



# Design Specification

29.09.2024

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# 1 Introduction

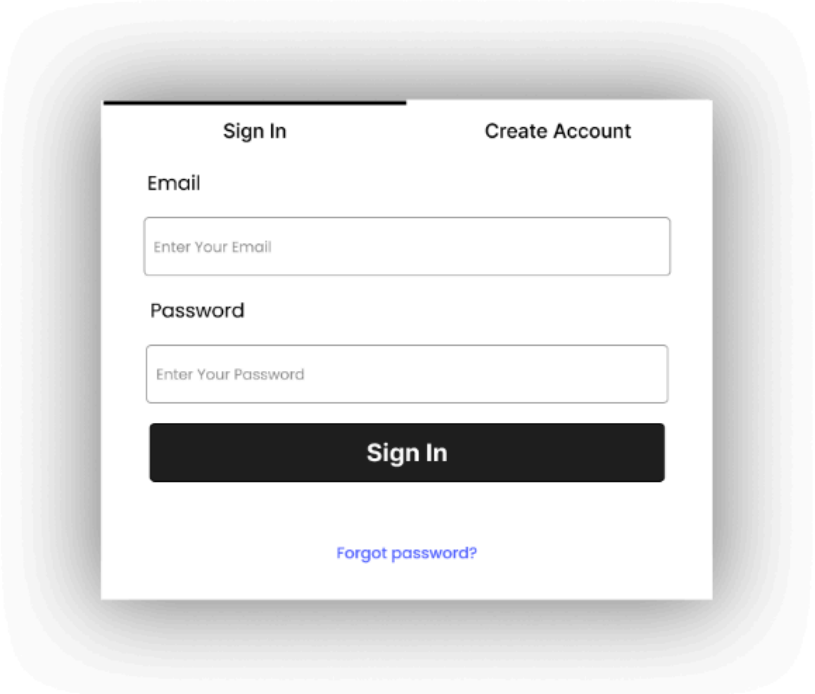
Smart Inventory is a comprehensive web-based application designed to revolutionize inventory management for businesses of all sizes, including restaurants and laboratories. This design specification outlines the visual elements and functionalities that will shape the user experience within Smart Inventory.

- Wireframes and detailed design mock ups will illustrate the user interface, navigation flow, and interaction patterns for each user role.
- Additionally, this document will include a section dedicated to the design of the database schema for Amazon DynamoDB, the NoSQL database service that will power Smart Inventory's data storage and retrieval capabilities.

The document aims to provide a clear road-map for developers to translate the vision of Smart Inventory into a user-centric and efficient application.

## 2 Wireframes

### 2.1 Sign In / Login



The wireframe shows a mobile app interface for signing in. It features a white card with rounded corners and a subtle drop shadow on a light gray background. At the top of the card, there are two tabs: "Sign In" (which is selected and underlined) and "Create Account". Below the tabs, the form is organized into sections. The "Email" section has a text input field with the placeholder text "Enter Your Email". The "Password" section has a text input field with the placeholder text "Enter Your Password". Below these fields is a prominent black button with the text "Sign In" in white. At the bottom of the card, there is a blue link that says "Forgot password?".

Sign In

Create Account

Email

Enter Your Email

Password

Enter Your Password

Confirm Password

Confirm Your Password

Name

Enter Your Name

Surname

Enter Your Surname

Create Account

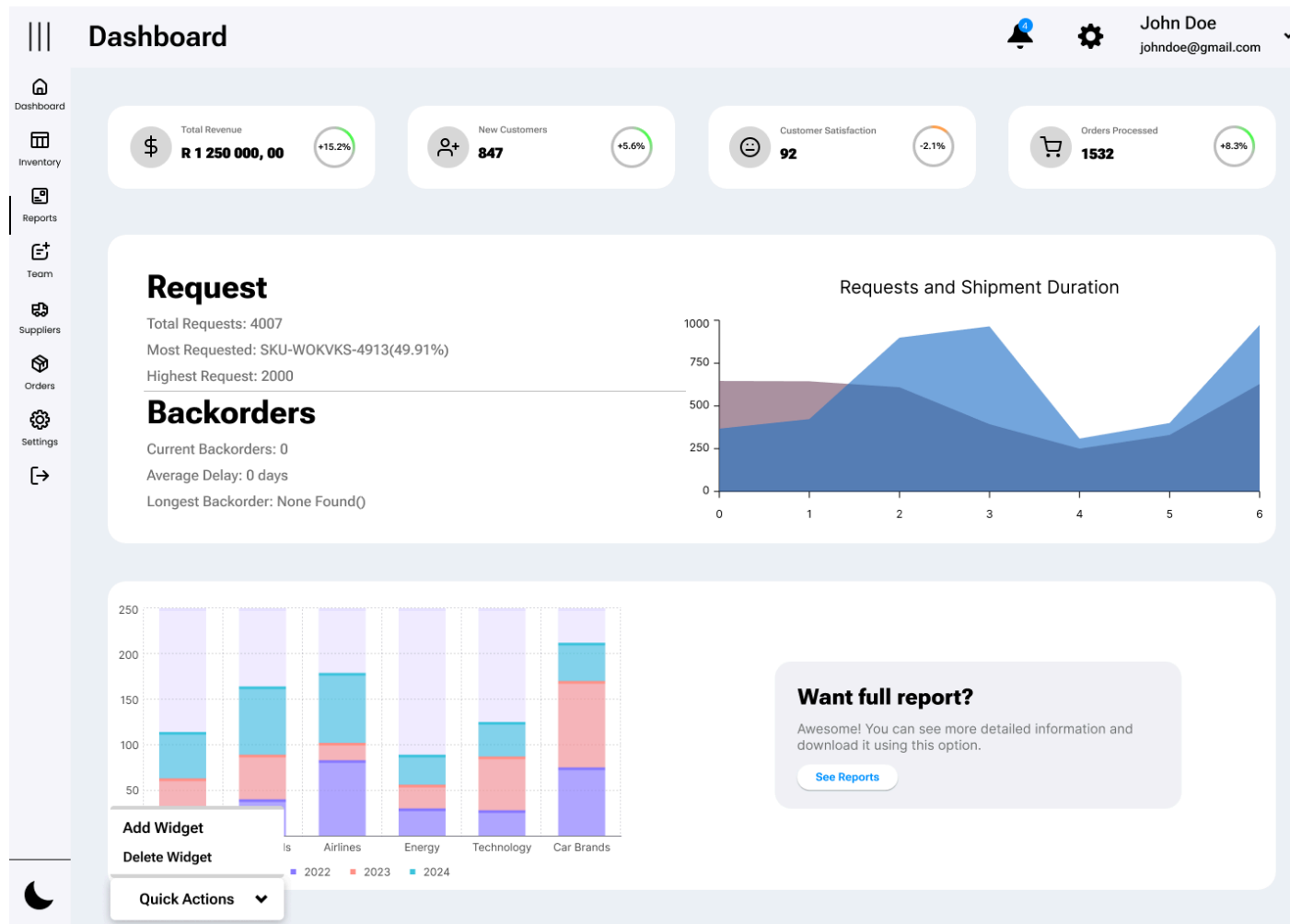
## Reset Password

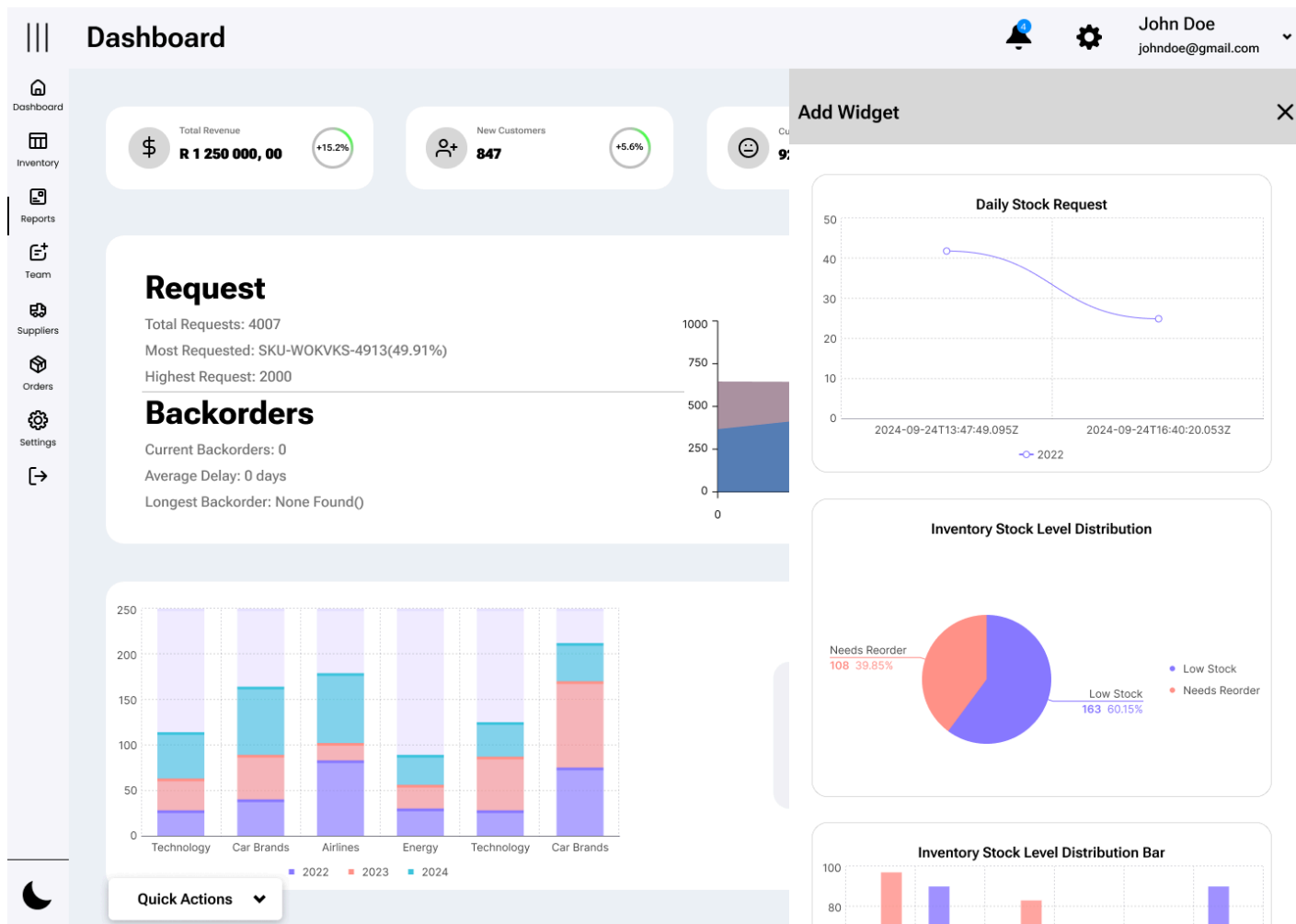
Email

**Send Code**

[Back to Sign In](#)

## 2.2 Dashboard







## 2.3 Inventory/Inventory Summary

Dashboard

Inventory

Reports

Team

Suppliers

Orders

Settings

Inventory

Q Search...

i

SKU	Universal Product Code	Description	Category	Quantity	Supplier	Expiration Date	Unit Cost	Lead Time	Delivery Cost	Low Stock Threshold	
CC-IN-350	789012345689	Instant Coffee 350g	Instant Coffee	30	Caffeine Creations	2025-09-24	120	3	165	8	
JJ-CB-1500	890123456785	Colombian Blend 1.5kg	Coffee Beans	17	Java Junction	2025-09-24	600	5	200	10	
YU290	123456789013	Assorted Chocolates	Confectionery	200	Sweet Sensations	2024-12-31	6.99	4	1	40	
BB-WB-750	345678901240	Whole Bean Blend 750g	Coffee Beans	10	Bean Bliss Coffee Roasters	2025-09-24	265	3	175	8	160
CC-IN-300	678901234578	Instant Coffee 300g	Instant Coffee	60	Caffeine Creations	2025-09-24	105	3	165	8	160
ZK482	678901234567	Cinnamon Sticks	Spices	150	Sugar & Spice Trading	2025-09-30	4.5	4	0.8	30	75
CM748	345678901235	Single Origin Coffee	Beverages	150	Bean Bliss Coffee Roasters	2025-02-28	11.99	4	1.8	30	90
ABB-WW-400	345678901237	Whole Wheat Bread 400g	Bread	45	Artisan Bread Bakers	2024-09-30	32	1	160	9	180
HJ824	901234567890	Biodegradable Coffee Cups	Packaging	500	EcoPack Solutions	2025-11-30	0.15	6	0.02	100	300
HJ824	901234567890	Biodegradable Coffee Cups	Packaging	500	EcoPack Solutions	2025-11-30	0.15	6	0.02	100	300
BH-CP-110	567890123459	Cappuccino Blend Coffee Beans 110g	Coffee Beans	60	Brew Horizon	2025-09-24	59.5	3	170	5	100
CM748	345678901235	Single Origin Coffee	Beverages	150	Bean Bliss Coffee Roasters	2025-02-28	11.99	4	1.8	30	90

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Quick Actions

Export Excel

Import Excel

Add Item

Remove Item

View QR code

Scan QR code

View Inventory Summary

Request Stock

Dashboard

Inventory

Reports

Team

Suppliers

Orders

Settings

Inventory Summary

🔔

⚙️

John Doe  
johndoe@gmail.com

Q Search...

?

Quick Actions

Export Excel

Run EOQ/ROP/ABC Calculation

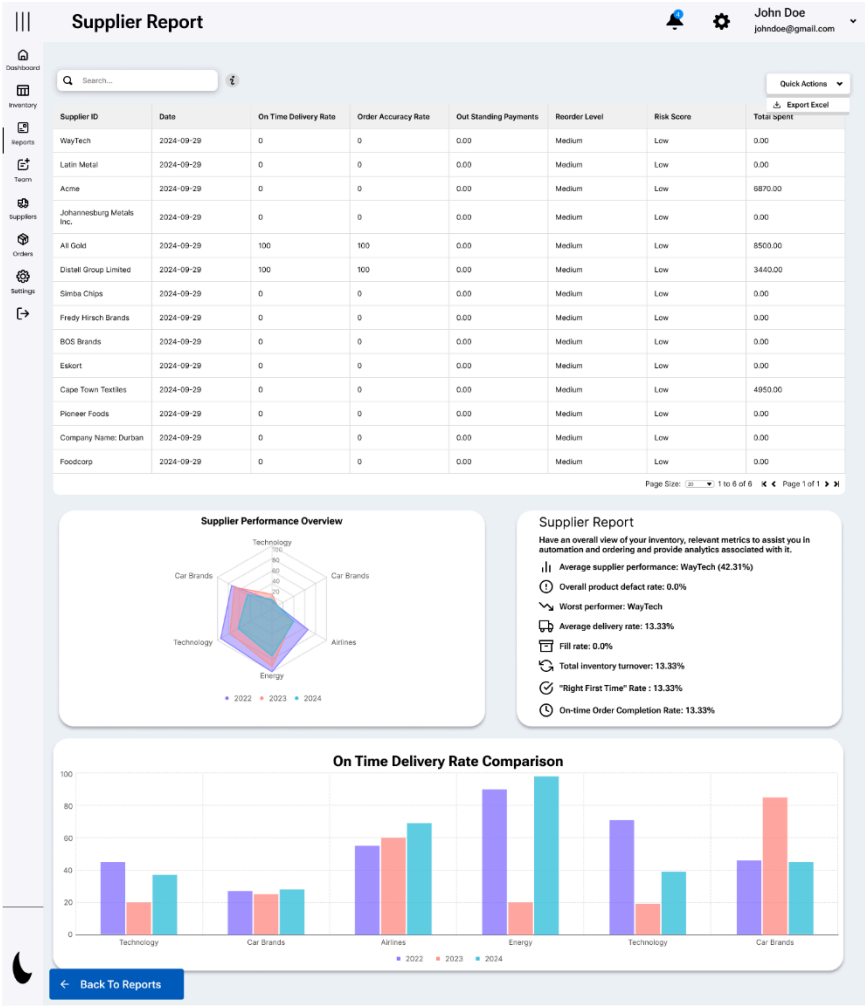
SKU	Description	Quantity	Low Stock Threshold	Reorder Amount	EOQ	ROP	Safety Stock	ABC Category	Annual Consumption Value	Holding Cost	Annual Demand	
LED6000 K8W	LED Light Bulb, 6000K, 8Watt, E27 Base	1000	100	250								
SPKR01BT	Portable Bluetooth Speaker, Water Resistant	750	15	30								
SKU-T49D60-5 120	Food: Perishable	16	10	25	34	9	4		4495	1.3485	500	1.37
A67898CD	Organic Cotton T-Shirt - Medium Size - Blue	200	30	75								
SKU-RTD7WA-3 448	Electronics	80	100	50	8	2	1		197.82	1.6485	18	0.049315068 493150684
SKU-T49D60-1 826	Food	0	500	100	0		0					
USB32GB BLK	Electronics	500	50	100								
BOOK00123 ENG	Introduction to Philosophy by J. Doe, Paperback Edition	400	10	20								

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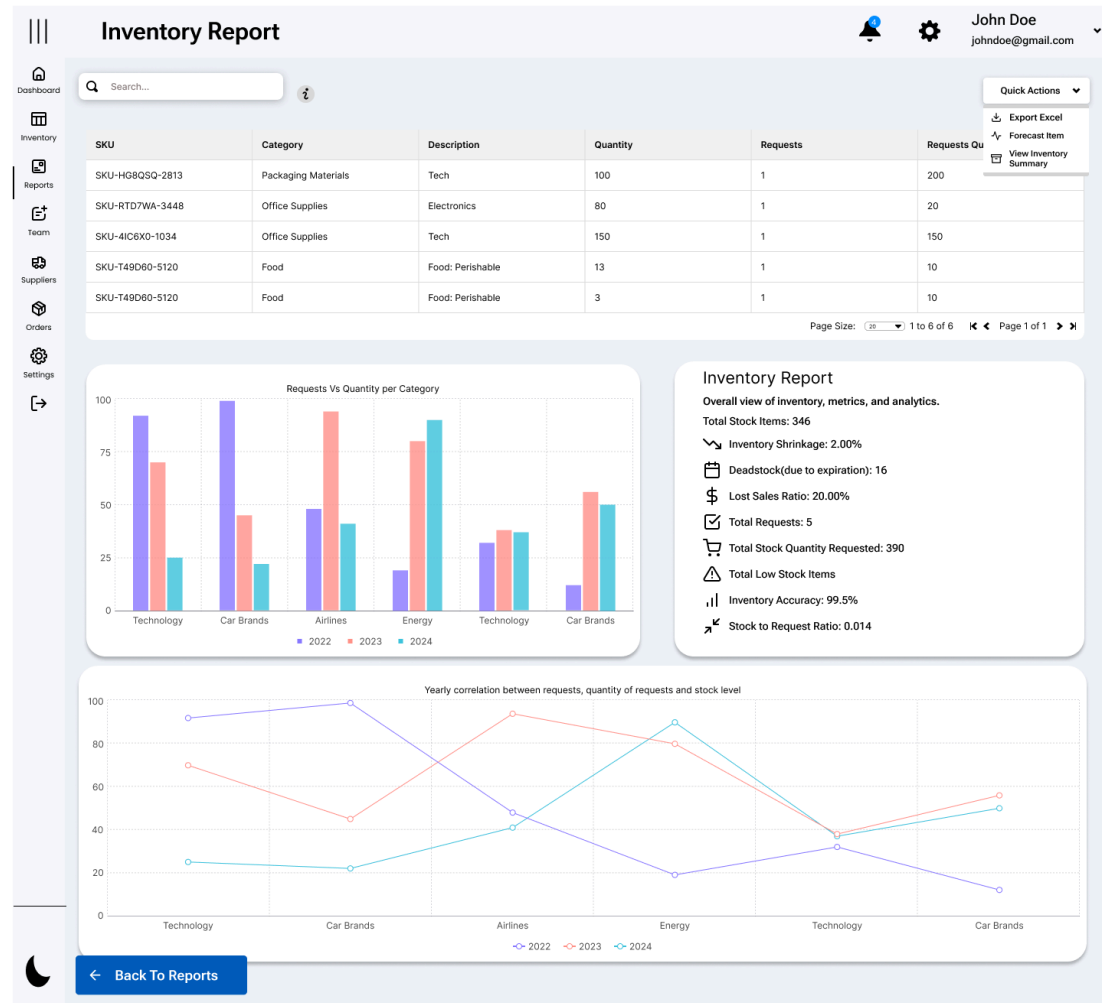
## 2.4 Reports



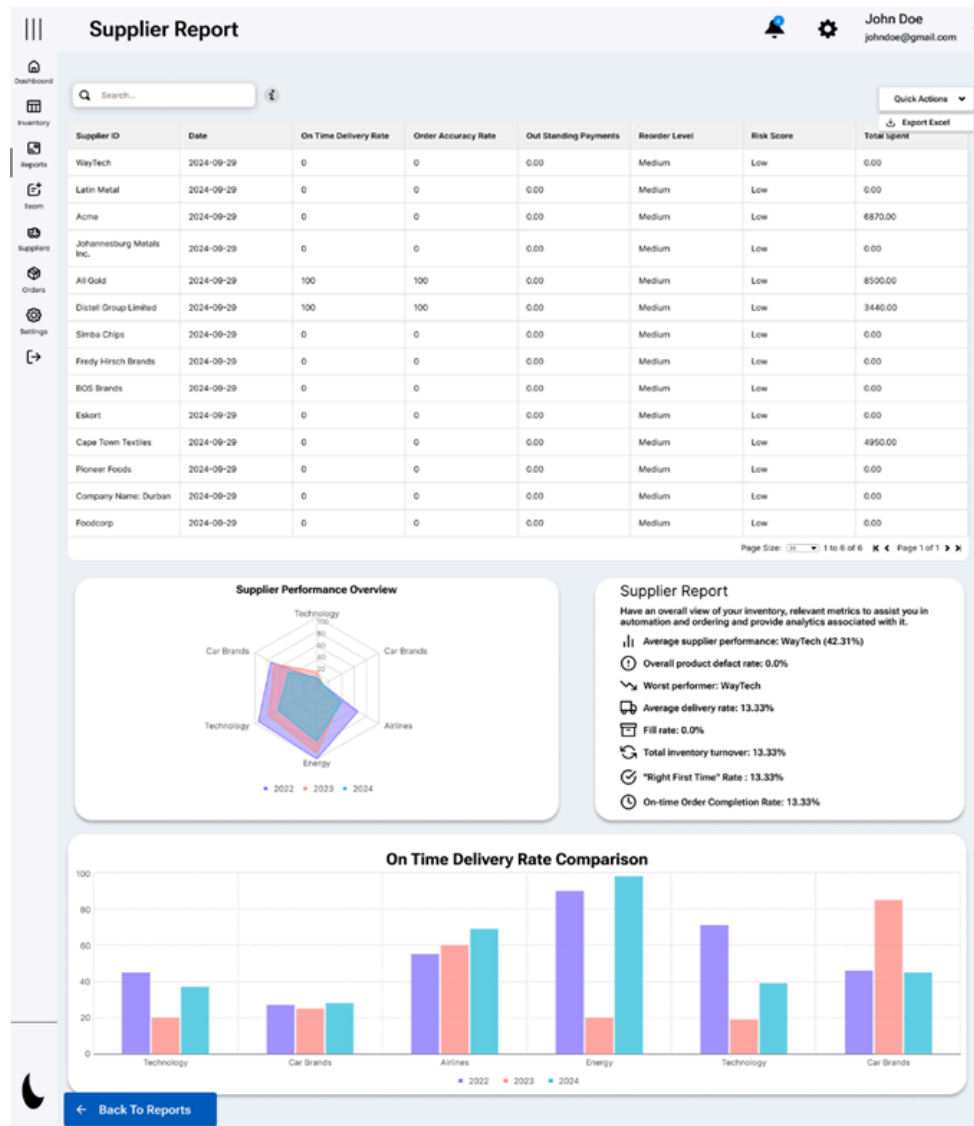
### 2.4.1 Orders Report



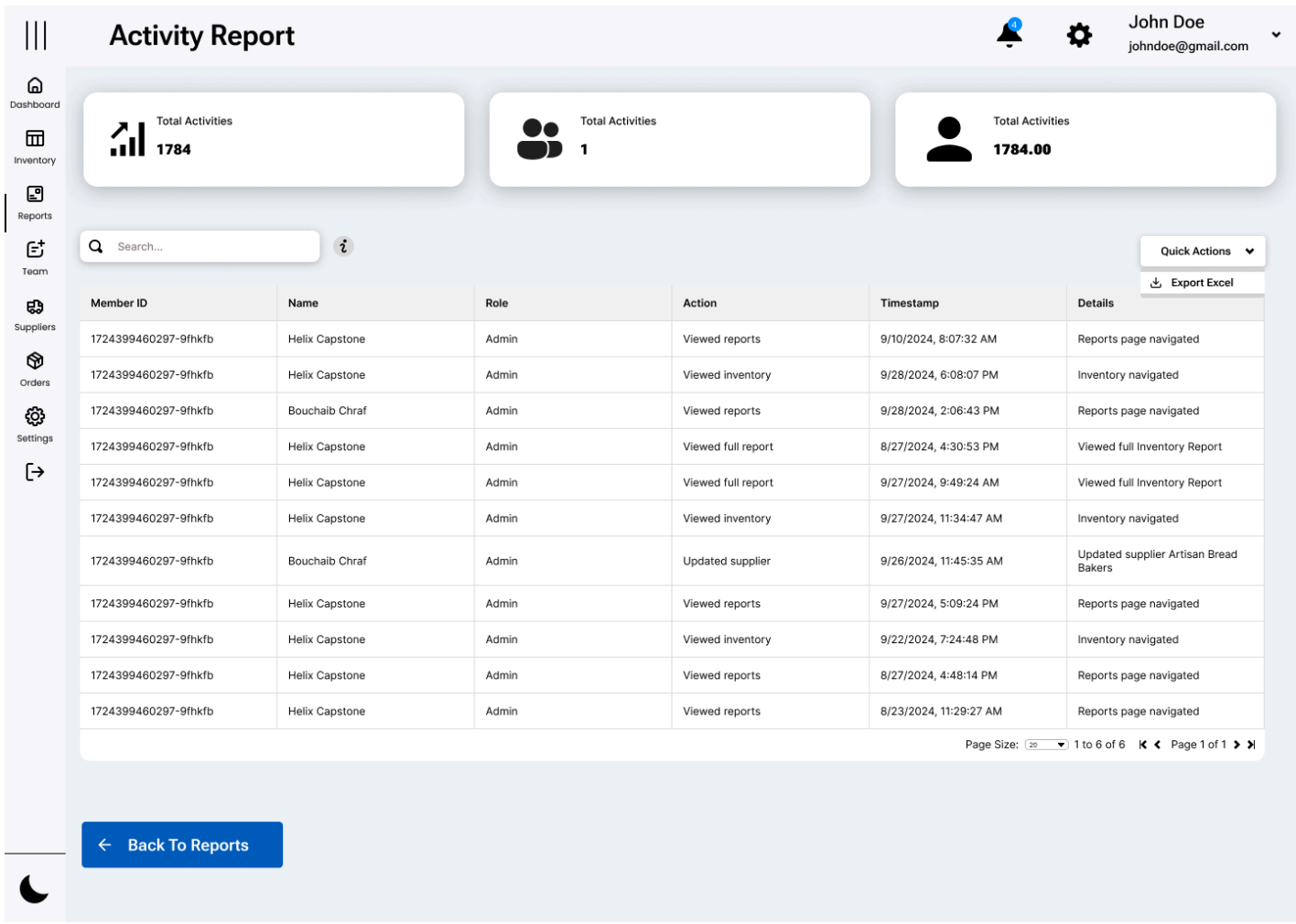
## 2.4.2 Inventory Report



### 2.4.3 Supplier Report



### 2.4.4 Activity Report



## 2.5 Settings

Dashboard

Inventory

Reports

Team

Suppliers

Orders

Settings

Settings

John Doe

johndoe@gmail.com

Customize Your Experience

Tailor the app to your needs by adjusting these key settings

Personal Details

John

Doe

johndoe7@gmail.com

Save Changes

Password

\*\*\*\*\*

New Password

UPDATE PASSWORD

Email Template

Update and edit your template for emails sent.

EDIT TEMPLATE

Automation Templates

Add, remove and edit your templates for order automation.

EDIT TEMPLATES

Delivery Information

Update and change your delivery information.

EDIT DETAILS

Theme

Switch between light and dark theme.

CUSTOMIZE

16



## 2.6 Help

### 2.6.1 FAQs

The screenshot displays a user interface for a help center. At the top, a navigation bar includes a hamburger menu icon, the word "Help", a notification bell icon, a settings gear icon, and a user profile for "John Doe" with the email "johndoe@gmail.com". Below this, a secondary navigation bar features four tabs: "FAQs" (which is underlined), "Troubleshooting", "User Guides", and "Contact Support". On the left side of the main content area, there is a vertical sidebar with icons for home, dashboard, calendar, list, settings, and a link icon. The main content area is titled "Frequently Asked Questions" in a large, bold font, with a subtitle "Discover answers to common inquiries and gain insights from questions others have already explored". Below the title, there are six filter buttons: "General", "Dashboard", "Inventory", "Team", "Suppliers", and "Orders". A list of 15 FAQ items is displayed, each with a question and a downward arrow icon on the right. The questions are: "How to reset my password?", "How to remember my password on sign in?", "How to change my email?", "How to change my name?", "How to add inventory?", "How to remove inventory?", "How to edit inventory?", "How to move widget?", "How to remove widget?", "How to add member to my team?", "How to remove member from my team?", "How to edit member of my teams details?", "How to add a supplier?", and "How to remove a supplier?".

**Help**

FAQs Troubleshooting User Guides Contact Support

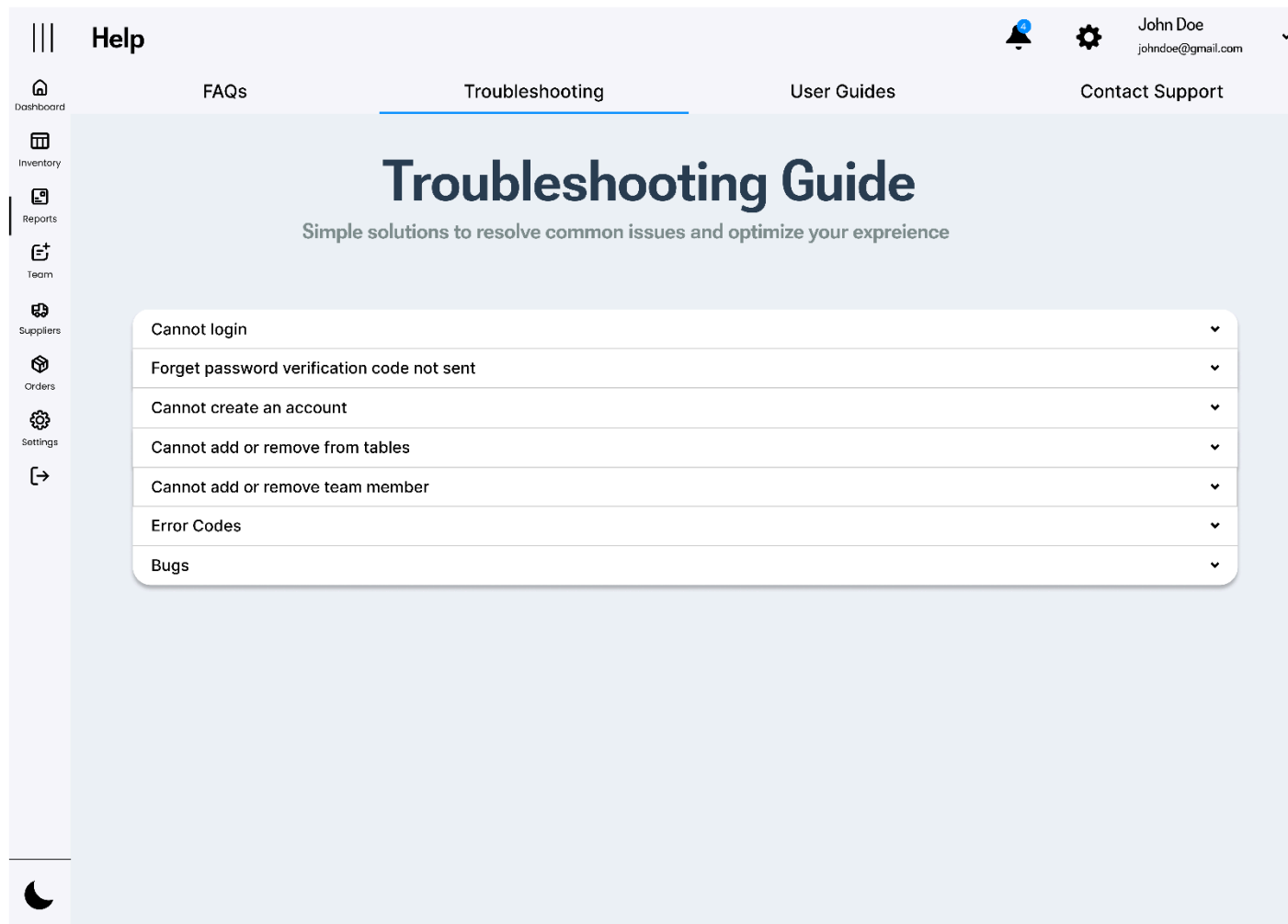
# Frequently Asked Questions

Discover answers to common inquiries and gain insights from questions others have already explored

General Dashboard Inventory Team Suppliers Orders

- How to reset my password?
- How to remember my password on sign in?
- How to change my email?
- How to change my name?
- How to add inventory?
- How to remove inventory?
- How to edit inventory?
- How to move widget?
- How to remove widget?
- How to add member to my team?
- How to remove member from my team?
- How to edit member of my teams details?
- How to add a supplier?
- How to remove a supplier?

## 2.6.2 Troubleshooting



## 2.6.3 User Guides

**Help**

Dashboard FAQs Troubleshooting **User Guides** Contact Support

**Download PDF Manual**

Download your own personal Smart Inventory User Manual to help guide your understanding of the system

[Click here to download\(PDF\)](#)

**View PDF Manual**

Read the user guide from the comfort of your application.

User Manual

Helix

August 2024

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2.3	Forgot Password Process	5

## 2.6.4 Contact Support

**Help**

John Doe  
johndoe@gmail.com

Dashboard FAQs Troubleshooting User Guides **Contact Support**

# Contact Support

Reach out to our dedicated team for personalized assistance with any questions or concerns you may have

## How Can We Help?

Name\*

Surname\*

Email\*

Message\*

Send

### 3 Database Design

The Smart Inventory system will utilize Amazon DynamoDB, a fully managed NoSQL database service provided by Amazon Web Services (AWS). DynamoDB offers high scalability, low latency, and flexible data modeling, making it suitable for the inventory management system. The key tables and their sample data are as follows:

*Table 1: Users Table (Cognito)*

Partition Key:	Username
Attributes:	
Username	First
Email	Last
Verified	tenetID

*Table 2: Suppliers Table*

Partition Key:	SupplierID
Attributes	
supplierID	contactPhone
Address	createdAt
contactEmail	name
updatedAt	

*Table 3: Stock Request Table*

<b>Partition Key</b>	<b>stockRequestId</b>
<b>Attributes</b>	
stockRequestId	SKU
tenetId	Supplier
createdAt	Type
qtyReq	

*Table 4: Inventory Table*

<b>Partition Key: Sort Key:</b>	<b>inventoryID tenetId</b>
<b>Attributes</b>	
inventoryID	lowStockThreshold
tenetId	upc
Category	reorderFreq
createdAt	SKU
Description	Supplier
expirationDate	

*Table 5: Orders Table*

<b>Partition Key: Sort Key:</b>	<b>Order_ID Order_Date</b>
<b>Attributes</b>	
Order_ID	Order_Status
Order_Date	Quote_ID
Actual_Delivery_Date	Quote_Status
Creation_Time	Selected_Supplier
Expected_Delivery_Date	tenantId

*Table 6: Generated Quote Suppliers*

<b>Partition Key: Sort Key:</b>	<b>QuoteID Company_name</b>
<b>Attributes</b>	
QuoteID	SupplierID
Company_name	tenantId

*Table 7: Generated Quote Items Table*

<b>Partition Key: Sort Key:</b>	<b>QuoteID ItemSKU</b>
<b>Attributes</b>	
QuoteID	Quantity
ItemSKU	tenantId
inventoryID	

*Table 8: Supplier Quote Summary Table*

<b>Partition Key: Sort Key:</b>	<b>QuoteID SupplierID</b>
<b>Attributes</b>	
QuoteID	Subtotal
SupplierID	Total_Quote_Value
VAT_Percentage	Currency
VAT_Amount	Additional_Comments



Delivery_Date	tenantId
Delivery_Cost	Timestamp

*Table 9: Supplier Quotes Prices Table*

<b>Partition Key: Sort Key:</b>	<b>QuoteID Upc_SupplierID</b>
<b>Attributes</b>	
QuoteID	TotalPrice
upc	Discount
SupplierID	IsAvailable
ItemSKU	tenantId
UnitPrice	Timestamp
AvailableQuantity	

DynamoDB's querying capabilities and AWS integration make it suitable for the Smart Inventory system. The design can evolve, leveraging DynamoDB's scalability and flexibility.