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## Application Development and Emerging Technologies Laboratory

ITS120L – BM1

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### Documented Acceptance Criteria

#### □ Prototype – User Interface (UI):

##### ○ Home Page

HOME CONTACT US ABOUT US SIGN IN SIGN UP

WeatherWise: is an AI-powered e-commerce inventory scheduling app that uses real-time weather data to predict supply surpluses and deficits. By combining smart forecasting, secure inventory management, and personalized product recommendations, we help businesses stay efficient, adaptive, and customer-focused—rain or shine

[LEARN MORE](#)



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- a. The first page to show up when users search the web app's link.
  - b. The Home page can show users the first impression of what the website's all about (its summarized functionalities).
  - c. By clicking *Learn More*, it will direct users to the About Us page.
- o About Us Page

HOME CONTACT US ABOUT US SIGN IN SIGN UP

#### WHO WE ARE

At WeatherWise, we specialize in AI-powered inventory scheduling solutions that adapt to real-time weather conditions. Our mission is to help businesses optimize supply, prevent shortages, and deliver smarter shopping experiences. With innovation, precision, and secure technology, we empower retailers to stay ahead in an ever-changing marketplace.



**Weatherwise**

- a. In the About Us page, users can see the specific goals of the website. Usually, it consists of the vision and mission of the group's objectives.
- b. Now, you can freely roam around the web app.

- o Contact Us Page

## CONTACT US

If you're interested in collaborating, please provide your information, and we will contact you soon. We look forward to connecting with you.

Name

Email

Message

Send



# Weatherwise

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- a. The Contact Page serves as the place for the users' concerns, comments, and such regarding the web application's usages.

### Sign Up Page



## Create an account

Start your 30-day free trial.

Name\*

Email\*

Password\*

Must be at least 8 characters.

Get started

Sign up with Google

Already have an account? [Log in](#)

# Weatherwise

- a. Users can input their name, e-mail, and password in order to create an account or just use their existing Gmail verification.
- b. On the other note, users can click the *log in* if they have an existing account.

- o Sign In Page

HOME CONTACT US ABOUT US SIGN IN SIGN UP



### Log in to your workspace

Welcome back! Please enter your details.

Workspace Code

Workspace0123

Remember for 30 days

[Forgot workspace code?](#)

[Enter Workspace](#)

[Enter Workspace with Invite Link](#)

Don't have an account [Create one](#)





## Log in to your account

Welcome back! Please enter your details.



# Weatherwise

Email

Password

Remember for 30 days [Forgot password](#)

[Sign in](#)

 [Sign in with Google](#)

- 
- a. Same with the Sign Up Page, users can create an account if they don't have one yet.
  - b. Upon entering the details of a newly created account, a workspace code will be given through an existing e-mail account that will serve as the user's unique dashboard code.
  - c. Then you will enter your newly created e-mail address and password.
- 
- o 2 Factor Authentication



**Weatherwise**

  
Weatherwise

### Verify Your Identity

We sent a code to your email

Enter 6-digit code

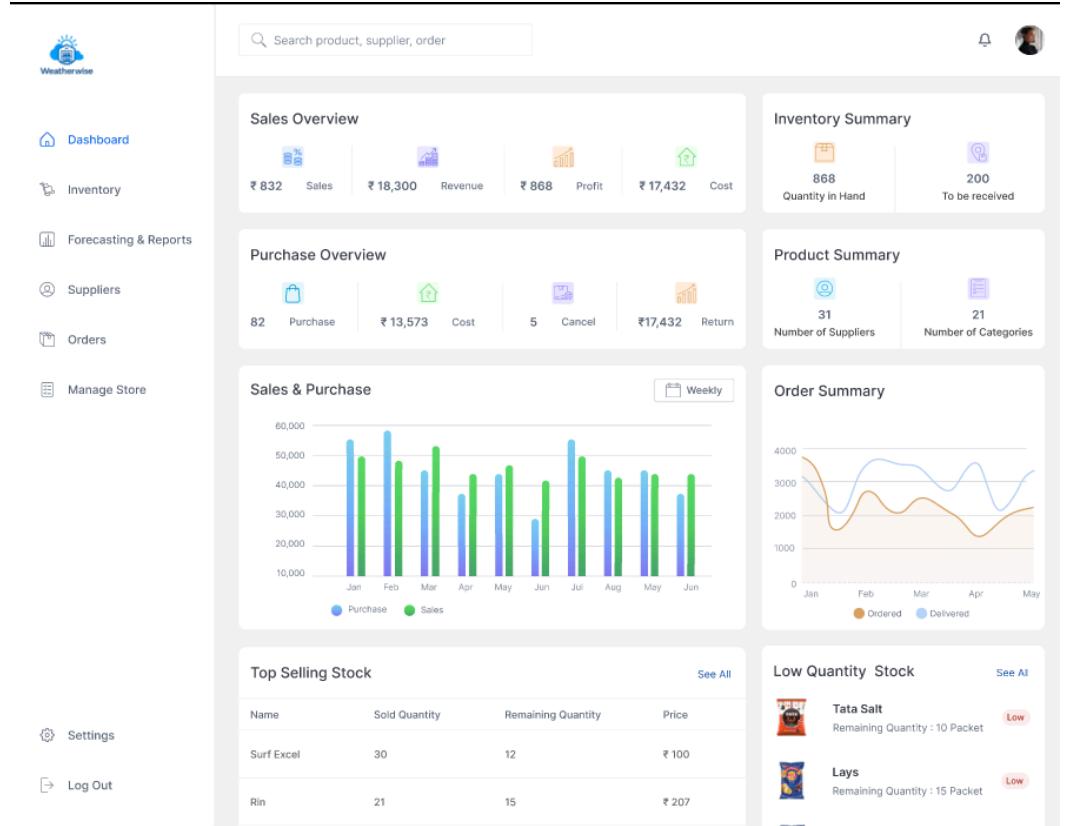
534789

Remember device for 30 days Resend Code?

Sign in

Back

- a. The system will then send a 6-digit code to the user's email, which is required for the user to access the dashboard.
- b. It will direct you to a workspace where you can buy orders and view the weather, sales, inventory, and such functionalities you could find on the website.
  - i. Dashboard



- In the Dashboard functionality, you can see how other users interact with your business online.
- Global navigation is seen all throughout the functionality pages (the profile for editing personal information like name, e-mail address, phone number, and passwords; the logo of the app and the log-out button, which directs you to the About Us page; the settings button, which enables you to personalize the functions of your features).

## ii. Inventory

Overall Inventory						
Categories	Total Products		Surplus		Deficits	
14 Last 7 days	868 Last 7 days	₱25000 Revenue	10 Last 7 days	₱45000 Excess	12 Low Stock	₱32,000 Shortage

View Products					
Products	Buying Price	Quantity	Threshold Value	Expiry Date	Availability
Maggi	₱430	43 Packets	12 Packets	11/12/25	In- stock
Bru	₱257	22 Packets	12 Packets	21/12/25	Out of stock
Red Bull	₱405	36 Packets	9 Packets	5/12/25	In- stock
Bourn Vita	₱502	14 Packets	6 Packets	8/12/25	Out of stock
Horlicks	₱530	5 Packets	5 Packets	9/1/25	In- stock
Harpic	₱605	10 Packets	5 Packets	9/1/26	In- stock
Ariel	₱408	23 Packets	7 Packets	15/12/26	Out of stock
Scotch Brite	₱359	43 Packets	8 Packets	6/6/26	In- stock
Coca cola	₱205	41 Packets	10 Packets	11/11/25	Low stock

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- Under the inventory, you could view your overall product sales.
- All of them are clickable (the Maggie, 430 pesos, 43 packets, and such).
- You could click the Add Product button, which leads you to adding details on the product you're selling or want to sell.

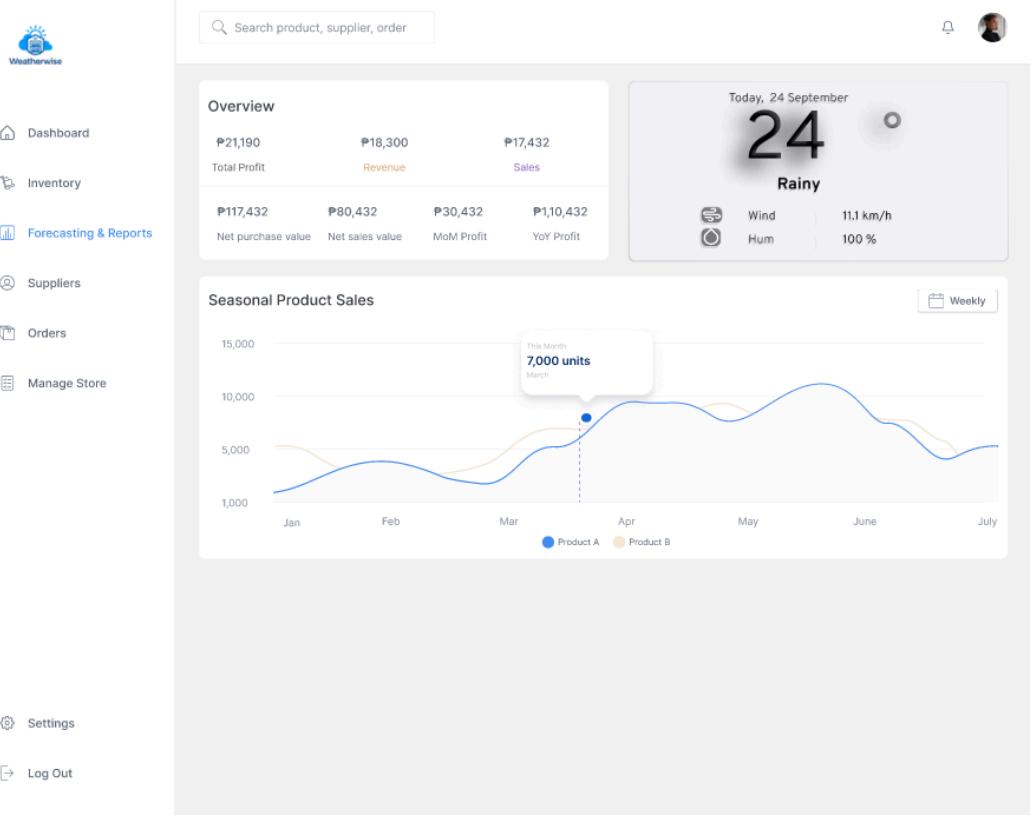
The screenshot shows the Weatherwise inventory management software interface. On the left, a sidebar navigation menu includes: Dashboard, Inventory (selected), Forecasting & Reports, Suppliers, Orders, Manage Store, Settings, and Log Out. The main content area has a header with a search bar ('Search product, supplier, order') and a user profile icon.

The central area is titled 'Overall Inventory' and 'New Product'. It features a 'Products' section listing items like Maggi, Bru, Red Bull, Bourn Vita, Horlicks, Harpic, Ariel, Scotch Brite, and Coca cola. A 'Low Stocks' summary table shows 12 items with a cost of ₹2500, ordered 2 times, and 2 not in stock.

The 'New Product' form includes fields for Product Name (with a placeholder 'Enter product name'), Product ID (placeholder 'Enter product ID'), Category (placeholder 'Select product category'), Buying Price (placeholder 'Enter buying price'), Quantity (placeholder 'Enter product quantity'), Unit (placeholder 'Enter product unit'), Expiry Date (placeholder 'Enter expiry date'), Threshold Value (placeholder 'Enter threshold value'), and a file upload section ('Drag image here or Browse image'). Buttons for 'Discard' and 'Add Product' are at the bottom right of the form.

A table on the right lists products with columns for Value, Expiry Date, and Availability. The table shows 8 rows of data, with the last row labeled 'Low stock'.

### iii. Forecasting and Reports



- a. The forecasting & reports only show which products are in demand in the summer or rainy season.

#### iv. Suppliers

The screenshot shows a web-based application for managing suppliers. On the left, there's a sidebar with navigation links: Dashboard, Inventory, Forecasting & Reports, Suppliers (which is the active page), Orders, Manage Store, Settings, and Log Out. At the top right, there's a search bar with placeholder text "Search product, supplier, order", a notification badge for a thunderstorm, and a user profile icon.

Suppliers					
	Supplier Name	Product	Contact Number	Email	Supply Category
	Richard Martin	Kit Kat	7687764556	richard@gmail.com	Non-Perishable
	Tom Homan	Maaza	9867545368	tomhoman@gmail.com	Non-Perishable
	Veandler	Tomatoes	9867545566	veandler@gmail.com	Perishable
	Charin	Iodized Salt	9267545457	charin@gmail.com	Non-Perishable
	Hoffman	Nescafe Gold	9367546531	hoffman@gmail.com	Non-Perishable
	Fainden Juke	Lettuce	9667545982	fainden@gmail.com	Perishable
	Martin	Ground Pepper	9867545457	martin@gmail.com	Non-Perishable
	Joe Nike	Zonrox Bleach	9567545769	joenike@gmail.com	Non-Perishable
	Dender Luke	Zonrox Bleach	9667545980	dender@gmail.com	Non-Perishable
	Martin	Vegetable Oil	9867545457	martin@gmail.com	Non-Perishable
	Joe Nike	Macaroni Pasta	9567545769	joenike@gmail.com	Non-Perishable
	Dender Luke	Natrue Oat Milk	9667545980	dender@gmail.com	Perishable
	Joe Nike	Mi Goreng	9567545769	joenike@gmail.com	Non-Perishable
	Joe Nike	Mi Goreng	9567545769	joenike@gmail.com	Non-Perishable

At the bottom of the table area, there are buttons for "Previous" and "Next", and a page indicator "Page 1 of 10".

- In this page, you can see a database full of different suppliers that you can connect with.
- Most needed products are also recommended when you click the thunderstorm above, besides the profile logo.
- The auto-reorder button is used to auto-order or automatically ship a supply when needed based on inventory demographics.
- When the add supplier button is clicked, it will go straight to the orders.

Overall Orders

Total Orders	Product Name	Enter product name	On the way
37	Product ID	Enter product ID	₹2500 Cost 12 Ordered ₹ 2356 Cost
Last 7 days	Category	Select product category	
	Order value	Enter order value	Add Product Filters Order History
	Quantity	Enter product quantity	Expected Delivery Status
Maggi	Unit	Enter product unit	11/12/22 Delayed
Bru	Buying price	Enter buying price	21/12/22 Confirmed
Red Bull	Date of delivery	Enter date of delivery	5/12/22 Returned
Bourn Vita			8/12/22 Out for delivery
Horlicks			9/1/23 Returned
Harpic			9/1/23 Out for delivery
Ariel			15/12/23 Delayed
Scotch Brite			6/6/23 Confirmed
Coca cola			11/11/22 Delayed

New Order

Product Name:  ₹2500

Product ID:  12

Category:  On the way

Order value:

Quantity:

Unit:

Buying price:

Date of delivery:

Notify on the date of delivery

Previous Next

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## v. Orders

Overall Orders

Total Orders	Total Received	Total Returned	On the way
37 Last 7 days	32 Last 7 days ₹25000 Revenue	5 Last 7 days ₹2500 Cost	12 Ordered ₹ 2356 Cost

Orders

Products	Order Value	Quantity	Order ID	Expected Delivery	Status
Maggi	₹4306	43 Packets	7535	11/12/22	Delayed
Bru	₹2557	22 Packets	5724	21/12/22	Confirmed
Red Bull	₹4075	36 Packets	2775	5/12/22	Returned
Bourn Vita	₹5052	14 Packets	2275	8/12/22	Out for delivery
Horlicks	₹5370	5 Packets	2427	9/1/23	Returned
Harpic	₹6065	10 Packets	2578	9/1/23	Out for delivery
Ariel	₹4078	23 Packets	2757	15/12/23	Delayed
Scotch Brite	₹3559	43 Packets	3757	6/6/23	Confirmed
Coca cola	₹2055	41 Packets	2474	11/11/22	Delayed

Add Order Filters Order History

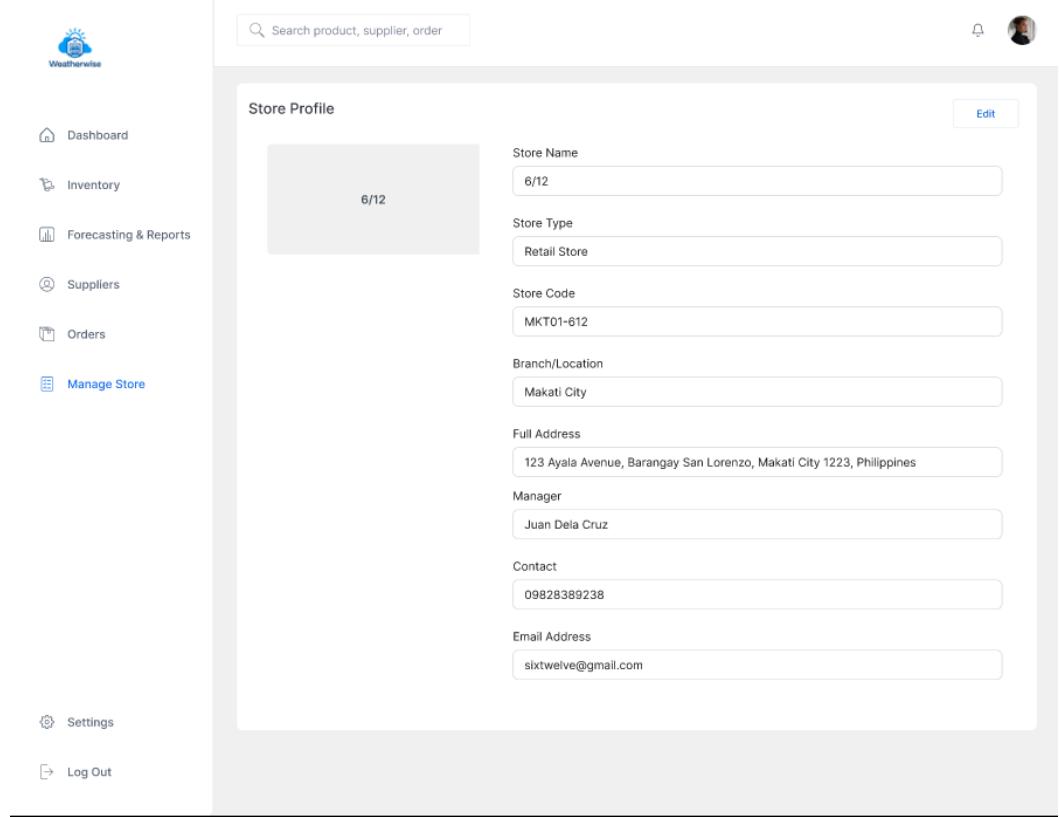
Previous Next

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Settings Log Out

- a. The orders page is for inputting an order manually, and it will show up in the orders' database table.

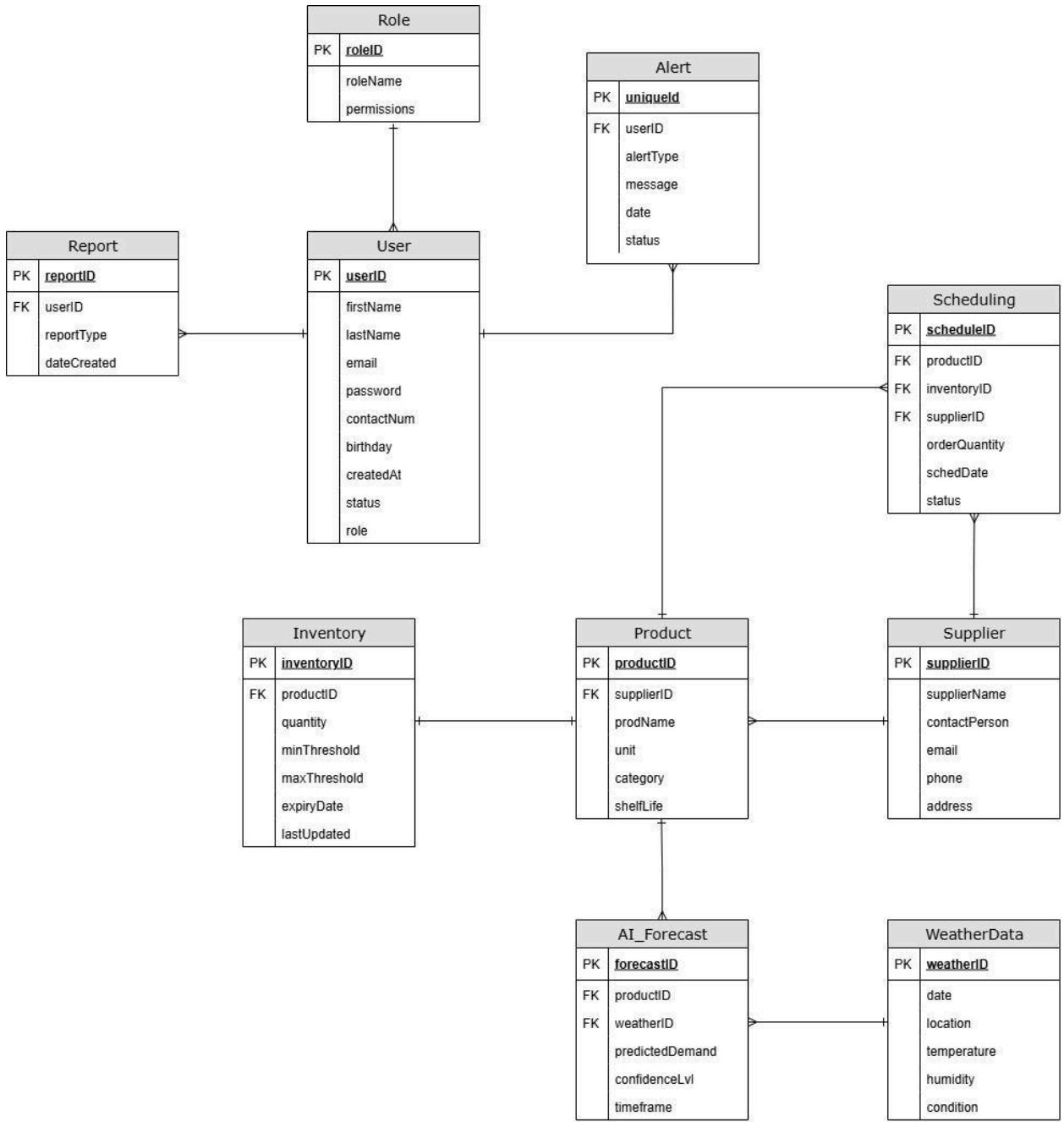
vi. Manage Store



The screenshot shows the Weatherwise application's user interface. On the left is a sidebar with the Weatherwise logo at the top. Below the logo are several menu items: Dashboard, Inventory, Forecasting & Reports, Suppliers, Orders, and Manage Store, which is highlighted in blue. At the bottom of the sidebar are Settings and Log Out options. The main content area is titled 'Store Profile' and contains a search bar at the top right. Below the search bar is a placeholder image labeled '6/12'. To the right of the image are various form fields: Store Name (6/12), Store Type (Retail Store), Store Code (MKT01-612), Branch/Location (Makati City), Full Address (123 Ayala Avenue, Barangay San Lorenzo, Makati City 1223, Philippines), Manager (Juan Dela Cruz), Contact (09828389238), and Email Address (sixtwelve@gmail.com). An 'Edit' button is located in the top right corner of the profile section.

- a. This allows users to input their store brand name (if applicable).

## □ Entity-Relationship Diagram (ERD):



- USERS have a ROLE
- ROLE defines a USER
- USERS manage PRODUCT
- PRODUCT is managed by USERS
- PRODUCT is affected by DEMAND
- DEMAND is predicted by AI MODEL

- WEATHER influences DEMAND
- INVENTORY contains PRODUCT
- PRODUCT is stored in INVENTORY
- AI MODEL generates RECOMMENDATION
- RECOMMENDATION suggests PRODUCT
- CUSTOMERs receive RECOMMENDATION
- USERs are notified by ALERT
- ALERT notifies USERs
- USERs create REPORT
- REPORT is created by USERs

#### 1. Entity Coverage

- The ERD shall include all core entities identified in the requirements: User, Product, Inventory, Supplier, Scheduling, Forecasting, and Reports.
- Each entity must contain all relevant attributes such as IDs, names, units, dates, and other required fields (like role for User).

#### 2. Primary Keys & Foreign Keys

- Each entity shall have a clearly defined primary key that uniquely defines records.
- All necessary foreign key relationships must be established to ensure referential integrity.

#### 3. Relationship Accuracy

- The ERD shall represent correct cardinalities (1:1, 1:M, M:1, M:N where appropriate).
- Role has a 1:M relationship with User
- User has 1:M relationship with Report
- User has 1:M relationship with Alert
- Product has 1:M relationship with Scheduling
- Scheduling has M:1 relationship with Supplier
- Supplier has 1:M relationship with Product
- Product has 1:1 relationship with Inventory
- Product has 1:M relationship with AI\_Forecast
- AI\_Forecast has M:1 relationship with WeatherData

#### 4. Traceability to Requirements

- Each functional requirement shall map to at least one entity/relationship in the ERD.

#### 5. Security & Roles Representation

- The ERD shall support role-based access control through the User entity, which should include a 'roles' attribute.
- Relationships should reflect which entities each role interacts with through the User entity.

## 6. Clarity & Documentation

- The ERD shall use clear and consistent naming conventions.
- All relationships must be labeled and documented in order to show direction and cardinality.