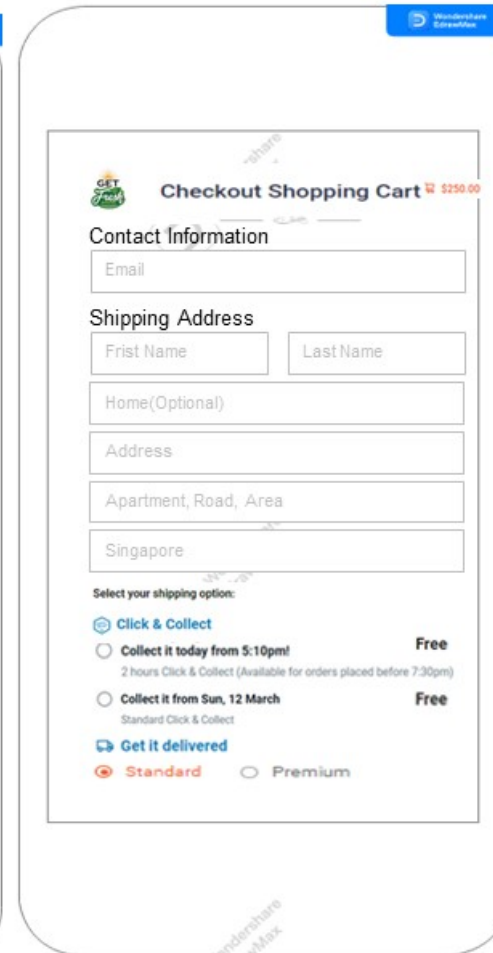
### Customer product finder



### Customer shopping cart



### Customer guest checkout



## Customer checkout payment



[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾

[My Profile](#)

[Contact Us](#)

\$250.00



### Review Your Order

#### Delivery Address

John Edwards  
51 Mun Keng Terrace  
Singapore 459934

#### Delivery Schedule

7 March 2023  
6pm - 9pm

#### Payment Method

John Edwards  
xxxx-xxxx 6374

#### Order Summary



USA Red Delicious Apple  
907 g

1 × \$4.95

#### Apply Promo Code

Promo Code

[Apply](#)



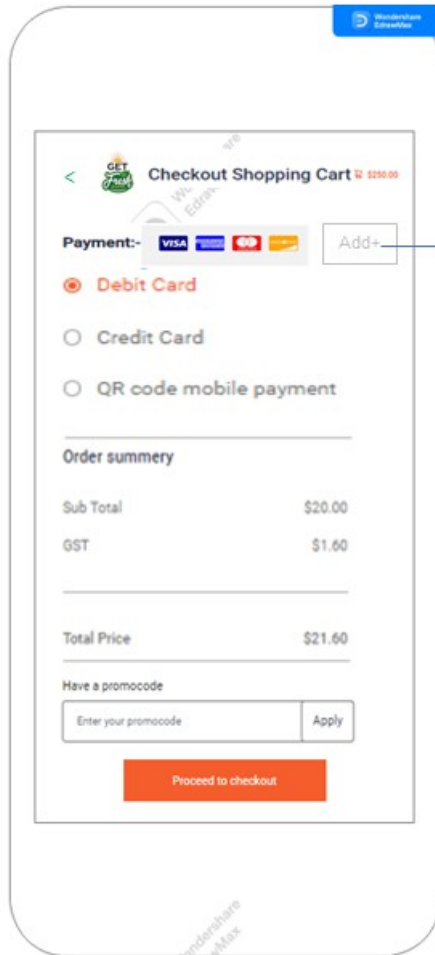
Delivery address same as Billing address

#### Payment Summary

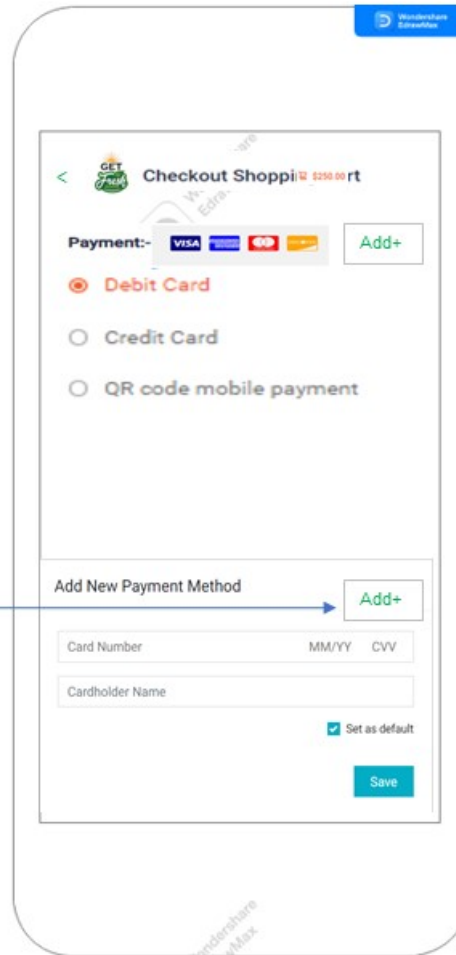
[Back](#)

[Pay & Place Order](#)

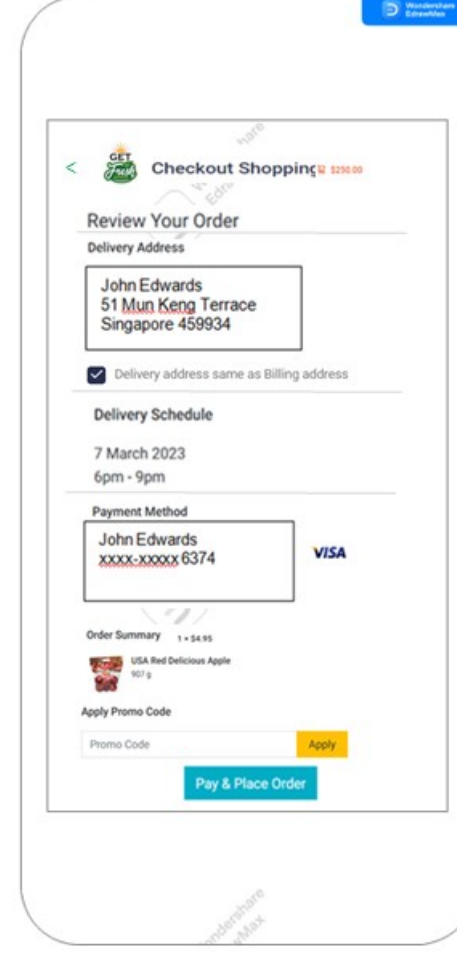
### Customer guest checkout



### Customer guest checkout



### Customer checkout payment



## Customer Profile Update



Home

About

Category ▾

Pages ▾

My Profile

Contact Us

\$250.00



Click to receive exclusive member promo codes to user's email

Subscribe to store membership

### Account

Profile

My Past Purchases

Address

Logout

### Profile Setting



Username: JohnEd

Email: john@gmail.com

Mobile: +65 93829382

Landline: 6 7282910

First name: John

Last name: Edwards

Company name:

Website:

Alternate Mobile Number:

Gender: Male

Your Bio: A down to earth guy who loves online grocery shopping

Update

### Customer Past Purchases



Home About Category Pages My Profile Contact Us \$250.00

#### Account

- Profile
- My Past Purchases**
- Address
- Logout

#### My Past Purchases List



**Kashmiri Orange /2kg**  
Green vegetables  
Delivered by supermarket  
Price:-\$65

Reorder past purchase



**Himachal Orange**  
Green vegetables  
Delivered by supermarket  
Price:-\$65

Reorder past purchase



**Kashmiri Orange /2kg**  
Green vegetables  
Delivered by supermarket  
Price:-\$65

Reorder past purchase

#### Date of delivery for past purchases

Delivery date 26 sept 2021  
Your order has delivered

Delivery date 30 sept 2021  
Your order has delivered

Delivery date 22 sept 2021  
Your order has delivered

Click to reorder and checkout from respective past purchases

## Customer current order tracking

The screenshot shows the 'GET Fresh FOOD' website interface. At the top, there is a navigation bar with links for Home, About, Category, Pages, My Profile, and Contact Us. A shopping cart icon shows a total of \$250.00. Below the navigation bar, the 'Account' section is visible on the left, with 'My Orders #Y34XDHR' selected. The main content area displays two order items:

- Kashmiri Tomato /2kg**: Green vegetables, Price:- \$65, Delivery date 26 April 2023. The delivery status is 'Preparing Order', and there is a 'Track delivery' button. A blue arrow points to this button with the text 'Click on 'Track Delivery' button to get to delivery details page'.
- Himachal Apple**: Green vegetables, Delivered by supermarket, Price:- \$65, Delivery date 10 April 2023. The delivery status is 'Shipment booked', and there is a 'Track delivery' button.

## Customer delivery tracking



Home

About

Category ▾

Pages ▾

My Profile

Contact Us

🛒 \$250.00



### Account

👤 Profile

🛒 My Past Purchases

📦 My Orders Tracking

📍 Address

🚪 Logout

ORDER #Y34XDHR

Expected Arrival 26/04/2023

Singpost 234094567242423422898



Order Processed



Order Shipped

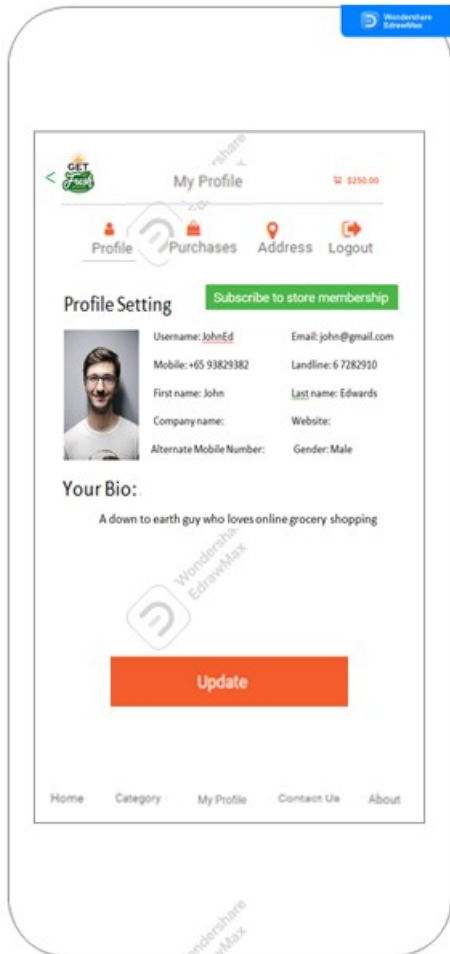


Order En Route

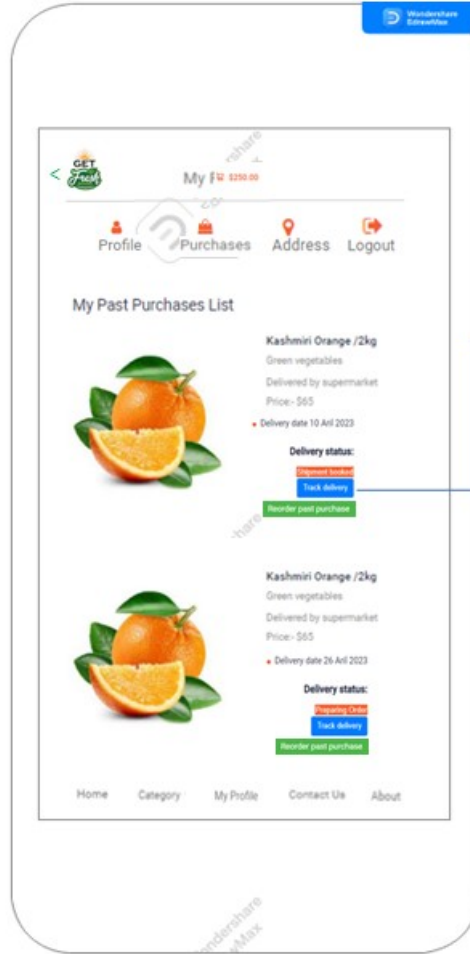


Order Arrived

### Customer Profile Update



### Customer delivery tracking



### Customer delivery tracking



## Customer delivery address



[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾

[My Profile](#)

[Contact Us](#)

 \$250.00



### Account

 [Profile](#)

 [My Past Purchases](#)

 [Address](#)

 [Logout](#)

### My Delivery Address

 51 Mun Keng Terrace

 Singapore 459534

 +65 83675478

## Customer feedback form



[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾

[My Profile](#)

[Contact Us](#)

\$250.00



### Contact Us

We are happy to hear from you!



**Phone Number**

Call Us:- +65 385 118 7200



**Support E-mail**

demo@demo.com



**Location**

239 Jurong East St 24, #01-106, Singapore 600249



**Opening Hours**

Mon-Sun: 7:00am to 9:00pm

**We are listening**

Our support member will assist through query

#### Feedback form

Your feedback is important to us!

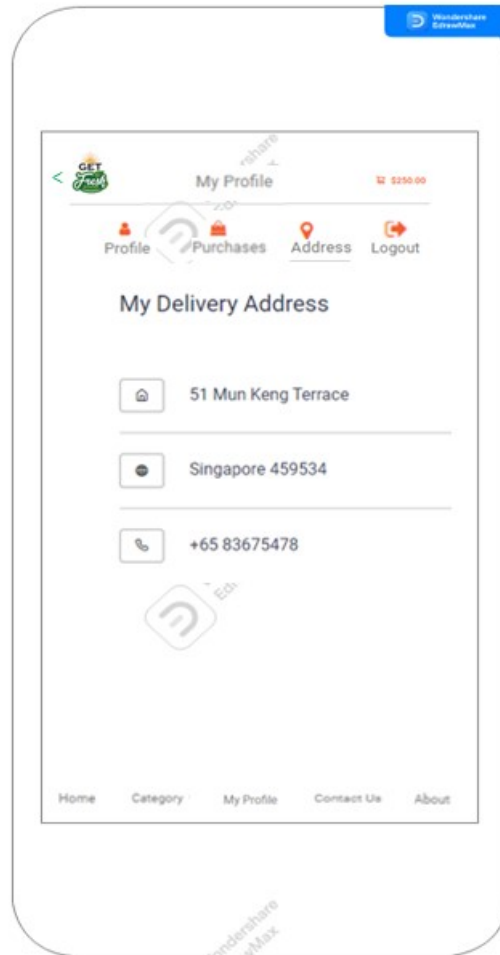
Name

E-mail

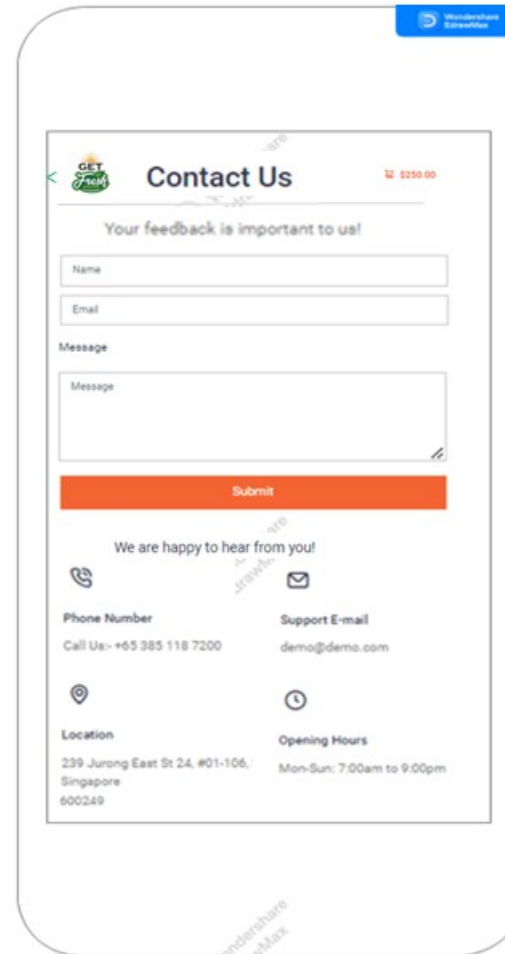
Message

Submit

### Customer delivery address



### Customer feedback form



## 9. Software Testing

A digital system implementation of GetFreshFood supermarket typically comprises a range of functional requirements that ensure the smooth operation of the business. In this section, we will examine one of the key functional requirements of a digital system for a supermarket which includes the use case model of each user, the screen designs and their flow. It also includes a test data for the customer online ordering system. By understanding these requirements and their importance in a digital supermarket automation system, we can identify opportunities to improve the efficiency and effectiveness of our system.

### Test case summary:



## Test Cases and Test Data

Update customer's shopping cart (Change Quantity, Delete, Keep for later, Enter promo code, Proceed to checkout)

Data to reproduce:

### Preconditions:

There are 3 items in the cart. Search for 'milk' under the search bar in the landing page. A list of items with the keyword 'milk' will be populated. Add in 3 items, 'Farm Fresh Chocolate Milk', 'Meij Deluxe Fresh Milk' and 'UFCVelvet Almond Milk – Original'. Each of the 3 products has 1 quantity each.



[Home](#)

[About](#)

[Category](#) ▾

[Pages](#) ▾




[My Profile](#)

[Contact Us](#)

\$250.00



## Shopping Cart

Product	Price	Quantity	Total
 <p><b>Farm Fresh Chocolate Milk</b> Size: 30c.m</p>	\$5.00	<input type="text" value="1"/>	\$5.00 <a href="#">Keep for Later</a>
 <p><b>Meiji Deluxe Fresh Milk</b> Size: 30c.m</p>	\$4.50	<input type="text" value="1"/>	\$4.50 <a href="#">Keep for Later</a>
 <p><b>UFC Velvet Almond Milk - Original</b> Size: 30c.m</p>	\$6.20	<input type="text" value="1"/>	\$6.20 <a href="#">Keep for Later</a>

Have a promocode

<input type="text" value="Enter your promocode"/>	<a href="#">Apply</a>
---	-----------------------

[← Countinue shopping](#)

### Order summary

Sub Total	\$15.70
GST	\$1.26

---

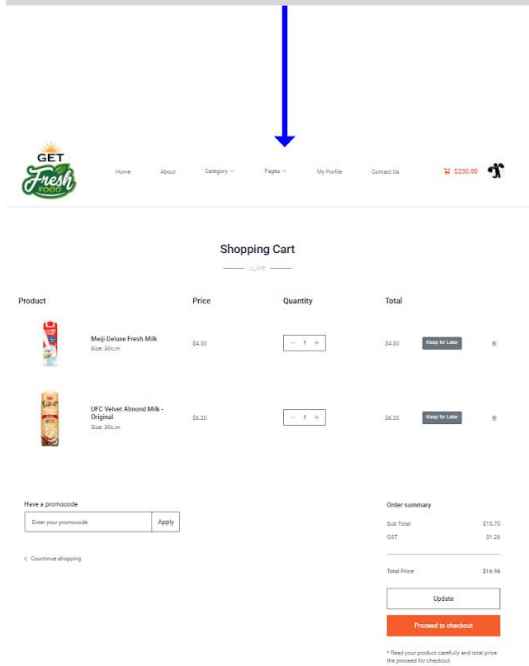
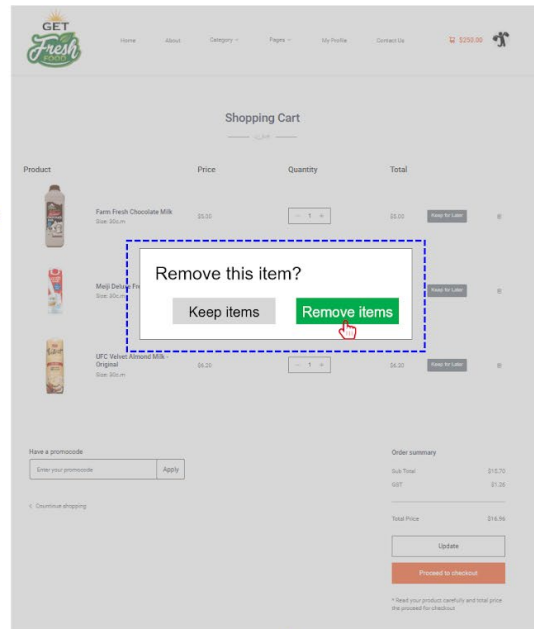
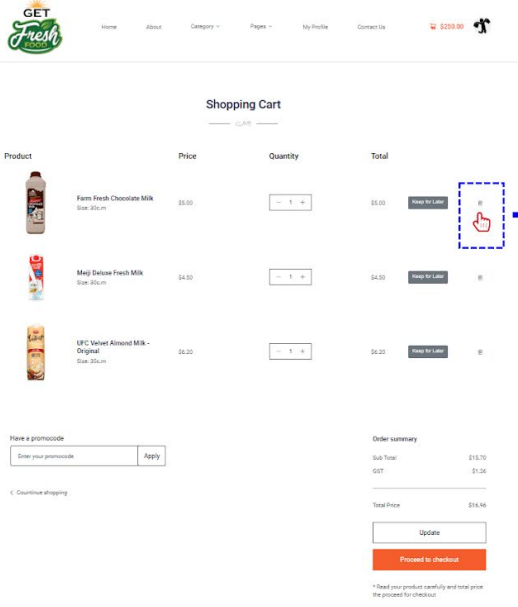
Total Price **\$16.96**

[Update](#)

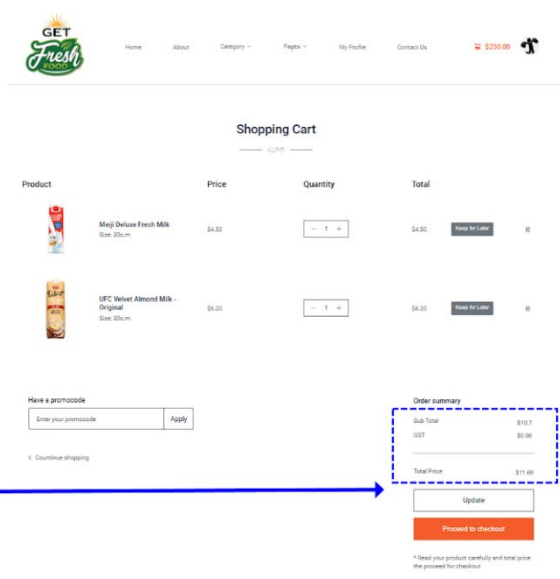
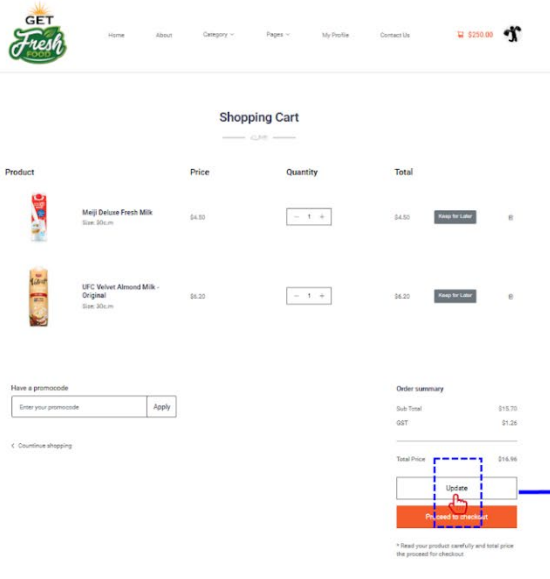
[Proceed to checkout](#)

\* Read your product carefully and total price the proceed for checkout

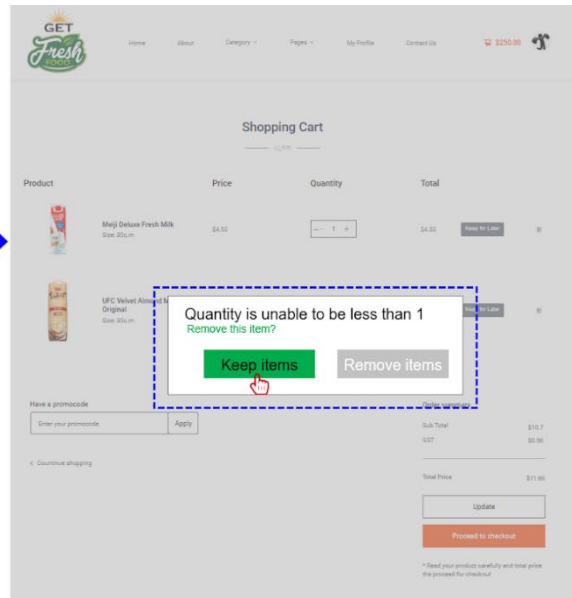
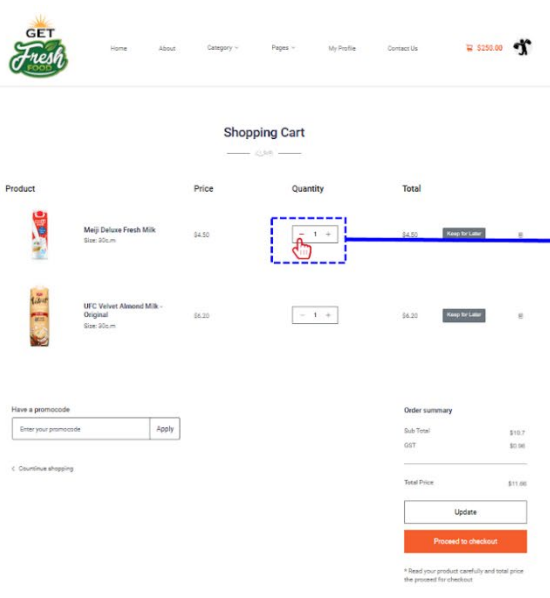
Test Case No	Test scenario	Expected Result
1	Click on the 'bin' icon on the extreme right side of the 'Farm Fresh Chocolate Milk' product.	The 'Farm Fresh Chocolate Milk' product is deleted from the list, with the 2 other products left in the list.



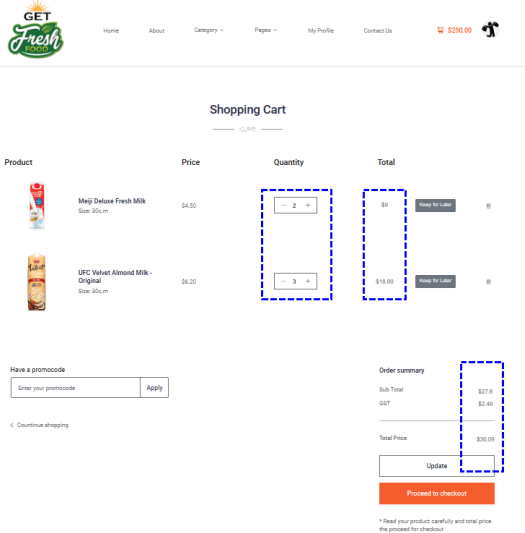
Test Case No	Test scenario	Expected Result
2	Click the 'Update' Icon.	New data is set. The Subtotal displayed is \$10.7, GST is \$0.96 and the total price is \$11.66.



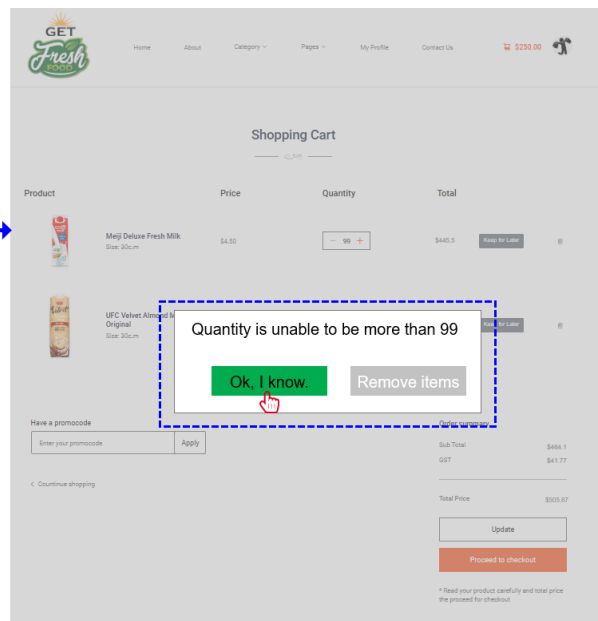
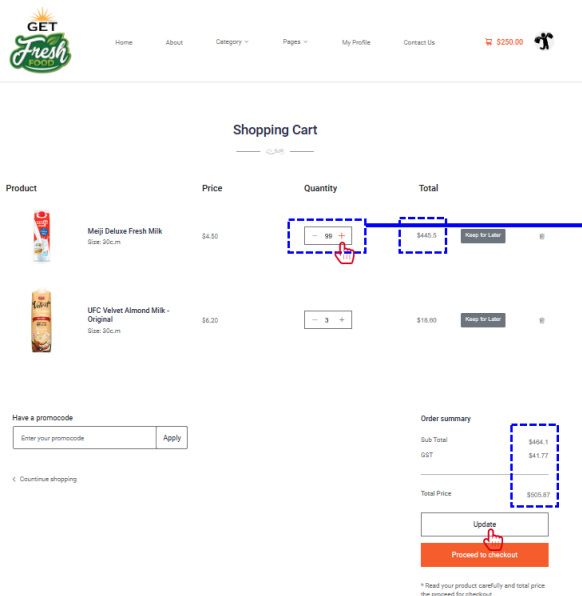
Test Case No	Test scenario	Expected Result
3	Continue clicking on the '-' icon under the quantity of the "Meiji Deluxe Fresh Milk" with its current quantity as 1.	The Quantity of the "Meiji Deluxe Fresh Milk" is still 1 as the quantity is unable to be less than 1 and the price is still the same.



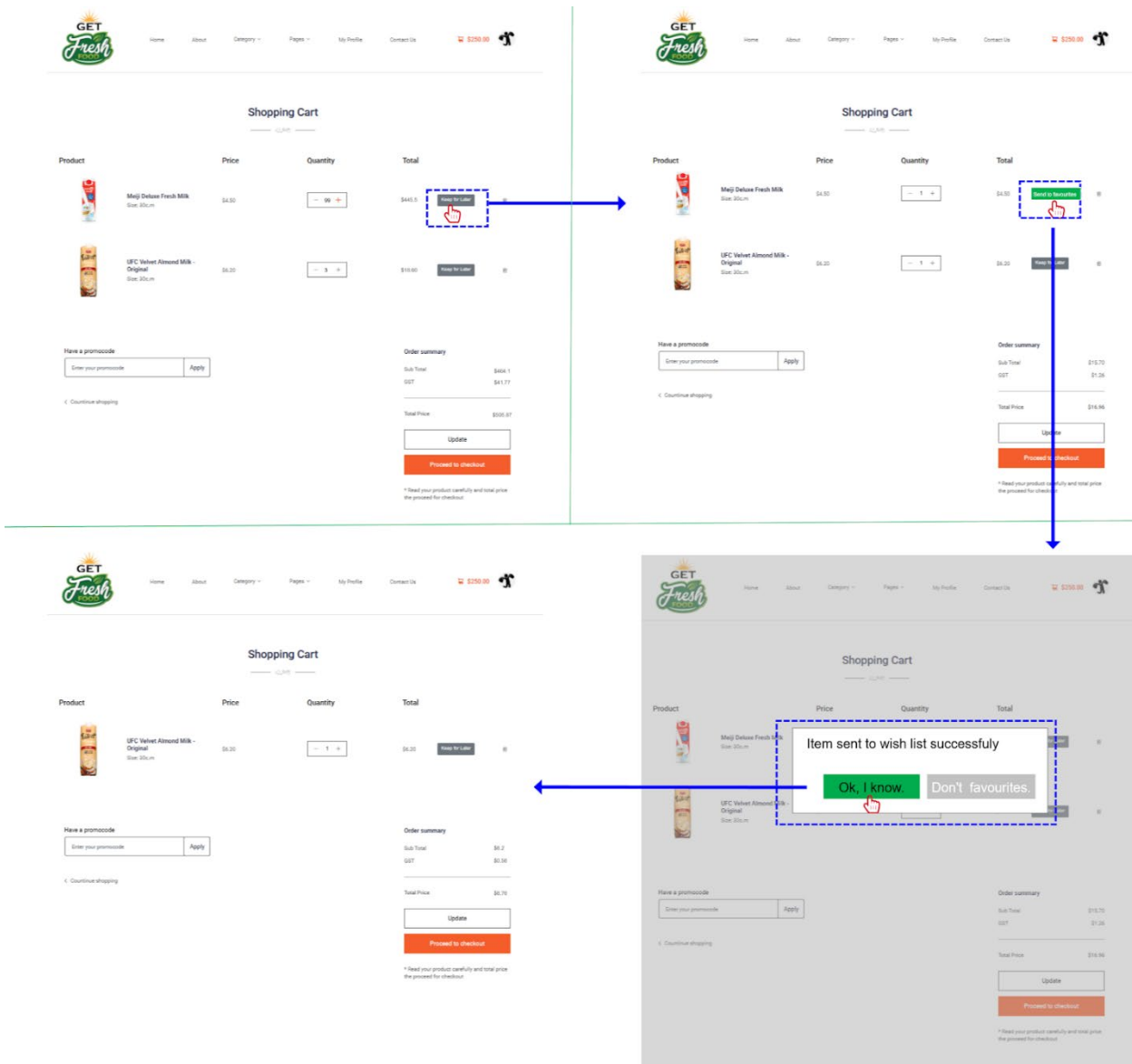
Test Case No	Test scenario	Expected Result
4	Click on the '+' icon quantity for the 'Meiji Deluxe Fresh Milk' once and twice for the 'UFC Velvet Almond Milk – Original'. Next, click on the 'Update Icon'.	New data is set. The total of each of the other 2 products is updated accordingly. If 'Meiji Deluxe Fresh Milk' quantity is set to 2 and 'UFC Velvet Almond Milk – Original' quantity is set to 3, the prices of them are \$9.00 and \$18.60 respectively.



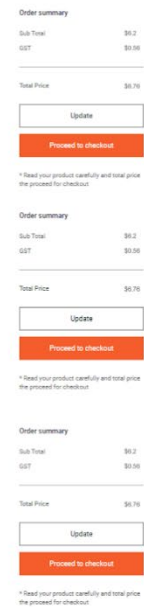
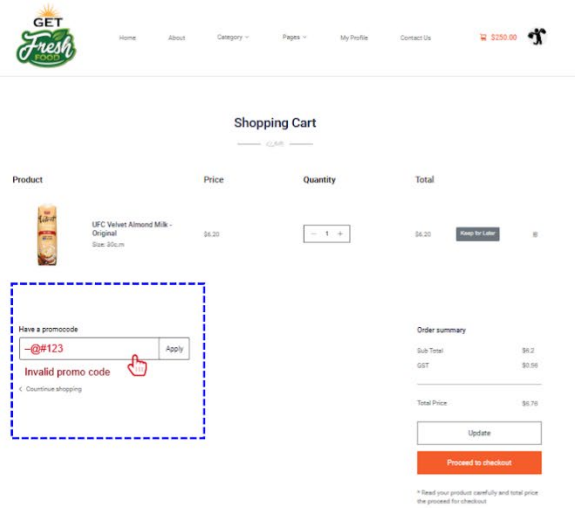
Test Case No	Test scenario	Expected Result
5	Click on the '+' icon on the "Meiji Deluxe Fresh Milk" until the quantity reaches 99. Next, continue to click on the '+' icon on the quantity of the "Meiji Deluxe Fresh Milk". Next, click on the 'Update Icon'.	The Quantity of the "Meiji Deluxe Fresh Milk" is still 99 as the quantity is unable to be more than 99. The price will keep updating until it reaches Qty 99, and thereafter the price will remain the same



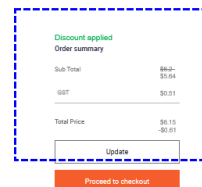
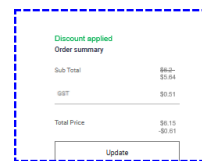
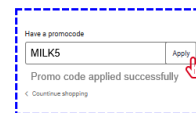
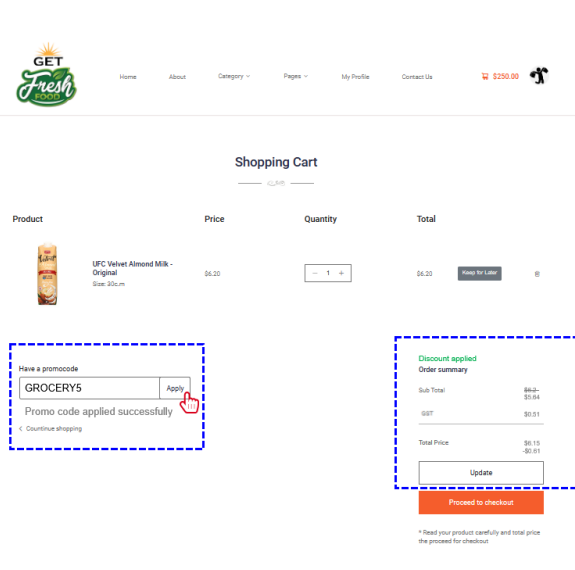
Test Case No	Test scenario	Expected Result
6	Click on the 'Keep for later' button on any of the products.	The message 'sent to favourites' is displayed. The Item is removed from the shopping cart and is moved to the favourites wish list.



Test Case No	Test scenario	Expected Result
7	Enter any invalid promo code in the test data and click on apply	The error message "Invalid promo code" has appeared. The subtotal has not been changed. It is still possible to checkout.



Test Case No	Test scenario	Expected Result
8	Enter a valid promo code in the test data and click on apply.	The message 'promo code applied successfully' is displayed. New data is set and there is a new line 'Discount applied' with (-value) under subtotal. The new subtotal is added to the (-value).



Test Case No	Test scenario	Expected Result
9	Click the 'Proceed to checkout' button	The user is directed to the checkout page where he enters his delivery information, payment and shipping method to checkout.

The image displays two screenshots from the GET Fresh website. The left screenshot shows the shopping cart page with a 'Proceed to checkout' button highlighted in a red box. The right screenshot shows the 'Customer checkout payment' page, which includes sections for 'Review Your Order', 'Delivery Address', 'Delivery Schedule', 'Payment Method', and 'Order Summary'. A blue arrow points from the 'Proceed to checkout' button in the shopping cart to the checkout page.

**Test data:**

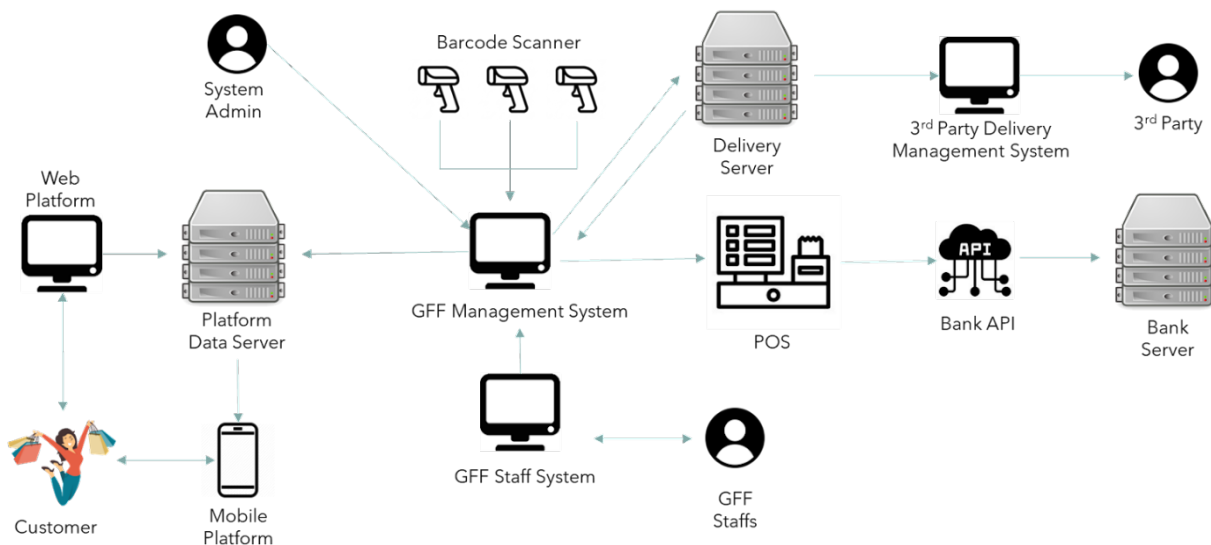
Prepare a set of products

Product name	Quantity	Price	Valid Promo Code	Invalid Promo Code
Farm Fresh Chocolate Milk	1	\$5	GROCERY5	-@#123
Meiji Deluxe Fresh Milk	99	\$4.50	NEWDAY5	NEWDA35
Meiji Deluxe Fresh Milk	1	\$4.50	MILK5	milk5
UFCVelvet Almond Milk – Original	1	\$6.20		null

## 10. Non-Functional Requirements

While functional requirements are critical to the operation of a digital automation system for a supermarket, non-functional requirements play an equally important role in ensuring the system's overall effectiveness and performance. These requirements are concerned with the system's characteristics and properties that are not directly related to its functionality, such as its performance which is the system response time, its volume which measures the number of users at given one time, security including user roles and tasks, reliability which includes recovery and down time, and usability of the system. In this report, we will examine the key non-functional requirements of our digital system for GetFreshFood supermarket, and how they can impact the system's performance and value to the business.

### 10.1 System Architecture



10. Non-Functional Requirements

10.2 System Performance Requirements

10.2 a) User Volume Table

User Group	Location	Total Count	Active Count	Remarks
Branch Manager	Singapore/GFF staff office	1	1	Branch Manager is stationed at the staff office, need to access the system everyday
Promoter	Singapore/GFF store	20	10	Promoters need to use the systems every day, they are shelf bounded, they shall be able to use system at store
Cashier	Singapore/GFF store	6	3	Cashiers are work stationed bounded, they shall be able to use the system on their work-stations.
Store Man	Singapore/GFF store	4	2	Store Men are desk bounded and sometimes they will move around, they are able to use the system around the store.
Owner	Singapore/Not in store	1	1	Owner does not come to the store, sometimes he can access the system occasionally.
Customer	Singapore/GFF store/ Anywhere	5000	2500	Customers will use online for ordering products. They will browse the website, make purchase options.

10.2 b) Business Transaction Volume Table

Biz Transaction (use case)	Business Criticality	No of user	Transaction Information	Concurrent Important Activities
<b>Promoter</b>				
Update Expiring Goods from shelf	Moderate	10	2 times in a day	10 times per hour
receive notification of goods expiry	Critical	10	One time per day	1 time per 2 hours
Update Damage goods from the shelf	Moderate	10	2 times in a day	10 times per hour
View Customer purchase history	Moderate	10	Multiple times in a day	20 times per hour
View Existing customer profile	Low	10	Multiple times in a day	20 times per hour
View the up-to-date stock inventory	Critical	10	2 times in a day	10 times per hour
Send notification for replenish of goods	Critical	10	2 times in a day	1 time per hour
View product information	Moderate	10	Multiple times in a day	20 times per min

Receive notification of promotion information	Critical	10	One time per week	1 time per hour
Receive notification of Manpower Plan	Critical	10	One time per day	10 times per hour
Receive notification of digital manuscript	Critical	10	One time per month	10 times per hour
<b>Branch Manager</b>				
Update product information	Critical	1	One time per week	20 times per hour
Update product directory	Moderate	1	One time per year	20 times per hour
Update digital planner for timetable planning	Moderate	1	One time per week	20 times per hour
Update product pricing	Critical	1	one time per week	50 times per hour
Send Manpower Plan to staff	Critical	1	One time per day	5 times a week
Send Promotion schedule	Critical	1	One time per week	1 time per day
Update product form	Critical		One time per day	5 times per day
Send product form	Critical	1	One time per day	2 times per day
View customer purchase history	Moderate	1	Multiple times per day	10 times per hour
View stock movement	Critical	1	2 times per day	5 times per day
View monthly order form from supplier	Critical	1	Multiple times per day	5 times per day
View list of damaged and expired products	Moderate	1	One time per month	5 times per day
View sale data report for data trends forecasting	Critical	1	One time per month	5 times per hour
View customer feedback form	Moderate	1	5 times per day	5 times per day
Receive notification from customer feedback	Moderate	1	5 times per day	5 times per day
receive notification for price change	Critical	1	3 times per week	3 times per week
Receive promotion schedule	Critical	1	3 times per week	3 times per week
Update sale data	Critical	1	2 times per day	2 times per day
Update digital manuscript and guidelines for each role	Low	1	one time per month	1 time per week

<b>Store Man</b>				
View damaged goods from shelf	Moderate	4	One time per day	10 times per hour
View expired goods from shelf	Moderate	4	One time per day	10 times per hour
View Promotional Schedule	Moderate	4	One time per day	10 times per hour
View product directory	Low	4	One time per day	10 times per hour
Received Notification when stocks drop below safety stocks	Low	4	One time per 3 days	1 time per day
Set notification for safety stocks	Low	4	Multiple times per day	1 time per hour
Update stocks Inventory	Critical	4	Multiple times per day	20 times per hour
Update the lead time from supplier	Low	4	Multiple times per day	1 time per 2 hours
update expired goods	Moderate	4	Multiple times per day	2 times per hour
Update damaged goods for replacement	Moderate	4	Multiple times per day	2 times per day
update customer delivery schedule	Critical	4	Multiple times per day	100 times per hour
Update supplier delivery schedule	Critical	4	Multiple times per day	20 times per hour
Update waster goods list	Moderate	4	2 times per day	2 times per day
Update supplier Credit Note	Critical	4	2 times per day	2 times per day
Received notification for digital Manuscript	Moderate	4	One time per month	1 time per day
Received notification of manpower plan	Moderate	4	One time per day	1 time per day
<b>Customer</b>				
Search for product online	Critical	5000	Multiple times per day	100 times per hour
Received notification for replenishment of stocks	Low	5000	Multiple times per day	100 times per hour
Use product finder to locate goods	Low	5000	Multiple times per day	100 times per hour

send customer feedback form	Critical	5000	Multiple times per day	20 times per hour
Browse customer purchase history	Critical	5000	Multiple times per day	200 times per hour
Making purchase	Critical	5000	Multiple times per day	100 times per hour
Track delivery status	Critical	5000	Multiple times per day	100 times per hour
select prefer online payment method	Critical	5000	Multiple times per day	100 times per hour
Received exclusive member promotion	Moderate	5000	Multiple times per day	50 times per hour
join store membership	Moderate	5000	Multiple times per day	20 times per hour
<b>Owner</b>				
Received product form.	Moderate	1	One time per day	10 times per day
update promotion schedule	Critical	1	One time per week	10 times per day
Received weekly sales data report	Critical	1	One time per week	20 times per day
Send notification to change price	Critical	1	One time per week	30 times per day

10.2 c) Data Volume Table

Business Entity Class	Source Document	Retention Period	Target Volume
Product form	Product information	Need to keep 1 week from last modification	1 week 10 changes from manager
Customer cart/wishlist data	Customer saved product	Need to keep 12 months unless deleted by the user	1 month 1000 from customer
Customer Profile Data	Customer information	Need to be kept 3 years from the first modification (Membership period). If recharged, reset the retention period.	1 month 1500 customers register
Customer purchase data	Customer purchase information	Need to be kept 1 year from the last modification	1 month 5000 transactions.

Replenish Form	replacement stock information	Need to be kept 6 months from the last modification	1 month 50 records
Sale transaction data	Overall sale record	Need to be kept 1 year after being sold.	1 day 500 records from sales
staff profile	Staff information	Need to be kept from 1 year from the last modification	1year 60 changes from HR
Store Inventory	Overall stock movement	Need to be kept for 1 month from first modification. If recharged, reset the retention period.	1 day 500 records from store man
Digital price data	Overall, Price information	Need to be kept 3 months from last modification	1 month 40 changes from manager
supplier profile	Supplier information	Need to be kept 2 years from last modification. (The default contract period is 2 years, as agreed).If the contract is renewed, reset the retention period.	1 year 10 records from supplier change
Messages	Internal Notification	Need to keep 1 month from last modification	1 day 1000 records from all staff

### 10.3 Security Requirements

#### 10.3 a) From data point of view

Data (entity class) /User Role (actor)	Promoter	Cashier	Store Man	Branch Manager	Owner	Customer
Customer profile data	r					c,r,u
Staff profile	r	r	r	c,u,r	c,u,r,d	
Supplier profile			c,u,r,d	c,u,r	c,u,r,d	
Store Inventory	r		c,u,r,d	r	r	
Product form	r	r	r	c,u,r,d		
Product information	u,r	r		c,u,r,d		r

c: create, u: update, r: read, d: delete

#### 10.3 b) From Use Case point of view

Biz Transaction (use case) /User Role (actor)	Promoter	Cashier	Store Man	Branch Manager	Owner	Customer
Update product form				X (Main user)		
View product form	x(Main user)				x	
Update Store Inventory			X (Main User)			
View Store Inventory	x(Main user)			x	x	
Update product pricing	x	x		X (Main user)		
Send customer feedback form						X (Main user)
View customer feedback form				x(Main user)	x	
Send promotion schedule				X (Main user)		
View promotion schedule	x	x	x		x	x
Send Notification for replenish goods	X (Main user)					

#### 10.4 Reliability Requirement

- **Operation Time**

Online - 24 hours a day, 7 days a week

Not more than 10 minutes of downtime.

Not more than 3 times a day.

Not more than 5 times a month

- **Hardware Failure**

recovery duration - should not be more than 30mins

Data Concurrency - not more than a shift old

- **Disaster Recovery**

Maximum 24 hours downtime

As the digital business grows larger in the future projection, better disaster recovery measures can be invested such as mirroring.

11. Appendix – Screens



# CEO Presentation



By: WhiteStar Computing

Picture This...



## Now Picture this....



## With our Digital Solution



Say Goodbye to...	Say Hello to...
Manual Work which takes up a lot of time (& DOESN'T generate sales)	Nation-wide customers (Can even explore SEA markets)
Miscommunication	Increased efficiencies
Storing information in Human Brain	Customer focused (Organised Department -> Attention to serve customer)
No history to make business decisions	Multiple Sales channels (Online and in-store)
Sales DON'T tally up	
Stocks DON'T tally up	

Not because you NEED to... But because you WANT to

## CONTENTS

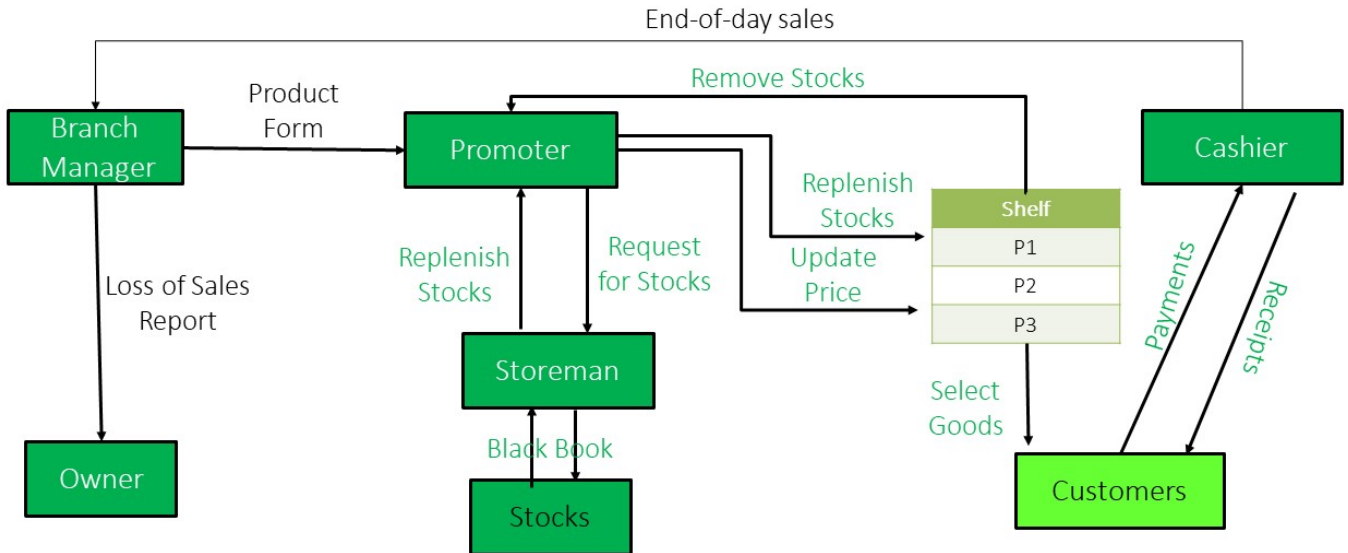
- 01 Current Operation Structure
- 02 Persona & Journey Map
- 03 Brief Architecture Design
- 04 Snippets of GFF digitalized features
- 05 Agile Methodology
- 06 Conclusion



# 01 Current Operation Structure



## Current Manual Operational Structure



## 02 Persona & Journey Map



## Persona: Expeditious Edward, Branch Manager

### Persona



"The on-the-ball, firm disciplinarian"

#### Main Tasks

- Oversee the daily operations and manpower planning of staff members.
- Ensure that the end of day sales tally with the cash received at the end of day and the stock matches the inventory list of the item.
- Write up a loss of sales report to the owner if end of day sales records do not tally.
- Review weekly sales results of all products.
- Write up a product form( based on price, classification, and display of goods).
- Amend prices of products after communication with the owner.
- Regular updates of business statistics of the store to the owner.
- Address customer's complaints and staff arguments.

#### About

Edward hails from the UK, has worked in grocery retail for the past 10 years. He holds a retail management degree from Cladiff university. He has established solid customer relationships with excellent interpersonal skills and is good at managing funds to reduce discrepancies. He is also a service orientated team member who can delegate tasks to team members well and has articulate communication skills.

#### Goals

- Complete all his required tasks by the end of shift.
- Make sure that the staff members perform their allocated tasks.
- Reduce customer's complaints
- Building rapport and establishing communication between staff members
- Reduce loss of revenue by reducing discrepancies in the sales records
- Reduce repetitive paperwork
- Increase sales volume and improve profit margin

#### Influences

- Customer satisfaction
- Smooth transition of staff members between shifts and co-operative members
- Staff mood and morale
- Safety in workplace of staff members
- Easy-to-use, cashless system
- High accuracy of sale records and inventory
- Ability to generate reports, e.g weekly sales results report, popular goods ranking list
- New popular groceries trend info

#### Pain Points

- Cash is hard to manage and tends to not tally
- Customer complaints
- Colleagues unclear about some parts of their job scope.
- Discrepancies in inventory record
- Writing up lots of paperwork and reports
- Lack of accountability between staff members
- Owner's unhappiness or dissatisfaction in company's operations
- Not easy to track and monitor where and when errors will appear or who makes the error.

### Metrics

- Legend
1. Customer Service Experience
  2. Good Relationship between Co-worker Communication



## Persona: Expeditious Edward, Branch Manager

### Journey Map

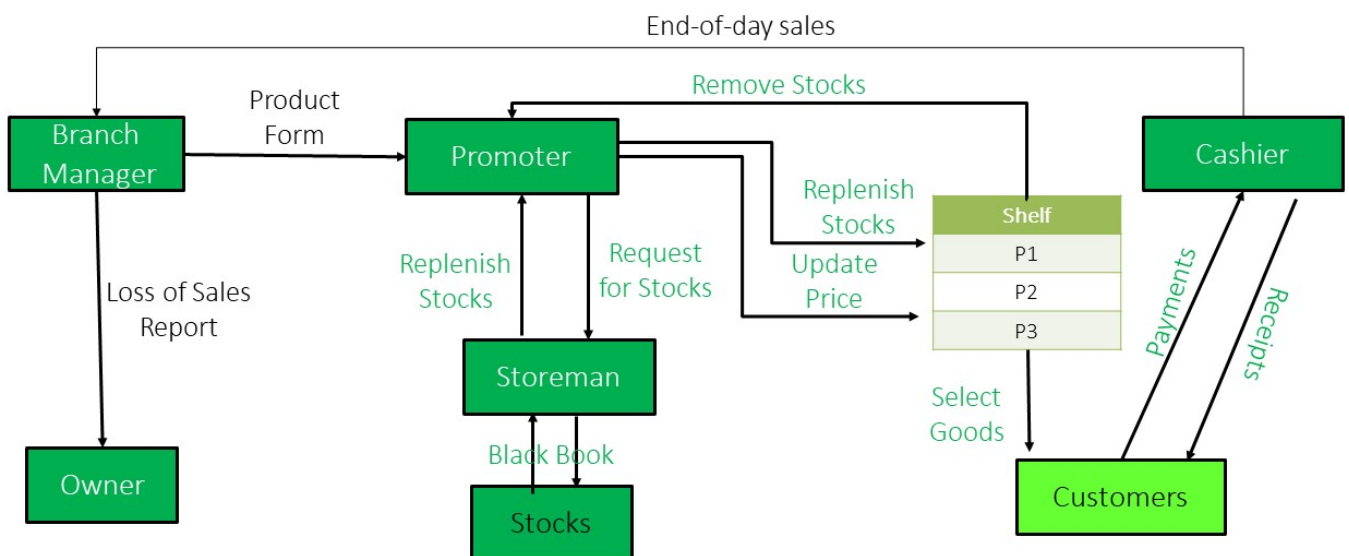


stages of journey	Motivation	Start of Shift	Walk the Ground	Review Weekly Sales	Day to Day job scope	Price Change	Business Development	End of shift
Activity	Run the daily operations of the supermarket efficiently to ensure positive and long-term customer relationships and keeping the owner satisfied.	Hold a morning briefing at 7.30am. Any issues are settled prior to the start of the next shift Check attendance of staff members during the morning briefing. Processes sales report from the cashiers from the previous day in an excel spreadsheet.	Go around to see if goods are all displayed at the right places and if all the staff are ready to seize the day	Review weekly sales results of all products.	Check the cash collected at the end of shift to tally with the end-of-day sales records. With discrepancies, a Loss of sales Report needs to be filed	Change product price based on instructions from the owner.	Research popular supermarket goods trend	Check the cash collected at the end of shift to tally with the end-of-day sales records. Ensure smooth closing of shift.
Feeling	Excited	Excited	Stressed	Stressed	Frustrated	Frustrated	Excited	Frustrated
Experience	Optimistic about running the departments efficiently by making sure staff perform their tasks and addressing their concerns and arguments. Looking forward to informing the owner of the company's operation efficiency and high accuracy of sales record and inventory.	Frustrated that there are always discrepancies in the total sales and physical stocks sold leading to extra work (loss of sales report). It is very hard to trace the source of error as every department seems to be capable of causing the mistakes. Physically check the attendance of the staff can be quite bring as some staff may be late.	Stressed to keep the morale of his team up as everyone seems to be very stressed over the amount of labourous work which require high level of concentration. Products can be placed in a very messy and inconsistent manner on the shelves which makes it hard to do stock take	Has to do lots of paperwork, calculate and analyze a huge amount of detailed sales data. Highly stressed as the end-of-day sales is an unreliable source due to discrepancies in the sales records.	Loss of sales report to write if sales figures don't tally. Have to check with staff members the root cause of why there are discrepancies.	Frustrated when there is an overlook of price changes and miscommunication of the updating of price changes by staff members.	Happy to pick out popular goods after analyzing sales data, observing competitors' transaction and researching social media data.	Upset that there is a lack of accountability between staff members when the sales figures do not tally. Has to write a loss of sales report to the owner in case of discrepancies in the sales figure.
Expectation	Smooth operation of supermarket and sales target are met.	Hope to have a system where daily activities/ movement of stocks and cash received be recorded. This can be used to trace the source of error to improve on the efficiency of the system. Can also minimise human error	Can have a tagging system of the products to identify the different products and map it to their prices in the system, and the movement of its stocks being recorded in real time. Pictures can be added in the system to match their description to assist the tagging.	Reduce physical paperwork that needs to be written for the report. An auto-generalisation of product projection of sales report according to sales.	Have an automation system to systematically monitor the sales record and inventory stock to reduce discrepancies in the sale  Would be good if this system also track business procedures.	If price change can be updated in a system and then reflected on the respective shelves placing the products, it will save a lot of trouble and inefficiencies.	Would be good to develop an analytical system where business performance can be input in and capture the performance per month, and forecasting can be done to include the national buying trends.	Have an automation system to systematically monitor the sales record and inventory stock to reduce discrepancies in the sale

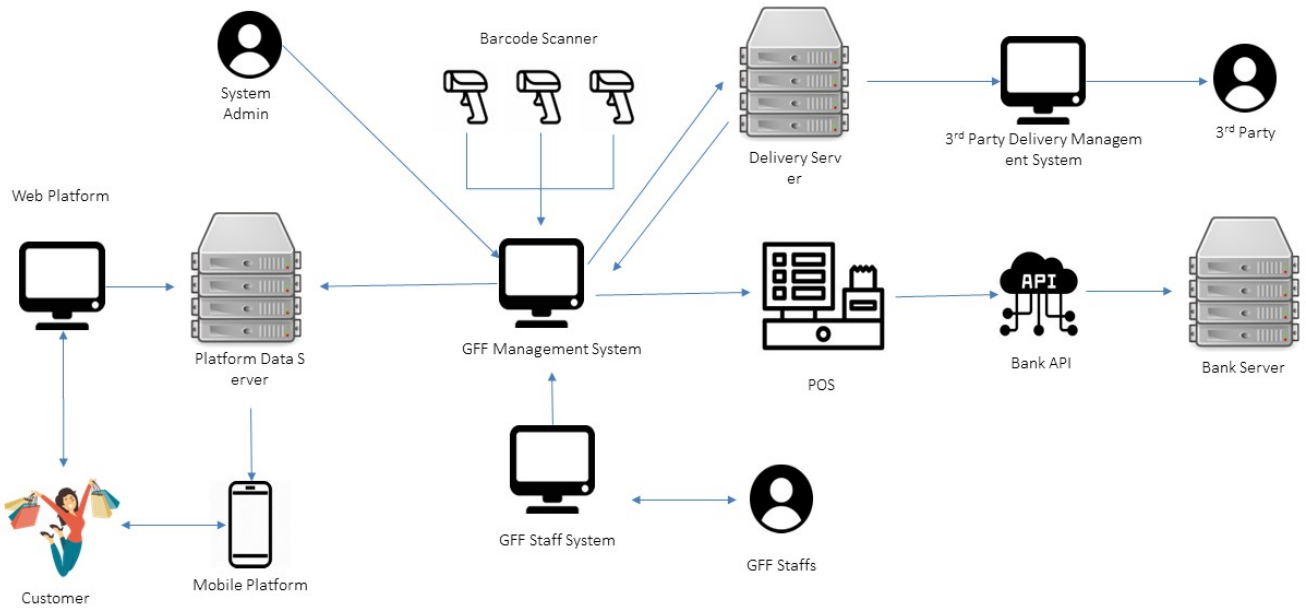
# 03 Brief Architecture Design



## Current Manual Operational Structure



# Digital Architecture Structure



## 04 Snippets of GFF Digitalized Features



## Snap-Shot of new GFF



### Branch Manager:

An overview of the health of the company displayed



#### Efficiency:

BM can look into the analysis by system and rethink sales strategy  
Time spend on improving sales

#### Resolve:

Multiple paperwork

- Product form
- Loss-of-sales form
- End-of-day sales paper

#### Efficiency:

Every employee works overtime to make sure stocks and sales tally  
Time spend working on tasks that bring no extra sales to company

## Snap-Shot of new GFF



- All business activities from supply chain to sales will be recorded
- Can track bottleneck and improve workflow
- Traceability

When a mistake is made, the source of error can now be trace  
(Not possible in the past)

#### 10. Update product form

#### 12. Update promotion schedule

## Snap-Shot of new GFF



- Familiarity
  - Forms such as Product form are still retain
  - Allow employee to know the purpose of the digital form
- For non-IT savvy employee
  - Cater to their needs with simpler manoeuvre
  - Training will be provided during this transition

ID	Name	Current Price	Storage Date	Supplier Price	Supplier	Manage
1000003	MILK	\$3.8	15/01/2023	\$2	Farm Co.	Edit Delete
1000004	Pot	\$12	15/01/2023	\$8	Life corp.	Edit Delete
1000005	Detergents	\$6	09/04/2025	\$3.9	Clean Inc.	Edit Delete

## Snap-Shot of new GFF



- Enhancement of business structure
  - Promoter can be issued a Smartphone (Looks professional)
  - GFF online to target more customers 24/7
  - Goods delivery option

Sounds Exiting?

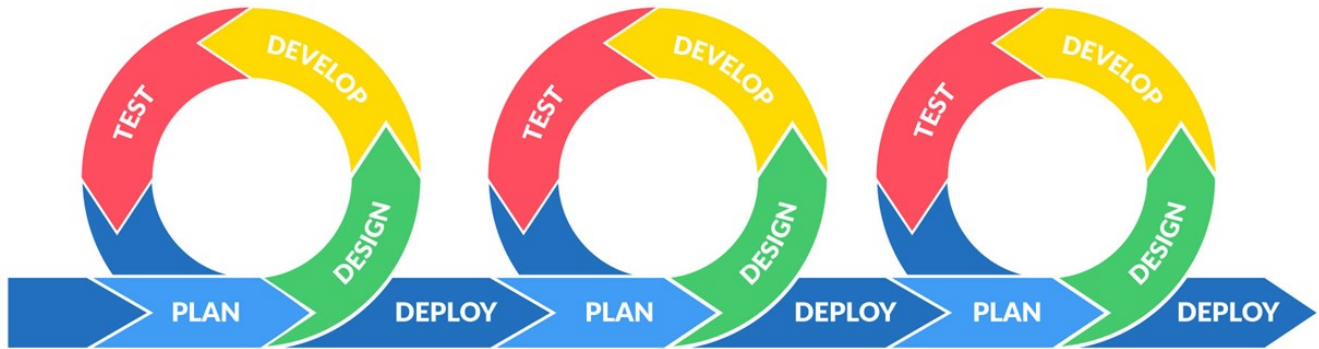


What's Next?

## 05 Agile Methodology



# Agile Methodology



# 06 Conclusion



## Conclusion



- Improve Customer shopping experience
- Streamline operations for the Business
- Convenience and Accessibility
- Reduce Waiting Time -> Improved Customer Satisfaction
- Digitalizing of staff -> Improved work efficiency
- Significant Benefits to both Customers and Staffs

THANK YOU



## References:

[https://www.freepik.com/premium-vector/fresh-food-vector-design-logo\\_29553427.htm#query=fresh%20food%20logo&position=9&from\\_view=keyword&track=ais](https://www.freepik.com/premium-vector/fresh-food-vector-design-logo_29553427.htm#query=fresh%20food%20logo&position=9&from_view=keyword&track=ais)

<https://eoiinconnect.com/wp-content/uploads/2020/10/Agile-Methodology-Infographic-v2-1536x529.jpg>

[https://cdn2.iconfinder.com/data/icons/black-friday-outline-2/48/Black\\_Friday\\_Line\\_Artboard\\_32-512.png](https://cdn2.iconfinder.com/data/icons/black-friday-outline-2/48/Black_Friday_Line_Artboard_32-512.png)

<https://www.pngwing.com/en/free-png-zrdaw>

[https://www.flaticon.com/free-icon/monitor\\_172218](https://www.flaticon.com/free-icon/monitor_172218)

<https://www.seekpng.com/ima/u2e6a9i1y3q8u2t4/>

<https://thenounproject.com/icon/pos-2292417/>

<https://www.istockphoto.com/vector/enjoy-shopping-gm496800923-41251630>

<https://www.3epr.com/what-food-marketers-need-to-know-post-covid-19/>

[https://www.flaticon.com/free-icon/smartphone\\_1250601](https://www.flaticon.com/free-icon/smartphone_1250601)

<https://www.pinterest.com/pin/408349891210823374/>

[https://www.flaticon.com/free-icon/api\\_3234207](https://www.flaticon.com/free-icon/api_3234207)

<https://www.dreamstime.com/photos-images/older-japanese-business-woman.html>

credit notes - Bing images

Where is a Credit Note used? (Sample Letter and Answers) - Kenyayote

Sales Calling Plan Template Elegant Free Sales Plan Templates Smartsheet | Sales report template, Business plan template free, Sales template (pinterest.com)

Promoter fairprice Jobs in Singapore - Mar 2023 | JobStreet

<https://www.istockphoto.com/vector/rsi-indicator-technical-analysis-vector-stock-and-cryptocurrency-exchange-graph-gm1141394558-305768029>

<https://www.scnsoft.com/blog/sales-analytics>

<https://codepen.io/rprol/pen/GBxqEg>

<https://sopro.io/resources/blog/email-open-rate-and-lead-rate-correlation/>

<https://www.systemcenterdudes.com/sccm-software-update-dashboard-overview/>

<https://help.maze.co/hc/en-us/articles/6147702161043-Open-card-sorting-results>

<https://fairprice.com.sg/product/unmeat-fish-free-tuna-style-flakes-in-water-salt-added-180g-13219194>

<https://www.isetan.com.sg/food-grocery/food-cupboard/bread/gardenia-original-wholemeal-bread-600g-8888247113170.html>

<https://fairprice.com.sg/product/fairprice-uht-kids-full-cream-packet-milk-fresh-milk-6-x-200ml-13165083>

<https://fairprice.com.sg/product/royal-umbrella-thai-hom-mali-rice-13111322>

<https://fairprice.com.sg/product/fairprice-canola-oil-2l-13174008>

<https://sparxsystems.com/resources/tutorials/uml/use-case-model.html>